FINAL REPORT

AVISTA UTILITIES – UPRIVER PARK

HABITAT MANAGEMENT PLAN

AUGUST 2019

Anderson Environmental Consulting, LLC
14234 N. Tormey Rd.
Nine Mile Falls, WA 99026

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LIST OF ACRONYMS AND ABBREVIATIONS

AEC	Anderson Environmental Consulting, LLC
Avista	Avista Corporation
CAO	Critical Areas Ordinance
dbh	diameter at breast height
GIS	Geographic Information Systems
HMP	Habitat Management Plan
IPaC	Information for Planning and Consultation
LUE	Limited Urban Environment
OHWM	ordinary high-water mark
PHS	Priority Habitat and Species
Project	Upriver Park Project
RCW	Revised Code of Washington
SMC	Spokane Municipal Code
SMP	Shoreline Management Plan
SVRP	Spokane Valley Rathdrum Prairie Sole Source Aquifer
USACE	United States Army Corps of Engineers
WDFW	Washington Department of Fish and Wildlife
NWI	National Wetlands Inventory

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1. INTRODUCTION

1.1 LOCATION AND ENVIRONMENTAL SETTING

The proposed Upriver Park Project (Project) is in the City of Spokane, Washington on Upriver Drive from Mission Avenue to North Center Drive between the Spokane River and Avista Corporation's (Avista) campus. Portions of the Project are owned by Avista and the City of Spokane Street, and Parks and Recreation Departments. The Project is in Section 9, Township 25 North, Range 43 East. Latitude 47.674367, Longitude 117.386544 (see **Figure 1)**.

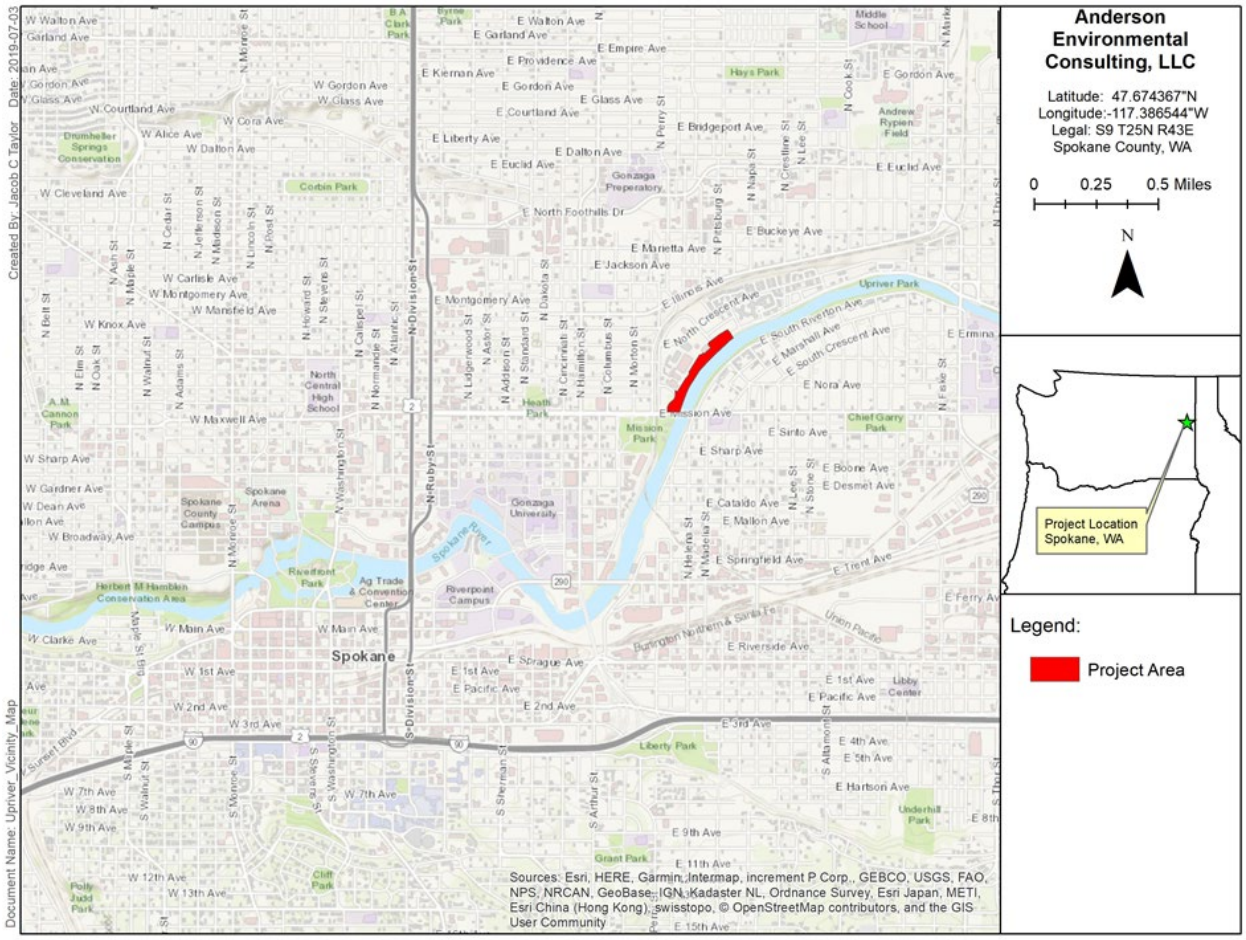


Figure 1. Vicinity Map

1.2 PROJECT DESCRIPTION

Approximately 85% of the Project's designated 250' shoreline area includes Upriver Drive, the Centennial Trail, and portions of buildings, plazas, fences, parking areas, and stormwater swales associated with Avista's campus. The remaining 15% of the Project area is largely undeveloped, with dense non-native trees and shrubs cover. During the summer months the area is heavily used by

transients for extended overnight camping. This area is not used by the public for recreational purposes due to the public safety concerns associated with the transient encampments, dense vegetation, vehicular traffic and lack of trail or pedestrian facilities.

Avista is proposing to vacate Upriver Drive, which would remove vehicular traffic from a significant portion of the Project area. More specifically, Upriver Drive, from Mission Avenue to Avista's Headquarter building main entrance would be converted to a driveway with up to 11 public parking spots on the east side, a small plaza, and signage. The section of road from the new North Center Drive to Avista's east employee entrance round-a-bout would be converted to a narrower drive, with up to 20 parking spots for Park visitors.

The Centennial Trail will be reconstructed through the park as a 12' wide paved pedestrian trail with 2' of gravel on the river side of the trail and will be within the existing footprint of Upriver Drive. Resting/viewing locations will be placed along the trail and through the park. A 10' to 20' length of gabion wall near the Avista Complex pedestrian gate will be removed to allow pedestrian access from the Centennial Trail to the existing Shoreline Trail, a 3' to 4' wide dirt path through the riparian area leading to the Spokane River. It will also connect to Mission Park and Avista's campus.

The Project will involve thinning non-native vegetation from the riparian area and revegetating and landscaping landward of Upriver Drive through the remainder of the project. Irrigation will be installed as appropriate to establish plantings.

The Project will involve constructing plazas, sidewalks, a 400-square-foot shade/rain shelter, a brick arch, park benches, signage, picnic tables, bike racks, kayak stands, light posts (approximately 14-16' tall), and a concrete amphitheater. A carry-in-only 5' x 20' removable floating dock for non-motorized watercraft will be installed. Park amenities will also include signs, art/interpretive feature(s), and water fountain(s). The Project will be constructed during 2020 (see **Figures 2-5)**. See **Appendix A** for an overview map of the proposed project.

Figure 2. Proposed Upriver Park Layout – South End

Figure 3. Proposed Upriver Park – South Plaza

Figure 4. Proposed Upriver Park – North Plaza

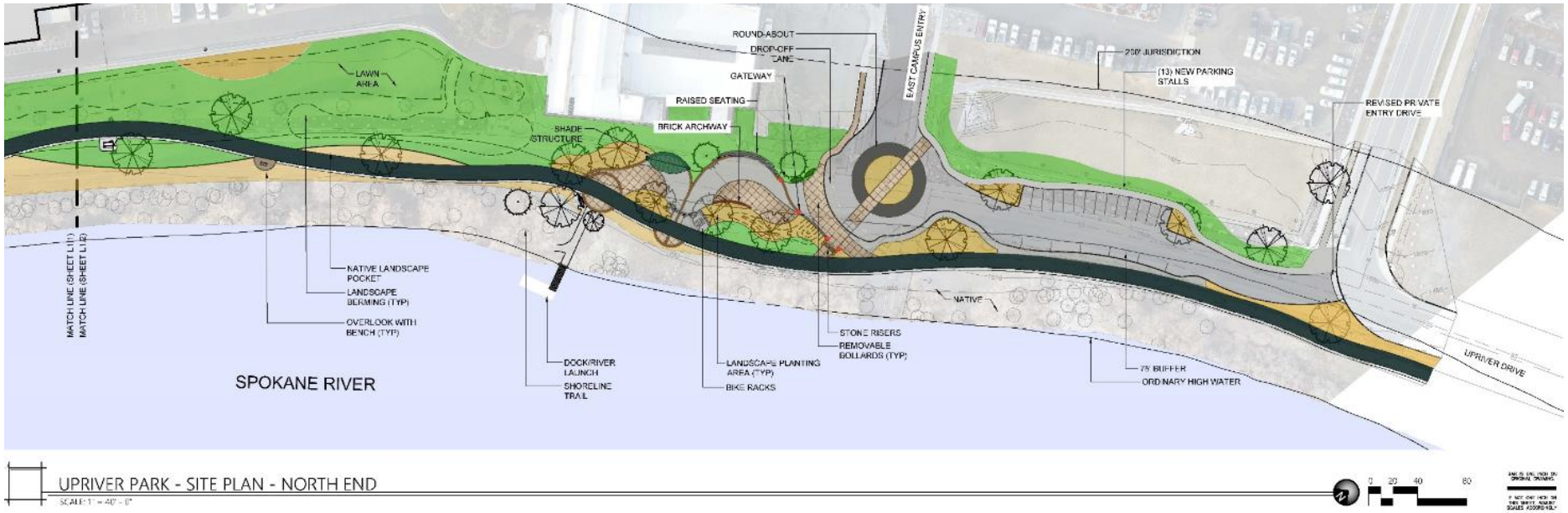


Figure 5. Proposed Upriver Park – North End

2. REGULATORY ENVIRONMENT

This Habitat Management Plan (HMP) includes a Shoreline Impact Assessment that is designed to comply with the requirements for both the Critical Areas Ordinance (CAO) and the Shoreline Master Program (SMP).

2.1 CITY OF SPOKANE SHORELINE MASTER PROGRAM

The Project is located within 200' of the Spokane River's ordinary-high-watermark (OHWM) and is under the jurisdiction of the City of Spokane's SMP. The shoreline jurisdiction also includes the associated wetlands, floodways, and the 100-year floodplain. The Project must incorporate and comply with the requirements of the SMP related to the shoreline buffer, shoreline districts and designations, design standards, and the requirements for recreational uses.

Shoreline regulations are developed to preserve the public's enjoyment of the shoreline; preserve ecological functions to ensure maintenance of water quality, fish and wildlife habitat; and maintain and enhance the aesthetic characteristics (SMP 17E.060.030).

SMP Table 17E.060-3, Shoreline Modifications, and SMP Table 17E.060-4, Shoreline Primary Uses, indicate that recreational development, including new pier or dock/launch ramps for small non-motorized watercraft within the Limited Urban Environment (LUE) may be allowed with either limited review or conditional use review respectively. Therefore, for the purpose of this report a Shoreline Conditional Use Permit is anticipated.

Shoreline Districts and Designations

The SMP designates this section of shoreline as being in the Upriver Shoreline District. Uses in the Upriver District are subject to the development standards in Table 17E.060-5. Design standards and guidelines for the Upriver District are in 17C SMC.

This section of the Spokane River is also designated as LUE, the purpose which is to accommodate a mixture of water-oriented residential, commercial, and institutional uses at moderate density levels, while protecting existing ecological functions and restoring ecological functions in areas that have been previously degraded. Water-dependent utilities and industrial uses are also accommodated. This designation also provides appropriate physical and visual public access and recreation uses. This environment is suitable for residential development, while allowing for non-residential uses with height limitations and at a significantly lower scale of intensity than is found in the intensive urban environment.

The LUE requires a 75' buffer from the OHWM, which provides water quality functions, habitat preservation, aesthetic and noise buffering functions and helps achieve no net loss of ecological function. Development may be allowed in the buffer if it is on the landward side of an existing public street running parallel to the Spokane River (SMP 17E.0606.720 E).

2.2 CITY OF SPOKANE CRITICAL AREAS

Section 17E.060.170 City of Spokane CAO states that the highest level of restrictions applies in critical areas that conflict with the SMP jurisdiction. Critical areas that are within the greater study area include wetlands, fish and wildlife conservation areas/riparian areas, geologic hazard areas, and the Spokane Valley Rathdrum Prairie Sole Source Aquifer (SVRP).

Development within critical areas within shoreline jurisdiction, require:

- No net loss of ecological functions;
- Submittal requirements as specified in the critical area ordinances and the shoreline regulations;
- Mitigation sequencing as specified in SMC 17E.060.230;
- Mitigation plan; and
- Application of the most protective measures where jurisdictions overlap.

3. EXISTING CONDITIONS

Wetlands and wetland buffers, shorelines/streams and buffers, geologically hazardous areas, and critical aquifer recharge areas are identified on the City of Spokane's CAO maps and were evaluated during field investigations. The SMP and the CAO regulate impacts to the following resources, which are evaluated in this Plan:

- Washington Department of Fish and Wildlife (WDFW) Priority Habitat and Species (PHS);
- Shorelines including their wetlands, floodway and 100-year floodplain;
- Fish and Wildlife Conservation Areas including the Spokane River, a Type S stream requiring a 250' buffer;
- Critical Aquifer Recharge Areas; and
- Geologically Hazardous Areas.

3.1 VEGETATION INVENTORY

The study area has two primary vegetative communities. One community includes riparian vegetation, which consists of primarily naturalized non-native trees and shrubs from the edge of Upriver Drive southeast to the river. While the overstory within the riparian community is predominantly non-native species, it provides some ecological functions; such as shoreline stabilization, shade, and sediment and pollutant filtration; however, the riparian area is overcrowded and does not provide a diverse or healthy vegetative community. The second community consists of landscaping that includes trees, shrubs and lawn consistent with Avista's campus between Upriver Drive and the western edge of the Project.

Land Expressions inventoried vegetation larger than 2' in diameter at breast height (dbh). The tree dbh, genus, canopy width, and proposed treatment (remove, modify, prune or remain untouched) were recorded for trees in the project limits. Trees were numbered and photographed. The inventory recorded 215 trees and shrubs between 2 inches and 84 inches dbh. **Table 1** lists trees and shrubs identified including species less than 2 inches dbh that were identified by Anderson Environmental Consulting (AEC). See **Appendix B** for the Arborist Report which has details of the vegetation inventory. **Photos 1 to 6** show the Project setting along Upriver Drive.

Table 1. Vegetation Identified in the Study Area

Common name	Scientific Name	Native/Non-Native
TREES		
American elm	*Ulmas americana*	Non-native
Apple	*Malus sp.*	Non-native
Black locust	*Robinia pseudoacacia*	Non-native
Box elder	*Acer negundo*	Non-native
Choke cherry	*Prunus emarginatus*	Native
Horse chestnut	*Aesculus hippocastanum*	Non-native
Norway maple	*Acer platanoides*	Non-native
Thinleaf alder	*Alnus incana*	Native
Poplar	*Populus sp.*	Non-native
Siberian elm	*Ulmus pumila*	Non-native
White willow	*Salix alba*	Non-native
SHRUBS		
Common lilac	*Syringa vulgaris*	Non-native
Douglas' hawthorn	*Crataegus douglasii*	Native
Golden currant	*Ribes aureum*	Native
Mock orange	*Philadelphus lewisii*	Native
Tall Oregon grape	*Berberis aquifolium*	Native
Western serviceberry	*Amelanchier alnifolia*	Native
White mulberry	*Morus alba*	Non-native
Woods rose	*Rosa woodsii*	Native
FORBS/GRASSES		
Common dandelion	*Taraxacum officinale*	Non-native
Common mullein	*Verbascum Thapsus*	Native
Common plantain	*Plantago major*	Non-native
Common tansy	*Tanecetum vulgare*	Non-native
Dalmation toadflax	*Linaria dalmatica*	Non-native
Silver sage	*Artemisia ludoviciana*	Native
Self-heal	*Prunella vulgaris*	Native
St. John's wort	*Hypericum perforatum*	Non-native

3.1.1 Riparian Vegetation

The area east of Upriver Drive is a riparian area dominated by non-native trees and shrubs. See **Photos 1 to 8**.

Photo 1. From north end of Project facing south

Photo 2. Benches near parking area at Center Street

Photo 3. Existing access to proposed boat launch

Photo 4. Proposed boat launch area

Photo 5. Riparian area during May 2019 high flows

Photo 6. Stormwater pond at south end of Project

Photo 7. Slope break near stormwater pond

Photo 8. Shoreline at south end of Project

3.1.2 Formal Landscaping

The area west of Upriver Drive is landscaped with lawn, ornamental shrubs and trees. See **Photos 9 to 14**.

Photo 9. Avista campus, south end of Project

Photo 10. Center of Upriver Park Project Area

Photo 11. West side of Upriver Drive facing north

Photo 12. Stormwater swale on the west side of Upriver Drive, facing north

Photo 13. Landscaping facing north

Photo 14. Stormwater pond at the north end of the Project

3.2 ECOLOGICAL FUNCTIONS WITHIN SHORELINE AND RIPARIAN HABITAT AREA

The 200’ SMP jurisdiction, 250’ RHA, CAO resources and applicable buffers overlap; however, for the purpose of this Plan, the 250’ RHA, which is the largest buffer, is used as the study area to evaluate ecological function. The shoreline within 250’ of the river is highly impacted and is not properly functioning habitat in most areas. Approximately 85% of the 250’ RHA is developed with the Avista campus buildings and grounds, associated landscaping and stormwater treatment areas, Upriver Drive,

parking areas, and other development which offer no ecological function. The remaining approximately 15% includes the Spokane River shoreline/riparian area and the Shoreline Trail. **Figure 6** shows the extent of man-made and developed areas. **Table 2** provides the area and percentages of functioning and non-functioning buffers relating them to **Figure 6**.

Figure 6. Riparian Function Areas

Table 2. Functioning and Non-functioning Riparian Areas

Map ID	Acres	Sq Ft	Percentage	Function
1	1.9	81,693	15	Functioning Riparian OHWM-75' inside project
2	1.7	74,495	14	Non-Functioning Riparian OHWM-75' inside project
3	4.3	187,839	35	Non-Functioning Riparian 75'-200' inside project
4	2.0	84,884	15	Non-Functioning Riparian 75'-200' outside project
5	0.3	14,687	3	Non-Functioning Riparian 200'-250' inside project
6	2.3	98,777	18	Non-Functioning Riparian 200'-250' outside project

3.3 PRIORITY HABITAT AND SPECIES

WDFW Priority Habitat and Species database and mapping for the study area list rainbow trout (*Oncorhynchus mykiss*), westslope cutthroat trout (*Oncorhynchus clarki lewisi*) and big brown bat (*Eptesicus fuscus*) as species that are likely to occur in the Spokane River and adjacent riparian habitats. This was confirmed through consultation with WDFW (King, 2019). Yellow-bellied marmots, waterfowl and songbirds are the only wildlife observed using the site during site visits in 2019. The riparian habitat is generally expected to support a variety of other small mammals, osprey, eagles, birds, amphibians and possibly deer. Forested wetlands and riparian areas are also considered by WDFW to be Priority Habitats and are present in the study area immediately adjacent to the shoreline as described in Section 3.4. See **Appendix C** for the PHS report.

Threatened and endangered species. The US Fish and Wildlife Service May 2019 IPaC report identifies potential federally listed, threatened or endangered species and designated critical habitat that could occur in the study area which include Yellow-billed cuckoo (*Coccyzus americanus*), water howellia (*Howelia aquatialis*) and bull trout (*Salvelinus confluentus*). None of these species were observed during the site visits.

Yellow-billed cuckoo is not known to occur in Spokane County and requires vast expanses of contiguous deciduous riparian habitat, which is not present in the Project area. Water howellia is often found in wetlands that are seasonally flooded with stagnant water and does not commonly occur along the Spokane River Shoreline nor is it expected to occur due to the swift flows. The project is expected to have no effect to Yellow-billed cuckoo and water howellia.

The USFWS' October 2010 Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for Bull Trout in the Coterminous United States; Final Rule determined the Spokane River in Idaho and Washington is not critical habitat for bull trout. Bull trout are not expected to be present in the area and the project would have no effect to bull trout. See **Appendix C** for the IPaC report.

3.4 FLOODPLAINS AND WETLANDS

According to the City of Spokane GIS database, 100-year floodplain exists in the project area. The area's wetlands and floodplains are regulated under the SMP and are evaluated as part of the PHS and riparian habitat within the shoreline jurisdiction. See **Appendix D** for Floodplain and Wetland maps.

The National Wetland Inventory (NWI) map identified wetlands along the Spokane River. During the May and June site visits the mapped wetlands were flooded with overbank flows and hydrophytic vegetation including willows were present, indicating that wetlands are likely to be present. Soil testing in late July after waters receded indicated sandy and gravely soils and the lack of hydric soils. (See Appendix D for data forms); however, since the area is vegetated within a graveled area and within an active floodplain, it is considered wetland and under the Eastern Washington Wetland Rating System, it would be considered a Category II wetland under special circumstances because it is a forested deciduous wetland in a floodplain.

3.5 FISH AND WILDLIFE CONSERVATION AREAS/RIPARIAN HABITAT AREAS (RHA)

The Spokane River is considered a Type S stream under the Spokane CAO, which requires a 250' buffer. The SMP ecological function is addressed as a part of the evaluation of shoreline ecological function.

3.6 CRITICAL AQUIFER RECHARGE AREAS

The SVRP Sole Source Aquifer supplies drinking water to approximately 100,000 people in Kootenai County, Idaho, and another 400,000 people in Spokane County, Washington. The Project is located over a critical aquifer recharge area to the SVRP. If completed, the Project will reduce traffic volumes, potential pollutants in the area and the total impervious surface along the river. See **Table 3**. The Project would result in a net reduction of impervious surfaces and pollutants in the area and would have no adverse impacts to the aquifer; therefore, no further discussion is warranted.

4. IMPACTS

This section discusses the potential project impacts to shorelines and critical areas including PHS, wetlands, floodplain, streams and their riparian habitats. Since these resources overlap and are all within the shoreline jurisdiction and have shared ecological functions, this discussion focuses on shoreline ecological functions and the project's general consistency with the SMP and CAO.

4.1 EFFECTS TO SHORELINE ECOLOGICAL FUNCTION

Standards for shoreline buffers require no net loss of ecological functions and preservation of the existing character of the shoreline consistent with the SMP. The existing condition of the shoreline in the project area is not desirable, as it is overgrown with non-native vegetation and is used primarily for transient camps during the summer months. This condition discourages public use of the park and enjoyment of the shoreline. The Project will restore and enhance the shoreline condition and shoreline ecological function once completed. **Table 3** summarizes impacts within 250' of the Spokane River compared to existing conditions.

Table 3. Summary of Existing and Proposed Conditions

Feature	Existing (sq ft)	Proposed (sq ft)	Difference (sq ft)
Roadway (excludes driveways)	116,200	0	-116,200
Paved Centennial Trail	4,358	27,007	+22,649
Driveways and Parking Areas	4,994	35,026 (South =17,500 North = 17,526)	+30,032
Plaza and Walks (concrete or impervious)	4,107	22,165	+18,058
Total Hard Surface	129,659	84,198	-45,461
	Existing (sq ft)	Proposed (sq ft)	Difference (sq ft)
Native Planting Areas	1,000	15,680	+14,680
Non-Native/Mixed Planting Areas	27,400	Lawn 30,965/Planting Area 16,910	+20,475
	Existing (# of trees)	Proposed (# of trees)	Difference (# of trees)
Total Native and Non-Native (>/= 2")	215	85	-130
Total Trees and Shrubs (>/=6")	170 (4 native)	77 (4 native)	-93 (only non-native removed)
Trees to be added	0	25 deciduous;7 evergreens	+32 trees
Total Native and Non-Native Trees (2" to <6")	45 (9 native)	9 (9 native)	-36 (only non-native removed)
Non-Native & Native Trees and Shrubs (<2")	Not counted	Not counted	avoid removing native shrubs

4.1.1 Benefits to Ecological Function:

The Project will benefit some shoreline function as described below:

- Vacating Upriver Drive and reconfiguring the trail and plazas will decrease the total impervious surface by 45,434 square feet (1.04 acres), reduce pollutants from vehicular use and create area that may provide marginal wildlife habitat and groundwater recharge.
- Vehicular traffic will be significantly reduced on Upriver Drive, which will minimize potential for wildlife and pedestrian collisions and eliminate barriers for wildlife.
- The Centennial Trail will be separated from vehicular traffic and provide safe bicycle and pedestrians access and continuity to the trail north and south of the project, improving public safety and recreational user experience.
- Approximately 10’ to 20’ of gabion wall near the Avista pedestrian gate and the existing jersey barrier along Upriver Drive will be removed which will eliminate a barrier to wildlife and obstruction of flood flows, possibly reducing erosion.
- Removing and thinning vegetation will create a healthier forest and allow native species to proliferate increasing the vegetative diversity of the riparian area. It will reduce fire risk by eliminating fuel and fire ladders that pose a health and safety risk.
- Thinning will provide views of the Spokane River, and will discourage unauthorized camping that will aid in reducing garbage, public health and safety concerns. Garbage from illegal encampments will be removed and the area will be patrolled by Avista.
- Several trees will be girdled and left as habitat trees to provide perches, wildlife habitat and food sources.
- Plazas, shelters and viewpoints will offer public views and enjoyment of the river and maintain access to the Shoreline Trail leading to the river and dock enhancing the recreational use.
- Parking will remain at the outer limit of the 75’ buffer, but within areas that are currently paved on the north end of the project. Additional parking will be located outside of the 75’ buffer within the existing road’s footprint along the driveways on the north and south ends of the project.
- Avista will plant native vegetation in planting areas within the 75’ shoreline buffer and incorporate native plants into other planting areas along the Centennial Trail and through the project which will improve aesthetics and native habitat.

4.1.2 Impacts to Ecological Function

The project's potential to affect the shoreline ecological function is described below:

- Ninety-three (93) of the 170 trees between 6 inches and 84 inches dbh will be cut at the base but the roots will remain in place to provide soil stabilization.
- While primarily non-native, the naturalized trees provide some habitat for birds, small mammals, food sources for fish, shade and water quality treatment. Care will be taken to selectively remove trees to maintain sufficient shading and habitat along the river while still considering views and safety. This will include leaving or pruning many of the trees along the shoreline including but not limited to approximately 21 large white willows (many of which are multi-stemmed).
- After the project is completed, in addition to native shrubs, 77 trees greater than or equal to 6 inches dbh will remain, including 64 trees that would be pruned and 13 trees that would be untouched. See **Table 3**. **Figure 7** illustrates the expected canopy cover provided by the trees that will remain within the project area after thinning.
- The proposed 5' x 20' floating dock will use natural and low impact materials including boulders or concrete, to secure it. The floating dock will be removable floating and will allow light to penetrate under it. A removable floating dock is more compatible to this section of the river because of flows and reservoir elevations that cause the area to be inundated on an annual basis. The dock will be installed during low flow periods and removed during the off-season. Access to the dock will use the existing shoreline trail which will help minimize harm to vegetation.

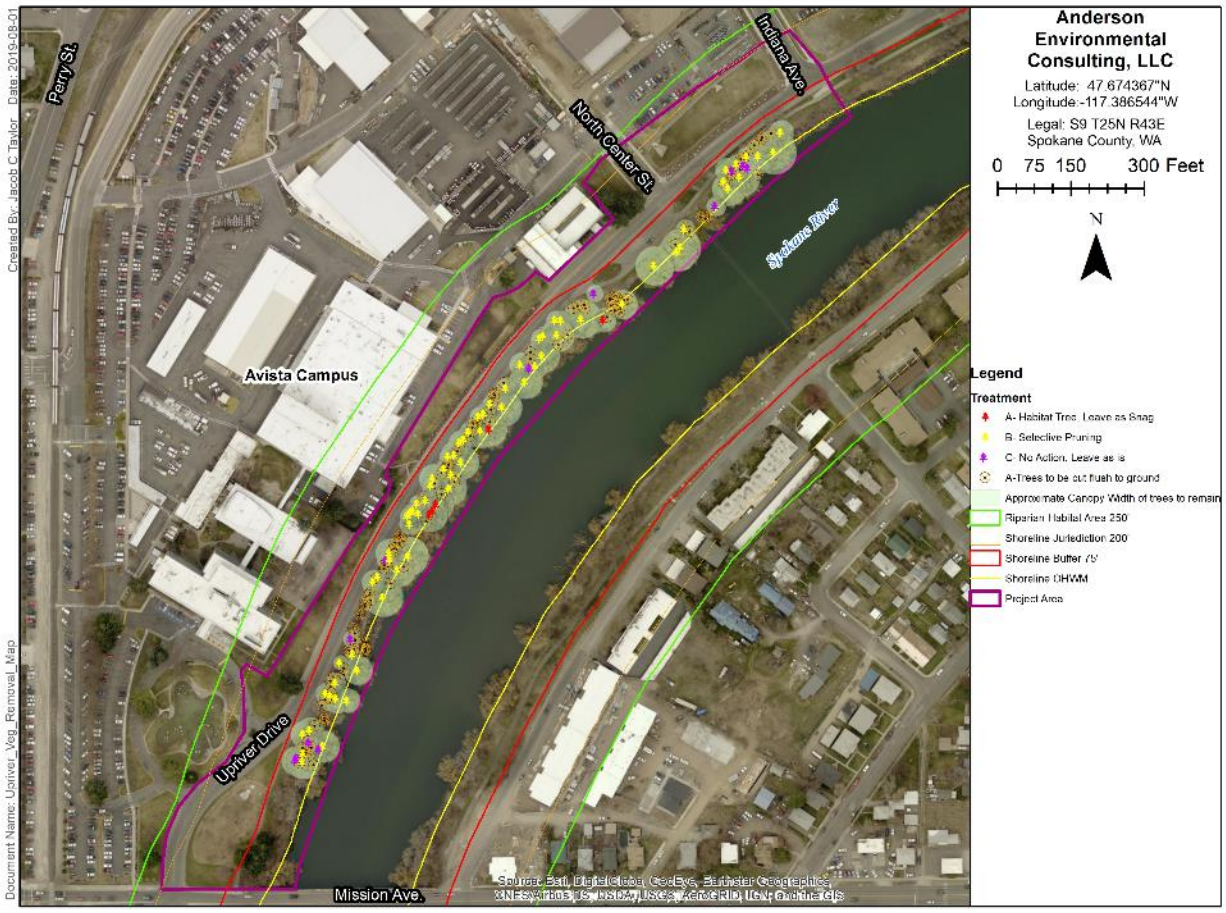


Figure 7. Estimated Canopy Cover After Project and Tree Removals

Table 4 provides a summary of the existing ecological functions of the shoreline including providing fish and wildlife conservation and riparian areas, aesthetic and noise functions, functions of wetlands and floodplains, and evaluates the potential changes to these ecological functions as a result of the project.

Table 4. Summary of Ecological Function and Impacts

Ecological Function	Description of Existing Function	Change to Ecological Function
Filtering Pollutants and Sediment from Runoff	Vehicles on Upriver Drive introduce heavy metals and petroleum products that may degrade water quality. Asphalt increases flows during runoff. The riparian area filters pollutants and sediments from Upriver Drive and potential nutrients from landscaping.	**Improve-**Vacating Upriver Drive will reduce stormwater and runoff from vehicles, and salt and sand from road maintenance. It will reduce impervious surfaces and roadway pollutants by approximately 1.04 acres and allow for more vegetation to filter sediment and toxicants. There will be more landscaping but native species will not require fertilization or pesticides.
Shoreline Stabilization	Trees and shrubs along the Spokane River stabilize the shoreline and prevent erosion and sedimentation. Gabion walls also stabilize the shoreline.	**Maintain in short term and improve in long term** -A total of 130 non-native trees and shrubs will be cut at the base, but the roots will remain intact. Removing the non-native trees and shrubs and thinning vegetation will create a healthier stand while still providing adequate soil stabilization. Additional native vegetation appropriate to the shoreline environment will be planted, and the disturbed soil will be reseeded, which will help stabilize soils. A short section of the gabion wall will be removed along the shoreline trail and will be designed to stabilize soils at the connection to the Shoreline Trail. There will be less impervious surface, which will minimize erosive flows off site, and some reduction of erosion from flood flows
Fish and Wildlife Habitat	Riparian habitat supports deer, small mammals, birds and provides shade for fish and aquatic species in the Spokane River. Bats may use crevices of mature trees. Birds and insects may use trees and woody debris. Small mammals may use fallen trees and boulders as shelter.	**Maintain in short-term and Improve in long term**-Removing non-native trees will allow native vegetation to proliferate and will increase species diversity. Native planting areas will be added in the 75' buffer and incorporated into other landscaping areas. Sufficient mature trees and habitat trees will remain to provide shelter, shade for fish and food sources for birds, small mammals and other species including bats. Pollinator friendly plants will remain in the stormwater swale in the south end of the project and will be incorporated into the plant selection. Snags/habitat trees will remain.
Preserve and Improve Natural Landscape	85% of the area within 250' of the river is buildings, road and asphalt with no ecological function.	**Improve**-Removing asphalt will allow more area for native plantings and available habitat and reduce runoff and risk of petroleum-based waste reaching the shoreline or river. Removing the jersey barriers will improve wildlife movement through the corridor and increase available habitat. Patrolling for transient camps will reduce degradation of the shoreline and also improve the wildlife value and natural setting of the area.
Screening Noise	The vehicle traffic on Upriver Drive generates noise. Trees and shrubs provide a minimal noise barrier for fish and wildlife.	**Improve**-Trees and shrubs do not provide significant noise reduction; however, the remaining density is sufficient and in tandem with the removal of vehicular traffic, the Project will reduce noise.

Ecological Function	Description of Existing Function	Change to Ecological Function
Preserve Aesthetic Value	Trees and shrubs provide an aesthetic value by screening traffic and pedestrians from wildlife and providing a natural setting; however, vegetation is overly dense restricting views of the Spokane River and encourages illegal encampments.	**Improve**-Trees and shrubs within the stand will be thinned in an aesthetically pleasing manner to provide views of the Spokane River. This will also discourage illegal camping that will aid in addressing garbage, public health and safety concerns. Garbage from these encampments will be removed during construction. Plazas, the shelter, viewpoints, and trail amenities are placed to offer views of the river but also not obstruct the natural beauty of the shoreline. Landscaping will blend with both the natural shoreline and more developed landscaping adjacent to the buildings. Parking will be within the existing paved road within the 75' buffer. New parking will be outside the 75' buffer within existing paved areas along the driveways.
Floodplain Function	The floodplain providing water storage during high flows, provides vegetation to slow flows during high flows and provides aquatic and terrestrial habitat.	**Maintain**-There will be no impact to floodplain function because vacating Upriver Drive will reduce impervious surfaces, improve water holding capacity in the project area and maintain aquatic and terrestrial habitat in the project. The amount of fill will be balanced with the material (asphalt) that is removed so there will be no net increase in fill in the 100-year floodplain and no obstruction to potential flood flows. Sufficient vegetation will remain to provide roughness during high flows. The dock will be removed annually during the fall and reinstalled in early summer based on river flows and reservoir elevations. All structures within 75' of the shoreline (including railings, plaza features and boulders) will be designed to not obstruct flows.

5. CONSISTENCY WITH SMP AND CAO REGULATIONS

The following section describes the Project's consistency with the goals and elements of the SMP and the CAO:

- The area is zoned residential single family along the river and light industrial around the Avista Campus. The project location is currently a park, the Centennial Trail and Upriver Drive which is underutilized due to illegal camping, lack of pedestrian access and poor visibility of the river. The park improvement increases pedestrian access, recreational use, improves aesthetic views, and provides connections to the shoreline trail and Centennial trail for all users. The project will not preclude the use of the surrounding properties consistent with their zoning.
- The Project will accommodate and enhance water-oriented uses by vacating Upriver Drive, providing public recreational access to the shoreline trail via paths that connect to the reoriented Centennial Trail, providing a removable dock, overlooks, benches and public parking. The dock will use natural materials and will not create flood or public hazards.
- The Project will protect the shoreline ecological functions by retaining sufficient trees and shrubs to provide wildlife habitat, soil stabilization, and water quality functions.
- The Project will restore the degraded shoreline by removing non-native vegetation that is inhibiting the growth of native species and planting approximately 15,680 square feet (0.36 acres) with native species and another 30,965 square feet (0.71 acres) of lawn and 16,910 square feet (0.39 acres) with a mix of native and non-native species. In addition, removing most of the roadway, reducing vehicular traffic, removing the traffic barriers, and changing human use patterns (eliminating transient camps) will enhance habitat for the limited wildlife that use the area.
- All elevated structures, except the floating dock will be located outside the 75' shoreline buffer which will preserve the ecological functions by improving wildlife movement, preserving water quality function and other ecological effects. Maintaining a more natural setting and landscape will also create more natural aesthetics.
- The project will not include elevated structures that could affect flows within the 75' buffer. The remaining trees and shrubs will provide roughness and enhance flood function.
- Parking within the 75' buffer will be placed in the outer limits of the buffer in areas that are currently paved. Additional parking will be located outside the 75' buffer.
- The project will enhance the visual aesthetic and recreational function of the area and public access consistent with the LUE designation by thinning the understory and tree cover, allowing views of the Spokane River, providing trails, dock and other recreational facilities and providing security to prevent illegal camping. The vegetation in the 75' buffer will be native species and there will be a combination of native and non-native species in the remaining landscape areas which will provide limited habitat for wildlife.

- The project will provide pedestrian access through the area to connect parks and the Centennial Trail.
- The project will retain native plant communities and plant additional areas with native species.
- The project will consider historic resources by including a compatible plaza and interpretive signage near the historic Ross Park Building north of the Project.
- Mitigation sequencing including avoidance, minimization and compensatory mitigation were implemented.
- The Project will not result in any fill of wetlands or fill within the 100-year floodplain.
- The removal of trees will be limited to non-native species and sufficient tree and shrub cover will remain to provide soil stability, wildlife habitat and water quality treatment. The removal of traffic will minimize permanent impacts to the area and allow wildlife movement and habitat.
- There will be Project features waterward of the existing Upriver Drive including overlooks, benches, trail access and portions of plazas; however, these will be minimal and designed to not detract from the shoreline aesthetics and functions.

6. MITIGATION

The SMP and CAO require mitigation sequencing, which is to first avoid, then minimize harm before compensatory mitigation is implemented. Mitigation sequencing for this project is described below:

6.1 AVOIDANCE MEASURES

The following measures were taken to avoid impacts to the ecological functions of the shoreline and critical areas:

- Virtually all the improvements, except the removable dock, replacing some parking and portions of the north plaza and overlooks are outside the 75' shoreline buffer. Locating the trail, driveways, parking and park facilities on the existing roadway prism rather than encroaching on undeveloped areas of the shoreline will avoid impacts to the most ecologically sensitive areas.
- Native trees and shrubs will be flagged and avoided.
- Dead logs and other habitat features will be selectively left in place to provide wildlife habitat.
- The Shoreline Trail will not be improved or paved but will remain a pervious surface.

6.2 MEASURES TO MINIMIZE HARM

The following measures will minimize impacts to the shoreline and critical areas:

- A Stormwater Pollution Prevention Plan and Spill Plan will be prepared, which will prescribe best management practices to minimize erosion, sedimentation and provide pollution prevention.
- Trees that will be removed will be cut at the base, so the root masses remain in the ground to stabilize soils.
- Native vegetation will be planted in planting areas, primarily within the 75' shoreline buffer (east of the Centennial Trail). Non-native landscaping with some native species incorporated will be installed primarily outside of the 75' buffer (west of the Centennial Trail).
- The native and landscaped vegetation will be irrigated until established and will be maintained in the future.
- The existing impervious surfaces cover approximately 129,659 square feet and the proposed impervious surface will be 84,198, which is a reduction of 45,434 (1.04 acre). See **Table 3**.
- The jersey barriers and a short segment of gabion wall will be removed along Upriver Drive, which will allow wildlife movement from the riparian area to the west and allow access to the larger vegetated areas in the park.

- Parking areas will be in previously paved areas both inside and outside of the 75' buffer. Seven parking areas that are currently located within the 75' buffer on the northern section of the Project will be designated. Thirteen parking spots will be added on the northern section of the Project and an additional 11 will be within existing paved areas along Upriver Drive on the southern end of the Project. None of the parking areas currently provide shoreline function.

6.3 COMPENSATORY MITIGATION

6.3.1 Vegetation Replacement

A vegetation replacement plan is required for projects that remove native vegetation within the City of Spokane shorelines. This directive ensures the replacement of damaged or degraded shoreline vegetation results in no net loss of shoreline ecological functions. Vegetation must be replaced in equivalent or greater areas to compensate for the loss. The SMP requires that at least 25% of existing healthy trees over 6 inches caliper, as identified in the vegetation replacement plan shall be retained. However, the replacement ratios apply only to native vegetation and not non-native species; therefore, the Project is in compliance with the replacement requirements since the removed trees are non-native species and native species will be avoided.

However, in order to enhance the ecological function of the shoreline, native species will be planted in areas totaling 15,680 square feet and non-native species will be concentrated in planting areas totaling 47,875 square feet. There may also be native species incorporated into the 47,875 square foot area. A total of 34 trees will be added landward of the existing Upriver Drive. In addition, grasses and forbs will be replaced through hydroseeding. Any of the plants in **Table 5** may be used in the areas designated for native plant species. See **Figures 2** and **3** for the locations of these planting areas.

6.3.2 Maintenance and Monitoring

The plantings will be maintained by Avista as part of the normal ground maintenance program, which will include; controlling weeds, irrigating plants until they are established and replacing dead plants to help ensure survival of native plants in the designated landscape areas. While 15,680 square feet will be planted in native trees and shrubs and another 47,875 square feet will be planted with a mix of natives and non-native species, no specific ratio of plant replacements is required and therefore, no success monitoring is required.

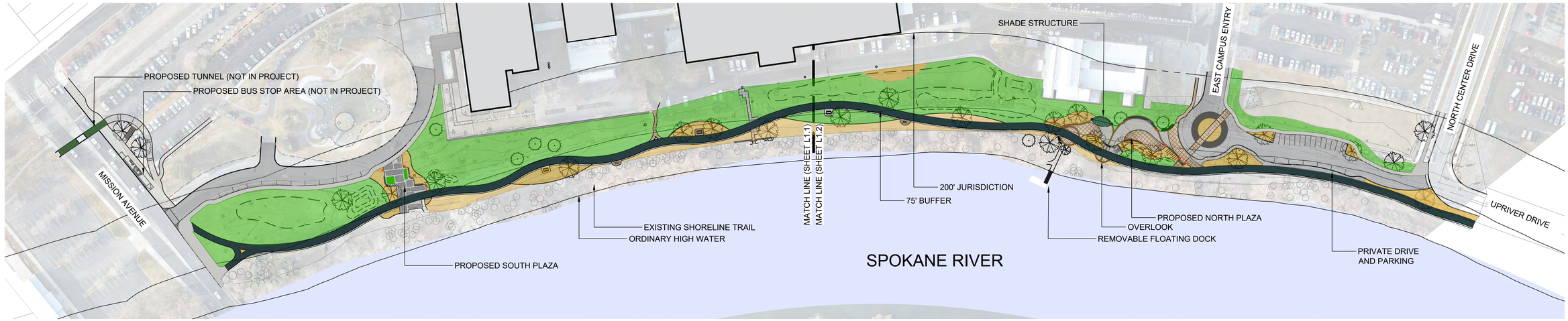
Table 5. Native Planting Palette

Common Name	Scientific Name
TREES	
Antelope bitterbrush	*Purshia tridentata*
Black cottonwood	*Populus trichocarpa*
Black hawthorn	*Crataegus douglasii*
Douglas maple	*Acer douglasii*
Ponderosa pine	*Pinus ponderosa*
Quaking aspen	*Populus tremuloides*
Rocky mountain juniper	*Juniperus scopulorum Sarg.*
SHRUBS	
Kinnickinnick	*Arctostaphylos uva-ursi*
Mallow ninebark	*Physocarpus malvaceus*
Mock orange	*Philadelphus lewisii*
Nootka rose	*Rosa nutkana*
Oceanspray	*Holodiscus discolor*
Red osier dogwood	*Cornus sericea*
Serviceberry	*Amelancier alnifolia*
Snowberry	*Symphoricarpos albus*
Wood rose	*Rosa woodsii*
FORBS/GRASSES	
Arrowleaf balsamroot	*Balsamorhiza sagittata*
Bluebunch Wheatgrass	*Agropyron spicatum*
Clover	*Trifolium sp.*
Idaho fescue	*Festuca idahoensis*
Indian ricegrass	*Achnatherum hymenoides*
Native Lomatium/biscuitroot species	*Lomatium sp.*
Needle and thread	*Hesperostipa comata*
Pinegrass	*Calamagrostis rubescens*
Sandberg bluegrass	*Poa secunda*
Silky lupine	*Lupinus sericeus*
Western Yarrow	*Achillea millefolium*

6.3.3 Other Mitigation

In addition to the avoidance, minimization and planting native vegetation on-site, Avista actively participates in other on-going native revegetation Projects within the City and outside the City along the Spokane River. One such project is Spokane Reforest, which is focused on planting native trees and shrubs in the near-shoreline environment below Kendall Yards. Those efforts are continuing in 2019 and beyond. Other projects that are in the vicinity but outside the city limits include the five acre wetland restoration project along the Little Spokane River on Washington State Parks property, riparian habitat improvements, including willow and cottonwood plantings along Nine Mile Reservoir and Lake Spokane, as well as assisting in replacing bulkheads with more natural shorelines. These Projects help to improve the ecological functions of the shorelines by planting native trees and shrubs, reducing erosion and sedimentation and enhancing the aesthetics and recreational use of the shoreline.

APPENDIX A. PROJECT SITE PLAN



UPRIVER PARK - OVERALL SITE PLAN

SCALE: 1" = 80' - 0"

0 40 80 160

REFERENCE NOTES SCHEDULE

SYMBOL	07 AMENITIES DESCRIPTION	QTY
	LARGE GRANITE BOULDER	2
	MEDIUM GRANITE BOULDER	2
	SMALL GRANITE BOULDER	2

SYMBOL	DESCRIPTION
	HARDSCAPE PLAZA
	PAVED ROADWAY
	CENTENNIAL TRAIL
	SIDEWALKS
	SHORELINE TRAIL
	LAWN AREA
	PLANTING/MULCH AREA
	NATIVE LANDSCAPE AREA
	BRICK ARCHES
	BENCHES
	PAVER INSET

SYMBOL	HARDSCAPE PREP / CONCRETE DESCRIPTION
	BROOM FINISHED CONRETE

SYMBOL	HARDSCAPE PREP / PAVERS DESCRIPTION
	HARDSCAPE ACCENT

LAND EXPRESSIONS
5615 E. DAY MT. SPOKANE RD.
MEAD, WA 99021
P. 509.466.6683 F. 509.466.7694
LAND EXPRESSIONS.COM

UPRIVER PARK
1411 E. MISSION AVE.
SPOKANE, WA 99252
OVERALL SITE PLAN

DATE: 05-15-19
REVISED:
07.15.19

PROJECT NO: 171020
PROJECT MGR: DN
DRAWN BY: TP

BAR IS ONE INCH ON ORIGINAL DRAWING.
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

811

L1.0
OVERALL SITE PLAN

APPENDIX B. VEGETATION INVENTORY/ARBORIST REPORT

FIELD REPORT SUMMARY
ASSESSMENT TYPE: LEVEL 1 - VISUAL INSPECTION
DATE OF INSPECTION: 11/8/2018

DOCUMENTS PREPARED BY:
JAMES DAVIS, ISA ARBORIST #PN-7874A & TREE RISK ASSESSOR (TRAQ) &
TOM PRATT, PLA, LANDSCAPE ARCHITECT

PER THE ON-SITE FIELD INSPECTION, THE FOLLOWING ITEMS WERE OBSERVED.

• 215 TREES WERE REVIEWED AND CONFIRMED IN CORRESPONDENCE TO THE TREE SURVEY.

• 10 DIFFERENT TREE GENERA WERE IDENTIFIED:

1. ACER
2. AMELANCHIER
3. MALUS
4. POPULUS
5. PRUNUS
6. PYRUS
7. RHUS
8. ROBINIA
9. SALIX
10. ULMUS

• 9 OF 215 TREES WERE UNKNOWN AND NOT IDENTIFIABLE AT TIME OF INSPECTION.

• DBH (DIAMETER AT BREAST HEIGHT) FOR RECORDED TRUNK SIZES WERE MEASURED AND RANGED FROM 2" TO 84"+ FOR SINGLE AND MULTI-STEM TREES.

PER THE ON-SITE FIELD INSPECTION, THE FOLLOWING ITEMS ARE RECOMMENDED.

• THREE (3) TREATMENT SOLUTIONS ARE PROPOSED:

1. *TREATMENT A* - REMOVE TREE FLUSH TO THE GROUND (LEAVE STUMP FOR STREAMBANK AND SOIL STABILIZATION)
2. *TREATMENT B* - SELECTIVE PRUNING (REFER TO FIELD REPORT)
3. *TREATMENT C* - NO ACTION (TREE TO REMAIN)

• PER THE FIELD REPORT, IT IS RECOMMENDED:

(130) TREES RECEIVE TREATMENT A
(71) TREES RECEIVE TREATMENT B
(14) TREES RECEIVE TREATMENT C

• OF THE (130) TREES TO RECEIVE TREATMENT A, (45) OF THEM ARE NON-SIGNIFICANT TREES (CLASSIFIED BY A DBH OF SIX INCHES OR LESS). RESULTING IN THE REMOVALS OF (85) SIGNIFICANT TREES (CLASSIFIED BY A DBH GREATER THAN SIX INCHES).

• IT IS RECOMMENDED THAT SOME TREES BE MODIFIED WITH ARBORIST SUPERVISION. ON-SITE MEETING WITH ARBORIST AND TREE REMOVAL CONTRACTOR TO COMMENCE BEFORE REMOVALS BEGIN.

• SOME TREES MAY BE GOOD CANDIDATES FOR "HABITAT TREES" INSTEAD OF FULL FLUSH-TO-GROUND REMOVALS. HABITAT TREES ARE CROWN REDUCED TO APPROXIMATELY 20' FT., APPROXIMATELY 95% OF LIMBS ARE REMOVED, AND THE BASE IS GIRDLED BY REMOVING A COMPLETE BAND OF BARK AROUND THE CIRCUMFERENCE OF THE TRUNK. THIS PRACTICE LEAVES PART OF THE TRUNK IN PLACE FOR HABITAT, PROVIDING ROOSTING FOR BIRDS AND OTHER ANIMALS, WHILE NOT COMPLETELY REMOVING THE TREE TO THE GROUND. BECAUSE THE TRUNK IS GIRDLED, THE TREE WILL NOT CONTINUE TO GROW, AND WILL EVENTUALLY DIE.

FIELD REPORT

FIELD INVENTORY ASSESSMENT DATE:	Thursday, November 08, 2018
ASSESSMENT TYPE:	LEVEL 1 - VISUAL ASSESSMENT
DOCUMENTS PREPARED BY:	JAMES DAVIS, ISA ARBORIST #PN-7874A & TREE RISK ASSESSOR (TRAQ) & TOM PRATT, PLA, LANDSCAPE ARCHITECT

CLIENT: AVISTA UTILITIES

SITE ADDRESS: 1411 EAST MISSION AVE, SPOKANE, WA 99252

- TREES TO BE REMOVED
- TREES TO BE MODIFIED W/ ARBORIST ON-SITE
- TREES TO BE PRUNED
- TREES TO REMAIN. NO ACTION NEEDED.

TREATMENT		SELECTIVE PRUNING			
A	REMOVE TREE FLUSH TO GROUND	CROWN RAISE (10'-20')	1	4	CROWN THINNING
B	SELECTIVE PRUNING ---------->	CROWN RAISE (+20')	2	5	REMOVE LARGE HORIZONATAL BRANCHING AT BRANCH UNION
C	NO ACTION (TREE TO REMAIN)	STRUCTURAL PRUNE	3	6	MEET ON-SITE WITH ARBORIST TO DISCUSS. ON-SITE DIRECTIVE.

TREE NO.	DBH (IN.)	SINGLE STEM / MULTISTEM (SS / MS)	GENUS	COMMON	CANOPY HEIGHT (FT.)	CANOPY WIDTH (FT.)	TREATMENT	NOTES
1	17"	SS	Acer	Maple	65'	40'	C	
2	11.25"	SS	Acer	Maple	50'	20'	C	
3	8.5"	MS	Acer	Maple	50'	25'	A	
4	8.5"	SS	Acer	Maple	40'	10'	A	
5	2.7"	SS	Acer	Maple	50'	50'	B4	
6	18"	SS	Salix	Willow	30'	20'	A	
7	19"	SS	Acer	Maple	60'	30'	B2	
8	6.5"	SS	Robinia	Locust	20'	10'	A	
9	3"	SS	Rhus	Sumac	15'	10'	A	
10	7"	SS	Acer	Maple	30'	20'	A	
11	3"	SS	Rhus	Sumac	15'	10'	A	
12	3"	SS	Robinia	Locust	15'	10'	A	
13	21"	SS	Populus	Poplar	50'	20'	C	
14	84" +	MS	Salix	Willow	50'	45'	B6	Fungal bodies on truck collar.
15	9"	SS	Acer	Maple	35'	20'	C	
16	6"	SS	Acer	Maple	25'	10'	A	
17	17"	SS	Acer	Maple	45'	35'	B1, B4	
18	18"	SS	Acer	Maple	45'	35'	B1	
19	-	-	-	-	-	-	-	No matching tree in field. N/A
20	7"	SS	Acer	Maple	20'	20'	A	
21	-	-	-	-	-	-	-	No matching tree in field. N/A
22	5"	SS	Robinia	Locust	35'	15'	A	
23	12"	SS	Robinia	Locust	35'	15'	A	
24	13"	SS	Robinia	Locust	35'	20'	A	
25	10"	MS	Unknown	Unknown	10'	20'	A	
26	22"	MS	Ulmus	Elm	45'	30'	A	
27	35"	MS	Populus	Poplar	70'	40'	B4	
28	10"	SS	Robinia	Locust	20'	20'	A	
29	11"	SS	Robinia	Locust	40'	20'	A	Remove adjacent maple as well. Not tagged.
30	12"	SS	Acer	Maple	35'	25'	B1	
31	4"	SS	Robinia	Locust	20'	10'	A	
32	24"	SS	Populus	Poplar	60'	40'	B4	
33	26"	MS	Salix	Willow	30'	30'	B6	
34	8"	MS	Acer	Maple	30'	15'	A	
35	6.5"	SS	Acer	Maple	10'	10'	A	
36	7"	MS	Acer	Maple	20'	10'	A	
37	8"	MS	Acer	Maple	30'	20'	B1, B4	
38	4"	SS	Robinia	Locust	10'	10'	A	
39	8"	SS	Robinia	Locust	25'	10'	A	
40	4"	MS	Acer	Maple	10'	10'	B4	
41	26"	MS	Salix	Willow	50'	40'	B6, B4	
42	4"	MS	Acer	Maple	10'	20'	A	
43	4"	MS	Acer	Maple	10'	20'	A	
44	6"	SS	Unknown	Unknown	20'	10'	B1, B4	
45	9"	SS	Robinia	Locust	30'	15'	A	
46	4"	SS	Robinia	Locust	15'	5'	A	
47	4"	SS	Robinia	Locust	15'	5'	A	
48	4"	SS	Robinia	Locust	15'	5'	A	
49	2"	MS	Unknown	Unknown	15'	10'	A	
50	2"	MS	Unknown	Unknown	5'	5'	A	

FIELD REPORT

FIELD INVENTORY ASSESSMENT DATE:	Thursday, November 08, 2018
ASSESSMENT TYPE:	LEVEL 1 - VISUAL ASSESSMENT
DOCUMENTS PREPARED BY:	JAMES DAVIS, ISA ARBORIST #PN-7874A & TREE RISK ASSESSOR (TRAQ) & TOM PRATT, PLA, LANDSCAPE ARCHITECT

CLIENT: AVISTA UTILITIES

SITE ADDRESS: 1411 EAST MISSION AVE, SPOKANE, WA 99252

- TREES TO BE REMOVED
- TREES TO BE MODIFIED W/ ARBORIST ON-SITE
- TREES TO BE PRUNED
- TREES TO REMAIN. NO ACTION NEEDED.

TREATMENT		SELECTIVE PRUNING			
A	REMOVE TREE FLUSH TO GROUND	CROWN RAISE (10'-20')	1	4	CROWN THINNING
B	SELECTIVE PRUNING ---------->	CROWN RAISE (+20')	2	5	REMOVE LARGE HORIZONATAL BRANCHING AT BRANCH UNION
C	NO ACTION (TREE TO REMAIN)	STRUCTURAL PRUNE	3	6	MEET ON-SITE WITH ARBORIST TO DISCUSS. ON-SITE DIRECTIVE.

TREE NO.	DBH (IN.)	SINGLE STEM / MULTISTEM (SS / MS)	GENUS	COMMON	CANOPY HEIGHT (FT.)	CANOPY WIDTH (FT.)	TREATMENT	NOTES
51	3"	MS	Unknown	Unknown	10'	15'	A	
52	7"	MS	Acer	Maple	25'	15'	C	
53	3"	MS	Acer	Maple	20'	15'	A	
54	7"	MS	Ulmus	Elm	20'	20'	A	Included bark.
55	6"	MS	Acer	Maple	20'	15'	A	
56	9"	MS	Robinia	Locust	20'	10'	A	
57	5"	MS	Robinia	Locust	20'	10'	A	
58	5"	MS	Acer	Maple	20'	10'	A	
59	9.5"	SS	Robinia	Locust	35'	10'	A	
60	18"	MS	Ulmus	Elm	50'	20'	A	
61	11"	SS	Acer	Maple	45'	20'	A	
62	38" +	MS	Salix	Willow	50'	60'	B6	
63	24.5"	SS	Robinia	Locust	60'	30'	B4	
64	6"	MS	Acer	Maple	20'	10'	A	
65	6"	MS	Acer	Maple	20'	10'	B1	
66	36"+	MS	Salix	Willow	50'	30'	A	
67	7"	MS	Robinia	Locust	20'	10'	A	
68	8.5"	MS	Robinia	Locust	20'	10'	A	
69	6"	MS	Acer	Maple	20'	10'	A	
70	8"	SS	Acer	Maple	30'	20'	C	
71	3"	SS	Acer	Maple	20'	10'	B1	
72	3"	SS	Acer	Maple	20'	10'	B1	
73	60" +	MS	Salix	Willow	40'	50'	B6	
74	60" +	MS	Salix	Willow	50'	30'	A	
75	60" +	MS	Salix	Willow	50'	60'	B6	
76	3"	SS	Acer	Maple	10'	5'	A	
77	18"	SS	Acer	Maple	50'	40'	B4	
78	3"	SS	Acer	Maple	20'	10'	A	
79	3"	SS	Acer	Maple	20'	10'	A	
80	3"	SS	Acer	Maple	20'	10'	A	
81	8"	MS	Unknown	Unknown	15'	15'	A	
82	7"	SS	Robinia	Locust	15'	15'	A	
83	8"	SS	Robinia	Locust	30'	15'	A	
84	8"	SS	Robinia	Locust	30'	15'	A	
85	9.5"	MS	Robinia	Locust	30'	15'	A	
86	60" +	MS	Salix	Willow	50'	60'	B6	
87	20"	MS	Robinia	Locust	45'	25'	B4, B6	
88	9"	SS	Acer	Maple	30'	15'	B1	
89	9"	SS	Acer	Maple	30'	15'	B1	
90	8"	SS	Acer	Maple	30'	15'	B1	
91	4"	SS	Robinia	Locust	20'	15'	B1, B4	
92	60" +	MS	Salix	Willow	50'	50'	A	
93	60" +	MS	Salix	Willow	40'	50'	A	Habitat tree. Discuss with Arborist before removal.
94	60" +	MS	Salix	Willow	30'	40'	A	Habitat tree. Discuss with Arborist before removal.
95	48" +	MS	Salix	Willow	45'	50'	A	Habitat tree. Discuss with Arborist before removal.
96	8"	MS	Robinia	Locust	35'	15'	B3	Remove western most angled leader.
97	8.5"	MS	Acer	Maple	35'	20'	A	
98	14"	MS	Robinia	Locust	45'	20'	B2, B4	
99	7"	MS	Robinia	Locust	30'	20'	B2, B4	
100	7"	MS	Robinia	Locust	35'	20'	A	Poor structure.

FIELD REPORT

FIELD INVENTORY ASSESSMENT DATE:	Thursday, November 08, 2018
ASSESSMENT TYPE:	LEVEL 1 - VISUAL ASSESSMENT
DOCUMENTS PREPARED BY:	JAMES DAVIS, ISA ARBORIST #PN-7874A & TREE RISK ASSESSOR (TRAQ) & TOM PRATT, PLA, LANDSCAPE ARCHITECT

CLIENT: AVISTA UTILITIES

SITE ADDRESS: 1411 EAST MISSION AVE, SPOKANE, WA 99252

- TREES TO BE REMOVED
- TREES TO BE MODIFIED W/ ARBORIST ON-SITE
- TREES TO BE PRUNED
- TREES TO REMAIN. NO ACTION NEEDED.

TREATMENT		SELECTIVE PRUNING			
A	REMOVE TREE FLUSH TO GROUND	CROWN RAISE (10'-20')	1	4	CROWN THINNING
B	SELECTIVE PRUNING ---------->	CROWN RAISE (+20')	2	5	REMOVE LARGE HORIZONATAL BRANCHING AT BRANCH UNION
C	NO ACTION (TREE TO REMAIN)	STRUCTURAL PRUNE	3	6	MEET ON-SITE WITH ARBORIST TO DISCUSS. ON-SITE DIRECTIVE.

TREE NO.	DBH (IN.)	SINGLE STEM / MULTISTEM (SS / MS)	GENUS	COMMON	CANOPY HEIGHT (FT.)	CANOPY WIDTH (FT.)	TREATMENT	NOTES
101	14"	SS	Ulmus	Elm	50'	40'	B2	
102	48" +	MS	Salix	Willow	50'	30'	A	Downed tree.
103	60" +	MS	Salix	Willow	50'	50'	B6	
104	48" +	MS	Salix	Willow	30'	40'	A	
105	60" +	MS	Salix	Willow	50'	40'	B2, B6	
106	60" +	MS	Salix	Willow	40'	40'	A	
107	7"	MS	Robinia	Locust	25'	20'	A	
108	9"	SS	Robinia	Locust	30'	20'	B1, B4	
109	7"	SS	Robinia	Locust	30'	15'	A	
110	9"	SS	Robinia	Locust	30'	15'	A	
111	9"	SS	Robinia	Locust	50'	20'	A	
112	9"	SS	Acer	Maple	30'	20'	B1	
113	18"	MS	Robinia	Locust	50'	40'	B2, B4	
114	60" +	MS	Salix	Willow	40'	50'	B6	
115	9"	SS	Robinia	Locust	20'	15'	A	
116	5"	MS	Alnus	Alder	20'	15'	B1	
117	30"	MS	Salix	Willow	30'	30'	C	
118	6"	SS	Robinia	Locust	20'	15'	A	
119	16"	SS	Robinia	Locust	50'	30'	B2, B4	
120	11"	MS	Robinia	Locust	45'	25'	B1, B4	
121	6"	MS	Robinia	Locust	20'	20'	A	
122	5"	MS	Robinia	Locust	20'	10'	A	
123	10"	MS	Robinia	Locust	45'	20'	B2	
124	7"	MS	Robinia	Locust	20'	20'	A	
125	8.5"	SS	Robinia	Locust	30'	10'	A	
126	5.5"	MS	Robinia	Locust	30'	10'	A	
127	60" +	MS	Salix	Willow	50'	50'	B6	
128	60" +	MS	Salix	Willow	40'	50'	A	Habitat tree. Discuss with Arborist before removal.
129	60" +	MS	Salix	Willow	40'	50'	A	
130	6"	SS	Robinia	Locust	40'	15'	A	
131	11"	SS	Robinia	Locust	40'	20'	B2, B4	
132	13.5"	SS	Robinia	Locust	45'	20'	B2, B4	
133	7"	SS	Robinia	Locust	30'	10'	A	
134	9"	SS	Acer	Maple	30'	15'	B2	
135	7"	SS	Acer	Maple	25'	15'	A	
136	60" +	MS	Salix	Willow	50'	60'	B6	
137	3"	SS	Acer	Maple	20'	10'	A	
138	4"	SS	Acer	Maple	20'	10'	A	
139	3"	MS	Amelanchier	Serviceberry	20'	10'	A	
140	10"	SS	Ulmus	Elm	25'	25'	A	
141	10"	SS	Acer	Maple	30'	25'	B2	
142	3"	MS	Amelanchier	Serviceberry	15'	15'	A	
143	60" +	MS	Salix	Willow	50'	50'	B6	
144	15"	SS	Acer	Maple	45'	30'	B2	
145	4"	MS	Amelanchier	Serviceberry	15'	15'	C	
146	48" +	MS	Salix	Willow	40'	30'	B6	
147	12"	SS	Robinia	Locust	30'	20'	A	
148	14"	MS	Robinia	Locust	30'	20'	A	
149	60" +	MS	Salix	Willow	50'	50'	B6	
150	9"	MS	Robinia	Locust	30'	20'	B1	

FIELD REPORT

FIELD INVENTORY ASSESSMENT DATE:	Thursday, November 08, 2018
ASSESSMENT TYPE:	LEVEL 1 - VISUAL ASSESSMENT
DOCUMENTS PREPARED BY:	JAMES DAVIS, ISA ARBORIST #PN-7874A & TREE RISK ASSESSOR (TRAQ) & TOM PRATT, PLA, LANDSCAPE ARCHITECT

CLIENT: AVISTA UTILITIES

SITE ADDRESS: 1411 EAST MISSION AVE, SPOKANE, WA 99252

TREES TO BE REMOVED
TREES TO BE MODIFIED W/ ARBORIST ON-SITE
TREES TO BE PRUNED
TREES TO REMAIN. NO ACTION NEEDED.

TREATMENT		SELECTIVE PRUNING			
A	REMOVE TREE FLUSH TO GROUND	CROWN RAISE (10'-20')	1	4	CROWN THINNING
B	SELECTIVE PRUNING ---------->	CROWN RAISE (+20')	2	5	REMOVE LARGE HORIZONATAL BRANCHING AT BRANCH UNION
C	NO ACTION (TREE TO REMAIN)	STRUCTURAL PRUNE	3	6	MEET ON-SITE WITH ARBORIST TO DISCUSS. ON-SITE DIRECTIVE.

TREE NO.	DBH (IN.)	SINGLE STEM / MULTISTEM (SS / MS)	GENUS	COMMON	CANOPY HEIGHT (FT.)	CANOPY WIDTH (FT.)	TREATMENT	NOTES
151	9"	MS	Robinia	Locust	20'	20'	B1	
152	60" +	MS	Salix	Willow	40'	40'	A	
153	60" +	MS	Salix	Willow	60'	50'	B6	
154	48" +	MS	Salix	Willow	20'	30'	A	
155	8"	SS	Acer	Maple	20'	20'	B1	
156	10"	SS	Acer	Maple	30'	20'	B2	
157	60" +	MS	Salix	Willow	70'	60'	B6	
158	24"	MS	Salix	Willow	20'	20'	A	
159	4"	MS	Amelanchier	Serviceberry	15'	10'	A	
160	3"	MS	Unknown	Unknown	10'	10'	A	
161	3"	MS	Unknown	Unknown	10'	10'	A	
162	23"	SS	Populus	Poplar	70'	30'	A	Habitat tree. Discuss with Arborist before removal.
163	15"	SS	Populus	Poplar	60'	20'	A	
164	6"	MS	Malus	Apple	20'	15'	C	Fruiting apple.
165	8"	SS	Populus	Poplar	40'	10'	A	Overhead powerlines intertwined in tree canopy.
166	12"	SS	Populus	Poplar	70'	20'	A	Overhead powerlines intertwined in tree canopy.
167	13"	SS	Populus	Poplar	70'	20'	A	Overhead powerlines intertwined in tree canopy.
168	12"	SS	Populus	Poplar	70'	15'	A	Overhead powerlines intertwined in tree canopy.
169	13"	SS	Populus	Poplar	70'	15'	A	Overhead powerlines intertwined in tree canopy.
170	9"	SS	Populus	Poplar	50'	10'	A	Overhead powerlines intertwined in tree canopy.
171	12"	SS	Populus	Poplar	50'	10'	A	Overhead powerlines intertwined in tree canopy.
172	12"	SS	Populus	Poplar	50'	10'	A	Overhead powerlines intertwined in tree canopy.
173	13"	SS	Populus	Poplar	70'	15'	A	Overhead powerlines intertwined in tree canopy.
174	60" +	MS	Salix	Willow	50'	40'	B6	
175	11"	SS	Populus	Poplar	70'	15'	A	Overhead powerlines intertwined in tree canopy.
176	12"	SS	Populus	Poplar	70'	15'	A	Overhead powerlines intertwined in tree canopy.
177	16"	SS	Populus	Poplar	70'	20'	A	Overhead powerlines intertwined in tree canopy.
178	9.5"	SS	Populus	Poplar	40'	20'	A	Overhead powerlines intertwined in tree canopy.
179	14"	SS	Populus	Poplar	70'	15'	A	Overhead powerlines intertwined in tree canopy.
180	60" +	MS	Salix	Willow	40'	40'	A	
181	60" +	MS	Salix	Willow	60'	60'	B6	
182	60" +	MS	Salix	Willow	60'	60'	B6	
183	5.5"	SS	Salix	Willow	20'	15'	A	
184	60" +	MS	Salix	Willow	60'	60'	B6	
185	10"	MS	Unknown	Unknown	20'	20'	C, B4	
186	15"	MS	Robinia	Locust	50'	30'	A	
187	60" +	MS	Salix	Willow	60'	30'	A	
188	60" +	MS	Salix	Willow	50'	30'	A	
189	60" +	MS	Salix	Willow	50'	30'	A	
190	60" +	MS	Salix	Willow	40'	40'	A	
191	9"	SS	Pyrus	Pear	50'	20'	C	
192	60" +	MS	Salix	Willow	50'	50'	B6	
193	4.5"	SS	Prunus	Cherry	20'	10'	A	
194	6"	SS	Prunus	Cherry	30'	10'	B1	
195	60" +	MS	Salix	Willow	60'	60'	B6	
196	3"	MS	Robinia	Locust	15'	10'	A	
197	3"	SS	Robinia	Locust	15'	10'	A	
198	10"	MS	Robinia	Locust	50'	30'	B2	
199	4"	SS	Prunus	Cherry	20'	10'	C	
200	9"	SS	Populus	Poplar	20'	20'	A	

FIELD REPORT

FIELD INVENTORY ASSESSMENT DATE:	Thursday, November 08, 2018
ASSESSMENT TYPE:	LEVEL 1 - VISUAL ASSESSMENT
DOCUMENTS PREPARED BY:	JAMES DAVIS, ISA ARBORIST #PN-7874A & TREE RISK ASSESSOR (TRAQ) & TOM PRATT, PLA, LANDSCAPE ARCHITECT

CLIENT: AVISTA UTILITIES

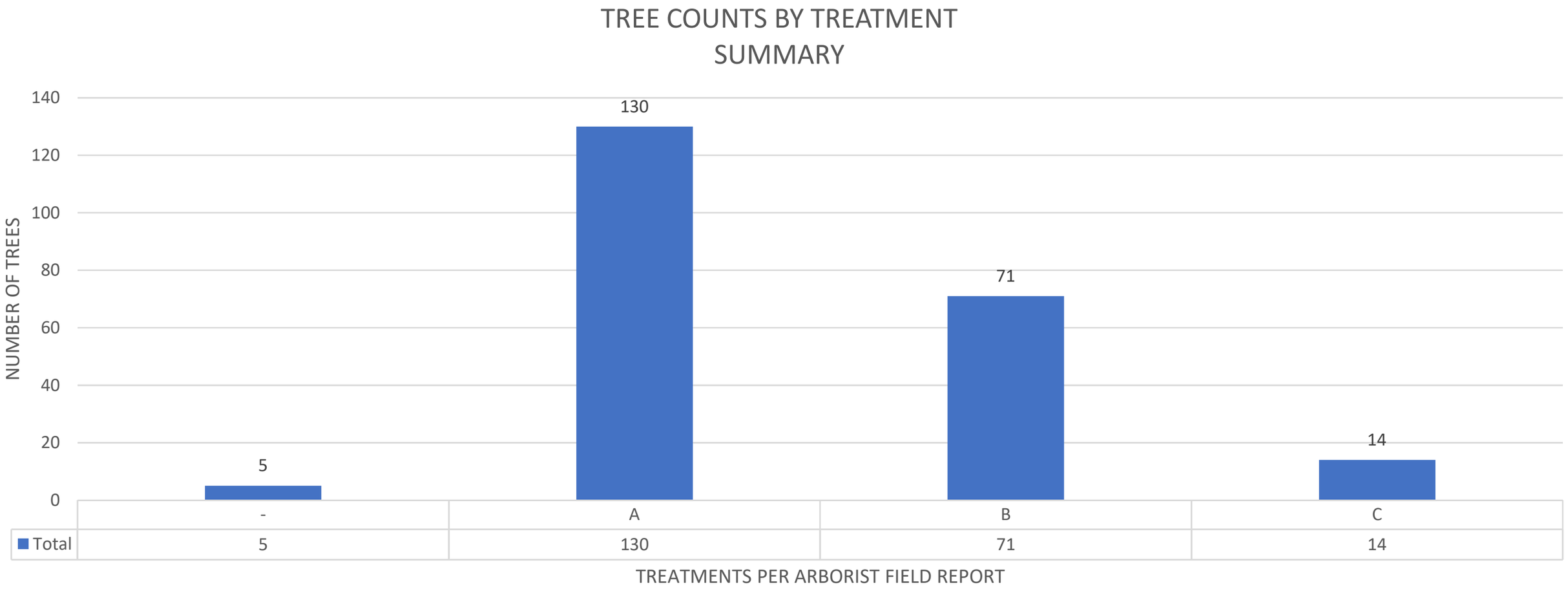
SITE ADDRESS: 1411 EAST MISSION AVE, SPOKANE, WA 99252

- TREES TO BE REMOVED
- TREES TO BE MODIFIED W/ ARBORIST ON-SITE
- TREES TO BE PRUNED
- TREES TO REMAIN. NO ACTION NEEDED.

TREATMENT		SELECTIVE PRUNING			
A	REMOVE TREE FLUSH TO GROUND	CROWN RAISE (10'-20')	1	4	CROWN THINNING
B	SELECTIVE PRUNING ---------->	CROWN RAISE (+20')	2	5	REMOVE LARGE HORIZONATAL BRANCHING AT BRANCH UNION
C	NO ACTION (TREE TO REMAIN)	STRUCTURAL PRUNE	3	6	MEET ON-SITE WITH ARBORIST TO DISCUSS. ON-SITE DIRECTIVE.

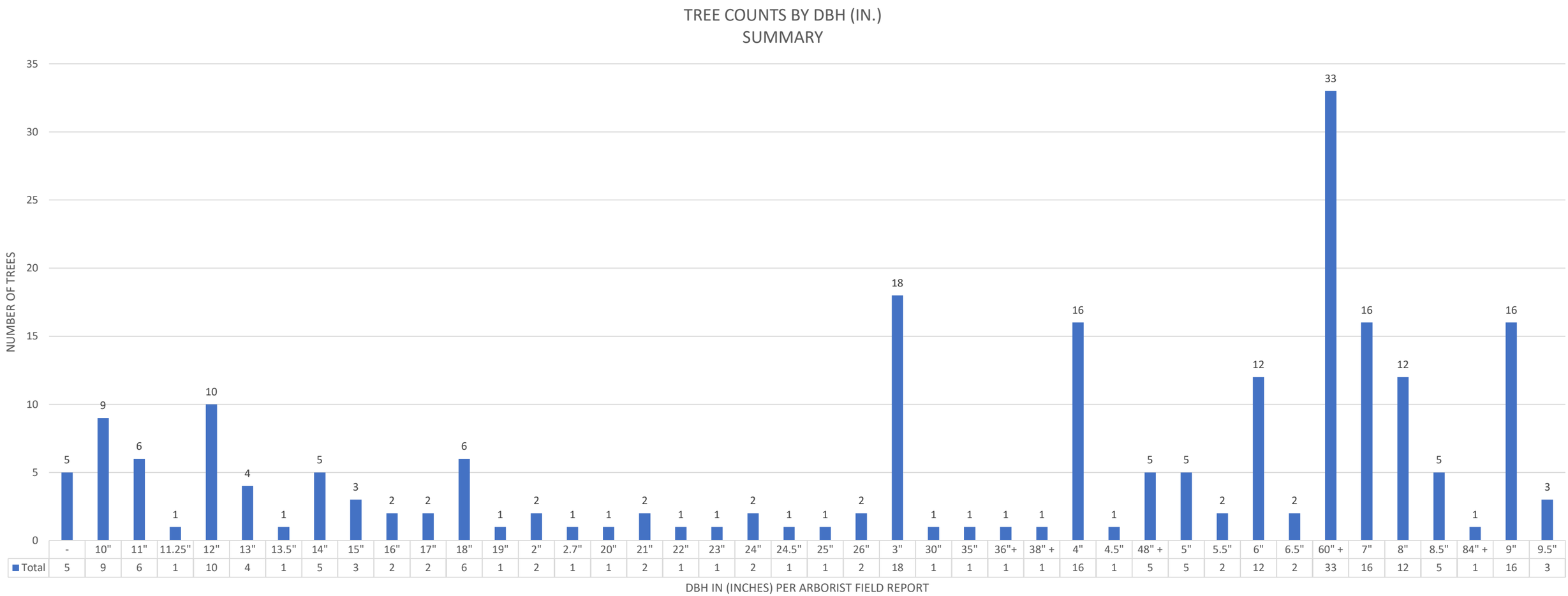
TREE NO.	DBH (IN.)	SINGLE STEM / MULTISTEM (SS / MS)	GENUS	COMMON	CANOPY HEIGHT (FT.)	CANOPY WIDTH (FT.)	TREATMENT	NOTES
201	-	-	-	-	-	-	-	No matching tree in field. N/A
202	-	-	-	-	-	-	-	No matching tree in field. N/A
203	12"	SS	Prunus	Cherry	30'	20'	B1	
204	7"	MS	Robinia	Locust	30'	20'	A	
205	25"	SS	Populus	Poplar	80'	30'	C	
206	21"	SS	Populus	Poplar	80'	30'	C	
207	14"	SS	Salix	Willow	20'	15'	A	
208	7"	SS	Robinia	Locust	30'	15'	A	
209	6"	SS	Robinia	Locust	25'	20'	A	
210	12"	SS	Ulmus	Elm	40'	20'	B2	
211	60" +	MS	Salix	Willow	50'	50'	B6	
212	4"	MS	Robinia	Locust	25'	10'	A	
213	8"	SS	Robinia	Locust	30'	20'	A	
214	60" +	MS	Salix	Willow	60'	70'	B6	
215	11"	MS	Robinia	Locust	30'	20'	A	Dead.
216	4"	MS	Robinia	Locust	20'	15'	A	
217	4"	MS	Robinia	Locust	20'	15'	A	
218	10"	SS	Robinia	Locust	60'	30'	B2	
219	-	-	-	-	-	-	-	No matching tree in field. N/A
220	18"	SS	Ulmus	Elm	60'	50'	C	

Count of TREE NO.



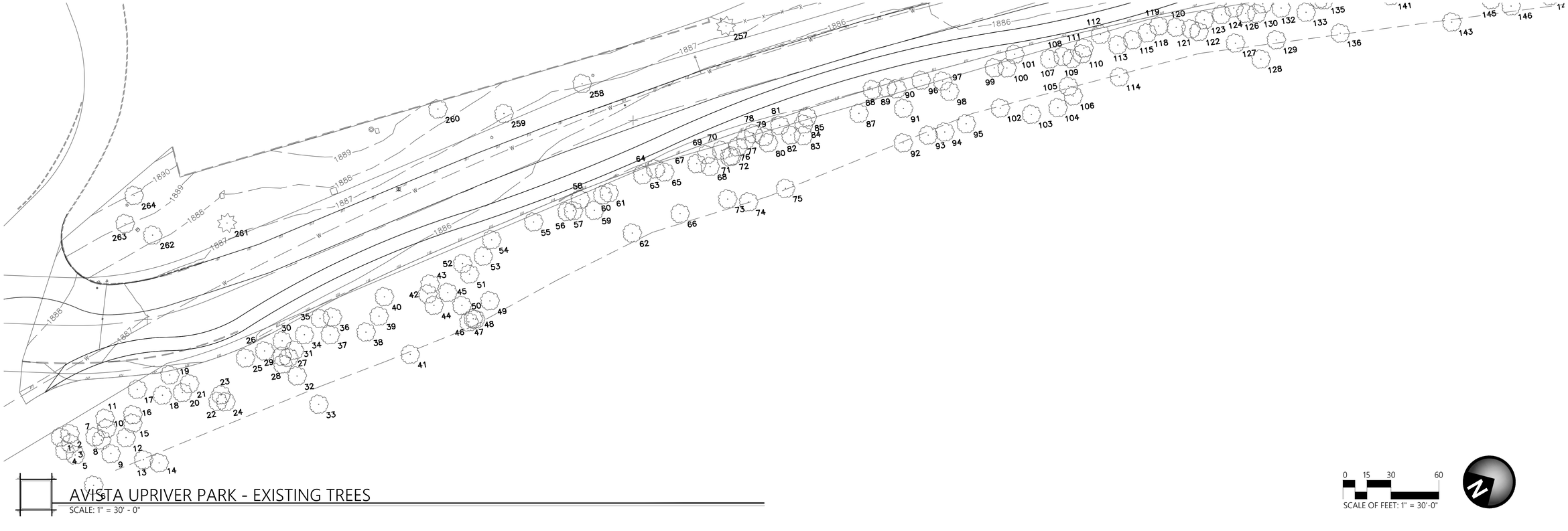
TREATMENT...

Count of TREE NO.



	-	10"	11"	11.25"	12"	13"	13.5"	14"	15"	16"	17"	18"	19"	2"	2.7"	20"	21"	22"	23"	24"	24.5"	25"	26"	3"	30"	35"	36"+	38" +	4"	4.5"	48" +	5"	5.5"	6"	6.5"	60" +	7"	8"	8.5"	84" +	9"	9.5"
Total	5	9	6	1	10	4	1	5	3	2	2	6	1	2	1	1	2	1	1	2	1	1	2	18	1	1	1	1	16	1	5	5	2	12	2	33	16	12	5	1	16	3

DBH (IN.)



AVISTA UPRIVER PARK - EXISTING TREES
SCALE: 1" = 30' - 0"

0 15 30 60
SCALE OF FEET: 1" = 30'-0"

AVISTA UPRIVER PARK - EXISTING TREES
SCALE: 1" = 30' - 0"

BAR IS ONE INCH ON ORIGINAL DRAWING.
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

0 15 30 60
SCALE OF FEET: 1" = 30'-0"

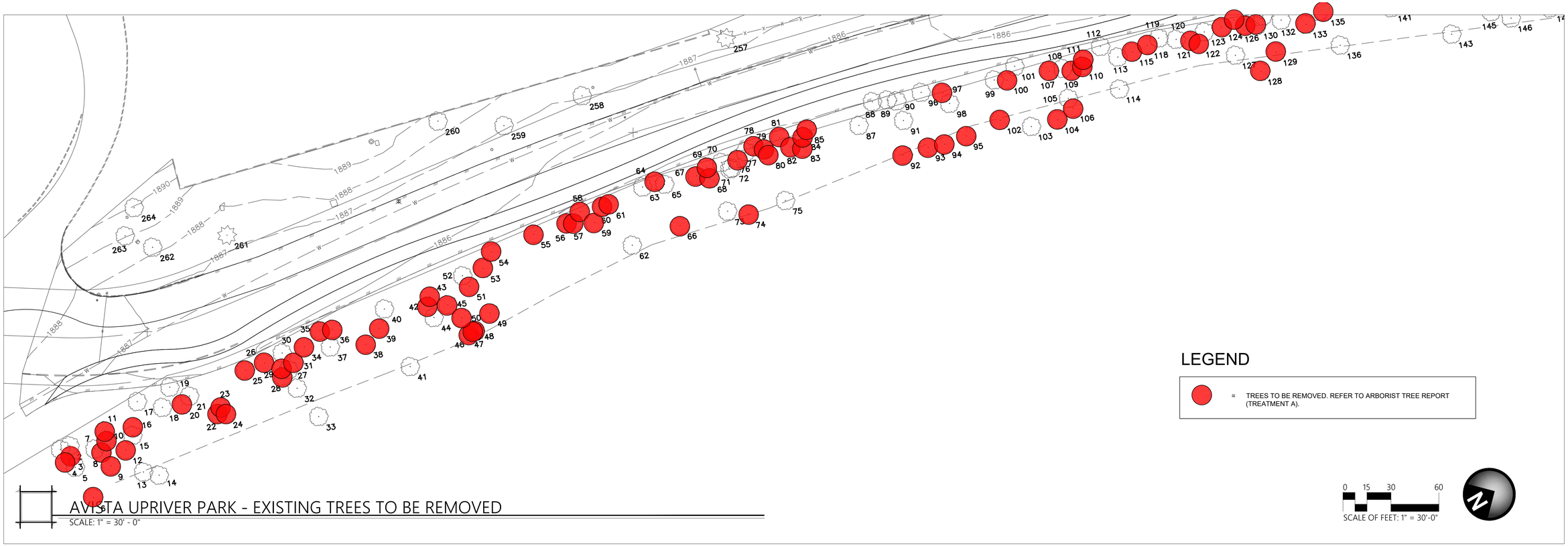
LAND EXPRESSIONS
5615 E. DAY MT. SPOKANE RD.
MEAD, WA 99021
P. 509.466.6683 F. 509.466.7694
LAND EXPRESSIONS.COM

AVISTA UPRIVER PARK
1411 E. MISSION AVE.
SPOKANE, WA 99252
EXISTING TREES

DATE: 10.24.18
REVISED:

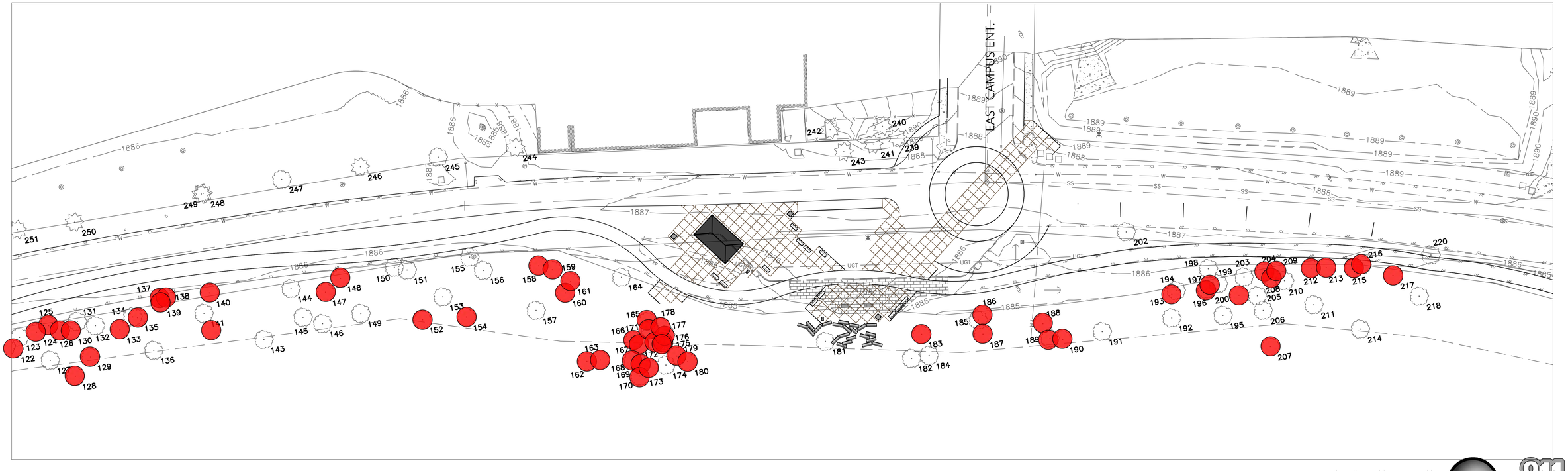
PROJECT NO: 171020
PROJECT MGR: DN
DRAWN BY: TP

L1.5
SITE PLAN-EXISTING



AVISTA UPRIVER PARK - EXISTING TREES TO BE REMOVED

SCALE: 1" = 30' - 0"



AVISTA UPRIVER PARK - EXISTING TREES TO BE REMOVED

SCALE: 1" = 30' - 0"

LAND EXPRESSIONS
5615 E. DAY MT. SPOKANE RD.
MEAD, WA 99021
P. 509.466.6683 F. 509.466.7694
LAND EXPRESSIONS.COM

AVISTA UPRIVER PARK
1411 E. MISSION AVE.
SPOKANE, WA 99252
TREE REMOVALS

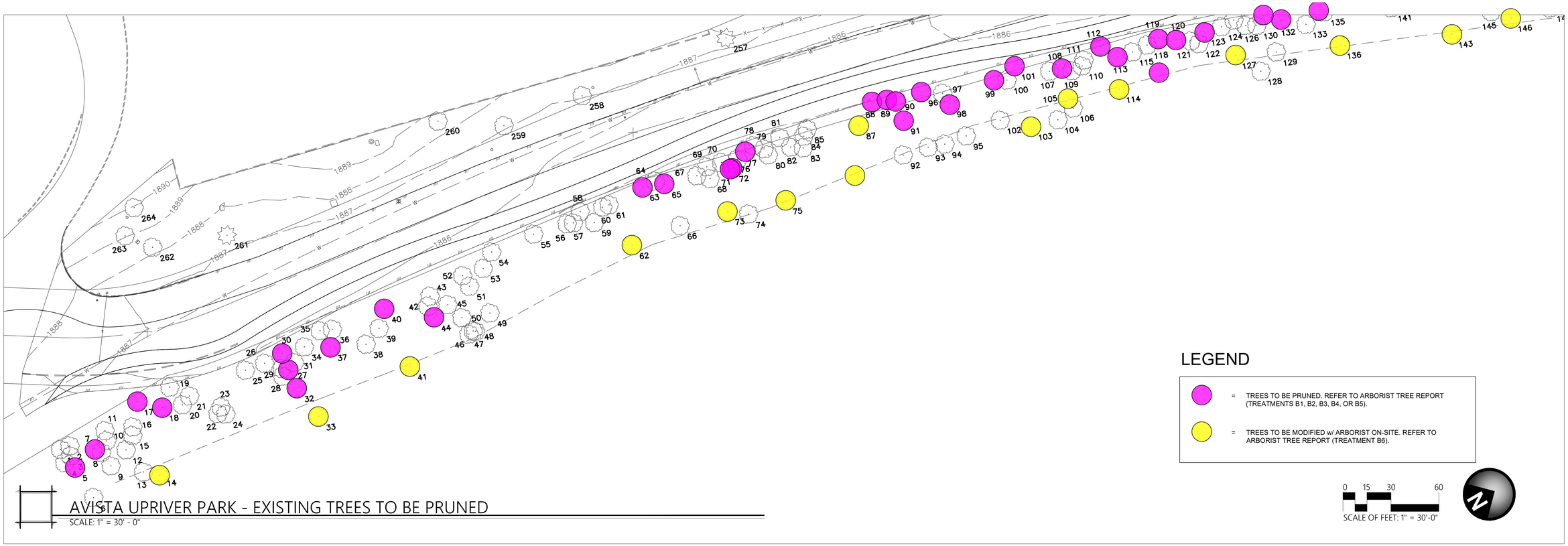
DATE: 11.09.18
REVISED:

PROJECT NO: 171020
PROJECT MGR: DN
DRAWN BY: JD

BAR IS ONE INCH ON ORIGINAL DRAWING.
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

811

L1.6
TREE REMOVALS PLAN



LEGEND

=	TREES TO BE PRUNED. REFER TO ARBORIST TREE REPORT (TREATMENTS B1, B2, B3, B4, OR B5).
=	TREES TO BE MODIFIED w/ ARBORIST ON-SITE. REFER TO ARBORIST TREE REPORT (TREATMENT B6).

0 15 30 60

SCALE OF FEET: 1" = 30'-0"

N

AVISTA UPRIVER PARK - EXISTING TREES TO BE PRUNED

SCALE: 1" = 30' - 0"

AVISTA UPRIVER PARK - EXISTING TREES TO BE PRUNED

SCALE: 1" = 30' - 0"

BAR IS ONE INCH ON ORIGINAL DRAWING.

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

0 15 30 60

SCALE OF FEET: 1" = 30'-0"

811

LAND EXPRESSIONS

5615 E. DAY MT. SPOKANE RD.
MEAD, WA 99021
P. 509.466.6683 F. 509.466.7694
LAND EXPRESSIONS.COM

AVISTA UPRIVER PARK

1411 E. MISSION AVE.
SPOKANE, WA 99252

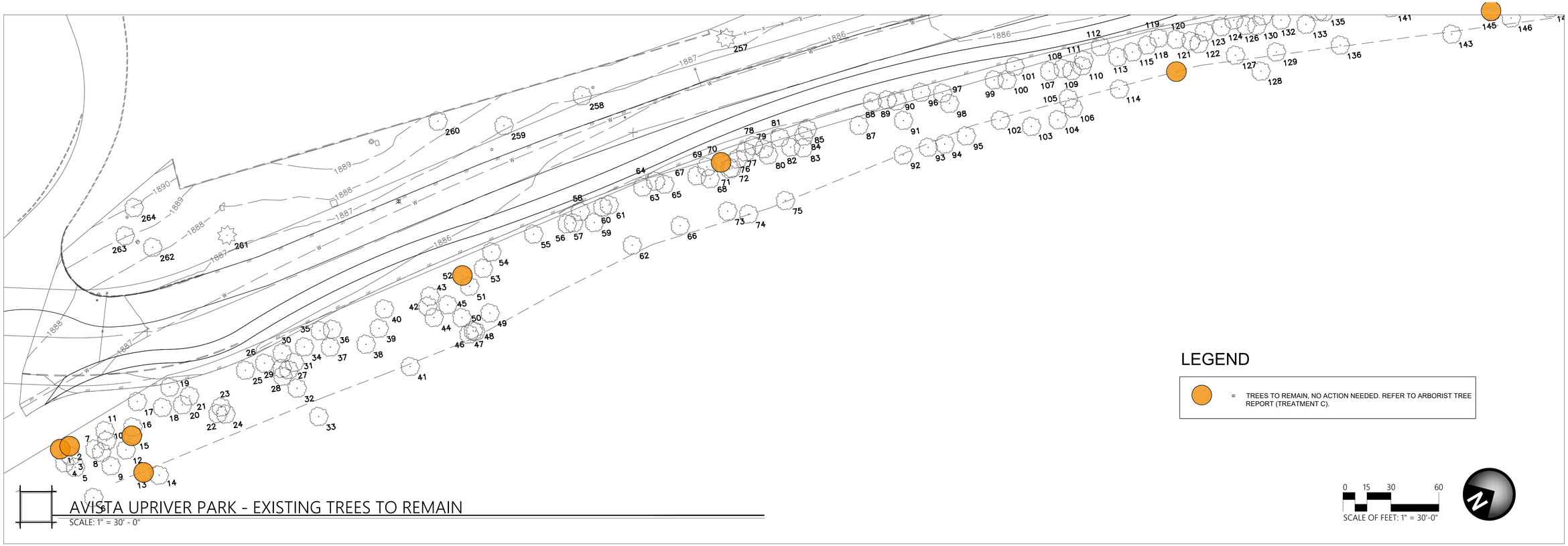
TREE PRUNING

DATE: 11.09.18
REVISED:

PROJECT NO: 171020
PROJECT MGR: DN
DRAWN BY: JD

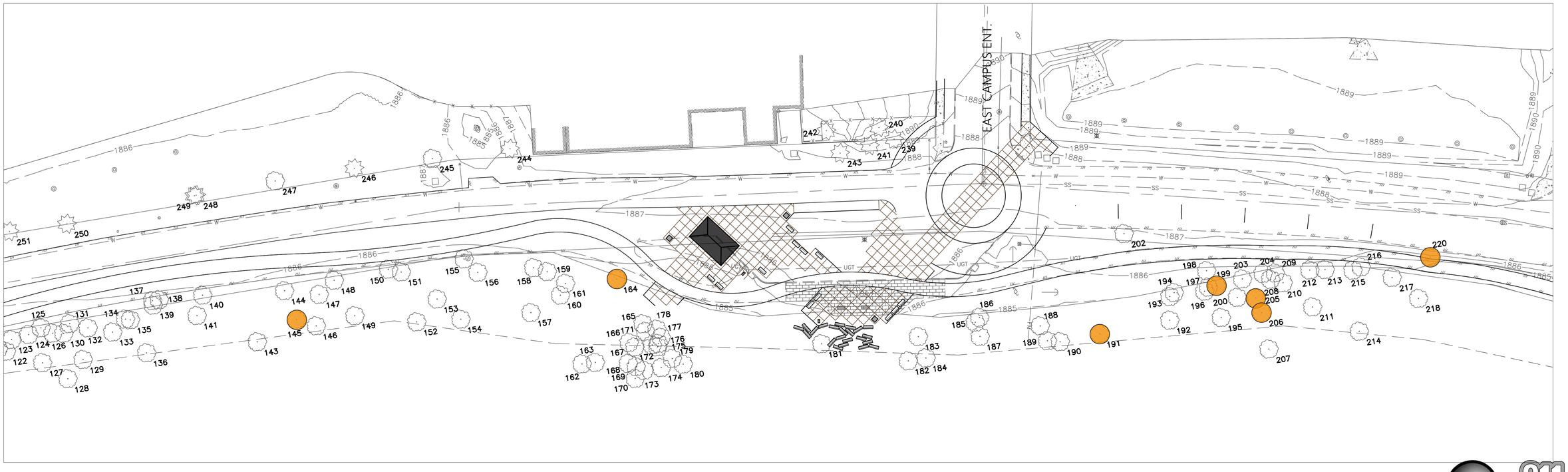
L1.7

TREE PRUNING PLAN



AVISTA UPRIVER PARK - EXISTING TREES TO REMAIN

SCALE: 1" = 30' - 0"



AVISTA UPRIVER PARK - EXISTING TREES TO REMAIN

SCALE: 1" = 30' - 0"

LAND EXPRESSIONS
5615 E. DAY MT. SPOKANE RD.
MEAD, WA 99021
P. 509.466.6683 F. 509.466.7694
LAND EXPRESSIONS.COM

AVISTA UPRIVER PARK
1411 E. MISSION AVE.
SPOKANE, WA 99252
TREES TO REMAIN

DATE: 11.09.18
REVISED:

PROJECT NO: 171020
PROJECT MGR: DN
DRAWN BY: JD

BAR IS ONE INCH ON ORIGINAL DRAWING.
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

811

L1.8
TREES TO REMAIN PLAN

APPENDIX C. SPECIES OCCURRENCE DATA

- IPaC Report
- PHS Report
- Map of Critical Areas

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Washington Fish And Wildlife Office
510 Desmond Drive Se, Suite 102
Lacey, WA 98503-1263
Phone: (360) 753-9440 Fax: (360) 753-9405
http://www.fws.gov/wafwo/

In Reply Refer To:
Consultation Code: 01EWFW00-2019-SLI-1055
Event Code: 01EWFW00-2019-E-02135
Project Name: Upriver Park

May 23, 2019

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated and proposed critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. The species list is currently compiled at the county level. Additional information is available from the Washington Department of Fish and Wildlife, Priority Habitats and Species website: http://wdfw.wa.gov/mapping/phs/ or at our office website: http://www.fws.gov/wafwo/species_new.html. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether or not the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species, and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:
http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.). You may visit our website at http://www.fws.gov/pacific/eagle/for information on disturbance or take of the species and information on how to get a permit and what current guidelines and regulations are. Some projects affecting these species may require development of an eagle conservation plan: (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Also be aware that all marine mammals are protected under the Marine Mammal Protection Act (MMPA). The MMPA prohibits, with certain exceptions, the "take" of marine mammals in U.S. waters and by U.S. citizens on the high seas. The importation of marine mammals and marine mammal products into the U.S. is also prohibited. More information can be found on the MMPA website: http://www.nmfs.noaa.gov/pr/laws/mmpa/.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Related website:
National Marine Fisheries Service: http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Washington Fish And Wildlife Office
510 Desmond Drive Se, Suite 102
Lacey, WA 98503-1263
(360) 753-9440

Project Summary

Consultation Code: 01EWFW00-2019-SLI-1055

Event Code: 01EWFW00-2019-E-02135

Project Name: Upriver Park

Project Type: LAND - MANAGEMENT PLANS

Project Description: Habitat Management Plan and Shoreline Impact Statement being prepared for development of Upriver Park in Spokane, WA

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/47.6742015662604N117.386771030063W

Counties: Spokane, WA

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
Yellow-billed Cuckoo *Coccyzus americanus* Population: Western U.S. DPS There is **proposed** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

Fishes

NAME	STATUS
Bull Trout *Salvelinus confluentus* Population: U.S.A., conterminous, lower 48 states There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8212	Threatened

Flowering Plants

NAME	STATUS
Water Howellia *Howellia aquatilis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7090	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE
PRIORITY HABITATS AND SPECIES REPORT

SOURCE DATASET: PHSPlusPublic Query ID: P190523111933
REPORT DATE: 05/23/2019 11.19

Common Name / Scientific Name / Notes	Site Name / Source Dataset / Source Record / Source Date	Priority Area / Occurrence Type / More Information (URL) / Mgmt Recommendations	Accuracy	Federal Status / State Status / PHS Listing Status	Sensitive Data / Resolution	Source Entity / Geometry Type
Big brown bat Eptesicus fuscus	 WS_OccurPoint 147631 July 23, 2018	Breeding Area Biotic detection http://wdfw.wa.gov/publications/pub.php?	GPS	N/A N/A PHS LISTED	Y TOWNSHIP	WA Dept. of Fish and Wildlife Points
Rainbow Trout Oncorhynchus mykiss	Spokane River SWIFD 1959	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?	NA	N/A N/A PHS LISTED	N AS MAPPED	 Lines
Westslope Cutthroat Oncorhynchus clarki lewisi	Spokane River SWIFD 1966	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?	NA	N/A N/A PHS LISTED	N AS MAPPED	 Lines

WDFW Test Map

May 23, 2019

PHS Report Clip Area

PT

LN

POLY

AS MAPPED

SECTION

QTR-TWP

TOWNSHIP

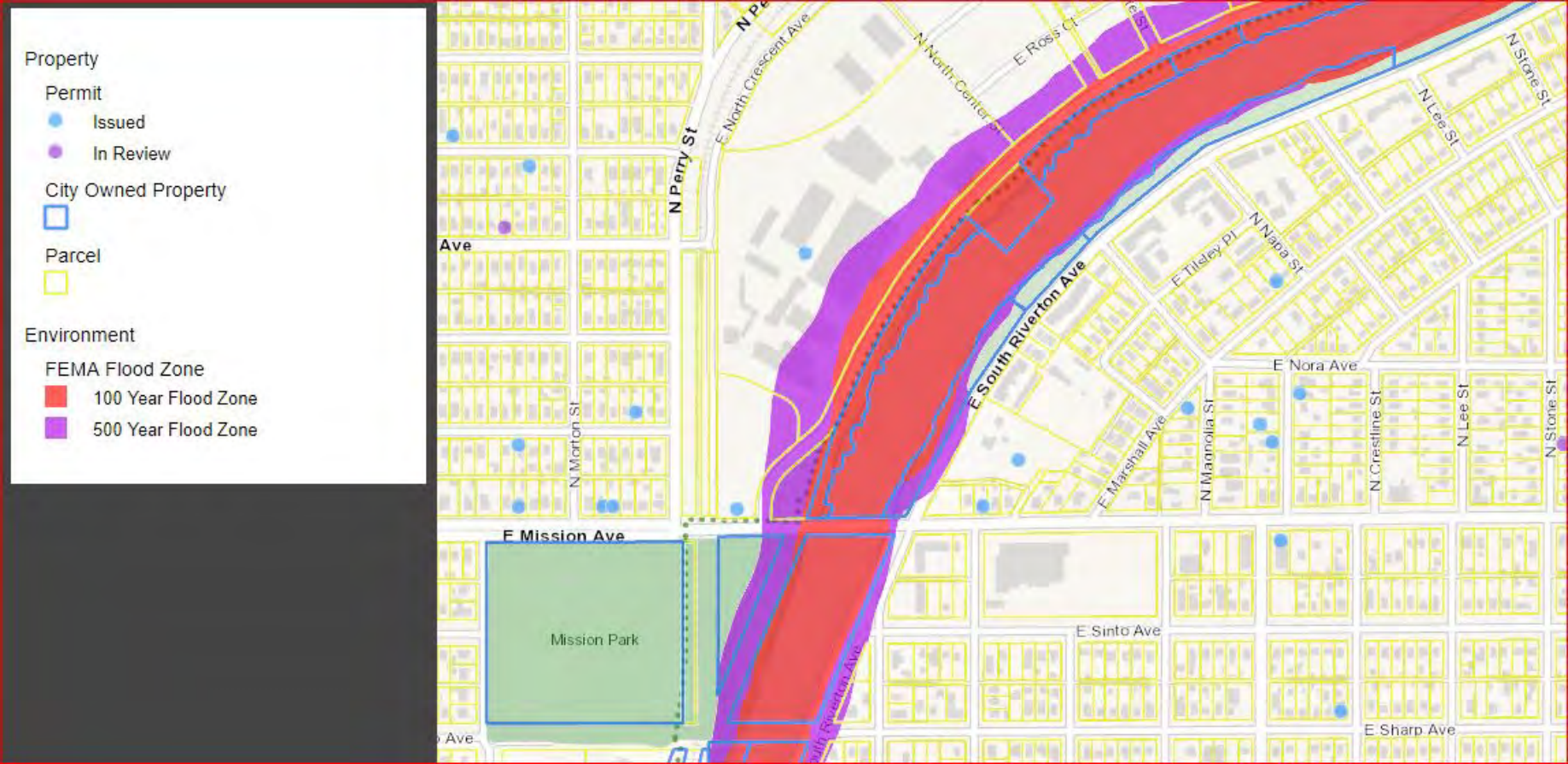
1:19,842

0 0.15 0.3 0.6 mi

0 0.275 0.55 1.1 km

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

APPENDIX D. FLOODPLAIN AND WETLAND MAPPING AND WETLAND DATA FORMS


Property
Permit
Issued
In Review
City Owned Property
Parcel
Environment
FEMA Flood Zone
100 Year Flood Zone
500 Year Flood Zone
N Perry St
E North Crescent Ave
N North Center St
E Ross Ct
N Stone St
N Lee St
E Tilsley Pl
N Napa St
E South Riverton Ave
E Nora Ave
N Morton St
E Marshall Ave
N Magnolia St
N Crestline St
N Lee St
N Stone St
E Mission Ave
Mission Park
E Sinto Ave
E Sharp Ave

Created By: Jacob C Taylor Date: 2019-08-01

Document Name: Upriver_Wetland_Map

Anderson Environmental Consulting, LLC

Latitude: 47.674367"N
Longitude:-117.386544"W

Legal: S9 T25N R43E
Spokane County, WA

0 75 150 300 Feet

N

Legend:

Wetland Data Points

- Upland
- Wetland

NWI Wetlands

- Freshwater Forested/Shrub Wetland
- Riverine

- Shoreline OHWM
- Shoreline Buffer 75'
- Shoreline Jurisdiction 200'
- Riparian Habitat Area 250'
- Project Area

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site: Upriver | City/County: Spokane/Spokane | Sampling Date: 7/26/19

Applicant/Owner: Avista | State: WA | Sampling Point: 1

Investigator(s): Jacob Taylor | Section, Township, Range: S9 T25N R43E

Landform (hillslope, terrace, etc.): Floodplain | Local relief (concave, convex, none): concave | Slope (%): 5

Subregion (LRR): B | Lat: 47.675052 | Long: -117.385542 | Datum: NAD 83

Soil Map Unit Name: 7111 | NWI classification: R3RS2

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: **Vegetation and Hydrologic indicators are present and redox not distinct; however, it is in a floodplain with little organics and shifting material and may be considered wetland under the 2010 Supplement under Difficult Wetland Situations-Riparian Areas. The mature overstory is hydrophytic vegetation but with little hydrophytic understory.**

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix alba*	40	yes	FACW
2. *Populus sp*	20	no	FAC
3.			
4.			
50% = 30, 20% = 12	60	= Total Cover	
Sapling/Shrub Stratum (Plot size:5)			
1. *Populus sp*	10	yes	FAC
2.			
3.			
4.			
5.			
50% = 5, 20% = 2	10	= Total Cover	
Herb Stratum (Plot size:_____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
50% = _____, 20% = _____		= Total Cover	
Woody Vine Stratum (Plot size:_____)			
1.			
2.			
50% = _____, 20% = _____		= Total Cover	
% Bare Ground in Herb Stratum 100	% Cover of Biotic Crust _____		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (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:

☒ Dominance Test is >50%

☐ Prevalence Index is ≤3.0[1]

☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

☐ 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: Ground gravel. No vegetation other than trees and a few shrubs. Little understory.

Project Site: Upriver

SOIL

Sampling Point: 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
0-6	10YR 4/2	100					loamy sand	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☐ 1 cm Muck (A9) (**LRR D**)
- ☐ 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)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR C)**
- ☐ 2 cm Muck (A10) **(LRR B)**
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: cobble

Depth (Inches): 6

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

Remarks: very rocky sandy soil. Dug 3 pits in vicinity, no hydric indicators within floodplain. Soil more loamy and darker near toe of slope

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) **(Nonriverine)**
- ☐ Sediment Deposits (B2) **(Nonriverine)**
- ☐ Drift Deposits (B3) **(Nonriverine)**
- ☐ Surface Soil Cracks (B6)
- ☒ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ 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)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) **(Riverine)**
- ☐ Sediment Deposits (B2) **(Riverine)**
- ☐ Drift Deposits (B3) **(Riverine)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): 6

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

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

Remarks: Area known to flood every spring/early summer. Obseved this area under 1-3 feet of water in May, 2019

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site: Upriver | City/County: Spokane/Spokane | Sampling Date: 7/26/19
Applicant/Owner: Avista | State: WA | Sampling Point: 2
Investigator(s): Jacob Taylor | Section, Township, Range: S9 T25N R43E
Landform (hillslope, terrace, etc.): hillslope | Local relief (concave, convex, none): convex | Slope (%): 20
Subregion (LRR): B | Lat: 47.675106 | Long: -117.385525 | Datum: NAD 83
Soil Map Unit Name: 7111 | NWI classification: upland
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:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix alba*	30	yes	FACW
2. *Populus sp*	20	no	FAC
3. *Crataegus douglasii*	5	no	FAC
4.			
50% = 27.5, 20% = 11	55	= Total Cover	
Sapling/Shrub Stratum (Plot size:5)			
1. *Populus sp*	10	yes	FAC
2.			
3.			
4.			
5.			
50% = 5, 20% = 2	10	= Total Cover	
Herb Stratum (Plot size:_____)			
1. *Asclepias fascicularis*	5	no	FAC
2. *Symphyotrichum sp.*	10	yes	FAC
3. *Linaria dalmatica*	5	no	UPL
4.			
5.			
6.			
7.			
8.			
50% = 10, 20% = 4	20	= Total Cover	
Woody Vine Stratum (Plot size:_____)			
1.			
2.			
50% = _____, 20% = _____		= Total Cover	
% Bare Ground in Herb Stratum 80	% Cover of Biotic Crust _____		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
Total Number of Dominant Species Across All Strata: 3 (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:

☒ Dominance Test is >50%
☐ Prevalence Index is ≤3.0[1]
☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
☐ 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: Gravelly area

Project Site: Upriver

SOIL

Sampling Point: 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
0-6	10YR 4/2	100					Sandy Loam	Gravel and rocks

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

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

- ☐ Histosol (A1)
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- ☐ Stratified Layers (A5) (**LRR C**)
- ☐ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
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- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

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- ☐ 2 cm Muck (A10) **(LRR B)**
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: cobble

Depth (Inches): 6

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

Remarks: very rocky sandy soil.

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) **(Nonriverine)**
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- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
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- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) **(Riverine)**
- ☐ Sediment Deposits (B2) **(Riverine)**
- ☐ Drift Deposits (B3) **(Riverine)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

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