

**MILWAUKIE PLANNING**  
 6101 SE Johnson Creek Blvd  
 Milwaukie OR 97206  
 503-786-7630  
 planning@milwaukieoregon.gov

# Application for Land Use Action

Master File #: NR-2019-003

Review type\*:  I  II  III  IV  V

**CHECK ALL APPLICATION TYPES THAT APPLY:**

<input type="checkbox"/> Amendment to Maps and/or Ordinances:	<input type="checkbox"/> Land Division:	<input type="checkbox"/> Planned Development
<input type="checkbox"/> Comprehensive Plan Text Amendment	<input type="checkbox"/> Final Plat	<input type="checkbox"/> Residential Dwelling:
<input type="checkbox"/> Comprehensive Plan Map Amendment	<input type="checkbox"/> Lot Consolidation	<input type="checkbox"/> Accessory Dwelling Unit
<input type="checkbox"/> Zoning Text Amendment	<input type="checkbox"/> Partition	<input type="checkbox"/> Duplex
<input type="checkbox"/> Zoning Map Amendment	<input type="checkbox"/> Property Line Adjustment	<input type="checkbox"/> Manufactured Dwelling Park
<input type="checkbox"/> Code Interpretation	<input type="checkbox"/> Replat	<input type="checkbox"/> Temporary Dwelling Unit
<input type="checkbox"/> Community Service Use	<input type="checkbox"/> Subdivision	<input type="checkbox"/> Sign Review
<input type="checkbox"/> Conditional Use	<input type="checkbox"/> Miscellaneous:	<input type="checkbox"/> Transportation Facilities Review
<input type="checkbox"/> Development Review	<input type="checkbox"/> Barbed Wire Fencing	<input type="checkbox"/> Variance:
<input type="checkbox"/> Director Determination	<input type="checkbox"/> Bee Colony	<input type="checkbox"/> Use Exception
<input type="checkbox"/> Downtown Design Review	<input type="checkbox"/> Mixed Use Overlay Review	<input type="checkbox"/> Variance
<input type="checkbox"/> Extension to Expiring Approval	<input type="checkbox"/> Modification to Existing Approval	<input type="checkbox"/> Willamette Greenway Review
<input type="checkbox"/> Historic Resource:	<input checked="" type="checkbox"/> Natural Resource Review**	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Alteration	<input type="checkbox"/> Nonconforming Use Alteration	<b>Use separate application forms for:</b>
<input type="checkbox"/> Demolition	<input type="checkbox"/> Parking:	• Annexation and/or Boundary Change
<input type="checkbox"/> Status Designation	<input type="checkbox"/> Quantity Determination	• Compensation for Reduction in Property Value (Measure 37)
<input type="checkbox"/> Status Deletion	<input type="checkbox"/> Quantity Modification	• Daily Display Sign
	<input type="checkbox"/> Shared Parking	• Appeal
	<input type="checkbox"/> Structured Parking	

**RESPONSIBLE PARTIES:**

**APPLICANT** (owner or other eligible applicant—see reverse): COM - Kelly Brooks or Jennifer Garbley

Mailing address: 10722 SE Main St State/Zip: 97222

Phone(s): 503-786-7573 503-786-7534 Email: BrooksK@milwaukieoregon.gov  
GarbleyJ@milwaukieoregon.gov

**APPLICANT'S REPRESENTATIVE** (if different than above): Tonia Williamson

Mailing address: 150 Beaver Creek Rd. State/Zip: 97045

Phone(s): 503-742-4357 Email: twilliamson@ncprd.com

**SITE INFORMATION:**

Address: 11910 SE McLoughlin Blvd. Map & Tax Lot(s): 1/E36CB03100

Comprehensive Plan Designation: \_\_\_\_\_ Zoning: \_\_\_\_\_ Size of property: 2.49

**PROPOSAL (describe briefly):**

a smaller phase II construction of a soft surface trail w/ overlook as outlined in the Robert Runby Master Plan also including vegetation enhancements.

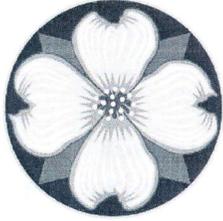
**SIGNATURE:**

**ATTEST:** I am the property owner or I am eligible to initiate this application per Milwaukie Municipal Code (MMC) Subsection 19.1001.6.A. If required, I have attached written authorization to submit this application. To the best of my knowledge, the information provided within this application package is complete and accurate.

Submitted by: Tonia Williamson Date: 9/5/19

**IMPORTANT INFORMATION ON REVERSE SIDE**

\*For multiple applications, this is based on the highest required review type. See MMC Subsection 19.1001.6.B.1.



**MILWAUKIE PLANNING**  
6101 SE Johnson Creek Blvd  
Milwaukie OR 97206  
503-786-7630  
planning@milwaukieoregon.gov

# Submittal Requirements

**For all Land Use Applications  
(except Annexations and Development Review)**

All land use applications must be accompanied by a signed copy of this form (see reverse for signature block) and the information listed below. The information submitted must be sufficiently detailed and specific to the proposal to allow for adequate review. Failure to submit this information may result in the application being deemed incomplete per the Milwaukie Municipal Code (MMC) and Oregon Revised Statutes.

Contact Milwaukie Planning staff at 503-786-7630 or [planning@milwaukieoregon.gov](mailto:planning@milwaukieoregon.gov) for assistance with Milwaukie's land use application requirements.

1. **All required land use application forms and fees**, including any deposits.

*Applications without the required application forms and fees will not be accepted.*

2. **Proof of ownership or eligibility to initiate application** per MMC Subsection 19.1001.6.A.

*Where written authorization is required, applications without written authorization will not be accepted.*

3. **Detailed and comprehensive description** of all existing and proposed uses and structures, including a summary of all information contained in any site plans.

*Depending upon the development being proposed, the description may need to include both a written and graphic component such as elevation drawings, 3-D models, photo simulations, etc. Where subjective aspects of the height and mass of the proposed development will be evaluated at a public hearing, temporary onsite "story pole" installations, and photographic representations thereof, may be required at the time of application submittal or prior to the public hearing.*

4. **Detailed statement** that demonstrates how the proposal meets the following:

A. All applicable development standards (listed below):

1. **Base zone standards** in Chapter 19.300.
2. **Overlay zone standards** in Chapter 19.400.
3. **Supplementary development regulations** in Chapter 19.500.
4. **Off-street parking and loading standards and requirements** in Chapter 19.600.
5. **Public facility standards and requirements**, including any required street improvements, in Chapter 19.700.

B. All applicable application-specific approval criteria (check with staff).

*These standards can be found in the MMC, here: [www.qcode.us/codes/milwaukie/](http://www.qcode.us/codes/milwaukie/)*

5. **Site plan(s), preliminary plat, or final plat** as appropriate.

*See Site Plan, Preliminary Plat, and Final Plat Requirements for guidance.*

6. **Copy of valid preapplication conference report**, when a conference was required.

## **Robert Kronberg Park Phase II**

Aug 2019

Tonia Williamson -NCPRD

Robert Kronberg Parks is a city owned property within the City of Milwaukie and zoned downtown open space. The project will be implemented on taxlot 11E36CB03100. Phase II primarily consists of the construction of a short soft surface trail and overlook (experiential node) along with additional vegetation enhancements in the central meadow. The phase II elements are outlined in the Robert Kronberg Master Plan (concept plan on page II). Description of the natural area is also within the Master Plan. I have included copies of these pages for your reference in Appendix A.

### General Notes

NCPRD staff will construct the project. No in water work or work below the high water line will occur as part of this project. Almost all of the trail will be outside of the Floodplain boundary and outside of the Water Quality Resources area, but all elements will be inside of the HCA area.

### Trail and Overlook

The trail proposed to be constructed will be soft surface and will be 5 ft wide. The trail is not proposed to be paved, it will be made of crushed rock both in size class  $\frac{3}{4}$ " minus and  $\frac{1}{4}$ ". The trail was designed to avoid the Floodplain and WQR areas to the extent practical. The trail that will be constructed is 280 linear ft and will predominantly stay in the HCA area where this type of activity is exempt. This project area is very flat and the trail will be mostly kept 40-5ft ft away from the WQR boundary which is another 50 ft to the waterbody. An engineer has not specifically designed this layout but we used the engineering designs from the current Robert Kronberg multi-use trail project to determine trail length, and locations and quantities within the different NR zones. A project site plan including construction plan elements is attached in Appendix B. In addition, we have attached engineering design details from other nearby park projects which will be followed during this projects construction in Appendix C.

The overlook will be soft surface with rock and large wood to help delineate the boundary of the overlook. See detail attached in Appendix C.

### Utilities

NCPRD will contact all utilities and have them located prior to construction and maintaining the integrity of the unities during construction.

### Construction Access

Access will be by the current temporary access from Mcloughlin Blvd similar to the current construction project at the site currently. NCPRD does not anticipate any need for traffic control because there is a long pull off area south of the temporary access entry at the north-west end of the site.

Staging will be coordinated with the City of Milwaukie engineering department and will not interfere with the current construction project. Wooden plants or similar will be placed over the new asphalt trail to protect that recently improved asset and staging will occur on the east side of the new trail within areas that were impacted by the current construction .

All equipment, materials and personal shall remain in areas of disturbance.

NCPRD will keep the work areas clean for the duration of the project and will not interfere with the current project led by the City.

Public-rights-of-way will be kept clean and serviceable at all times. If any materials accidentally fall into a roadway it will be clean up promptly.

### Construction staking

NCPRD will provide staking of project limits and the centerline of the trail.

### Vehicle Operations and Staging

NCPRD will complete vehicle staging, cleaning, maintenance, refueling, and fuel storage in staging area that is at least 150 ft from any water body.

NCPRD will be responsible for containment and cleanups for the materials and equipment used for this project. Personnel will be trained in proposed methods for disposal of spilled materials and spill containment.

NCPRD will inspect all equipment and vehicles that work within 150 feet from water daily for fuel leaks before leaving the staging area. NCPRD will repair and leaks before using equipment at the site. NCPRD will document inspections in a record that is available for review upon request.

### Erosion Control - Stabilize slopes and protect slopes

Erosion control was set up for the current City of Milwaukie multi-use trail project (silt fencing was installed to the east and downslope of the NCPRD work area). See Appendix D for the Multi-use trail plan silt fence installation instructions. NCPRD does not propose to change that plan but NCPRD will need to cut a small portion of that fencing and “bubble” out and addition linear ft of silt fencing as per Appendix D to the east to include the overlook . NCPRD will use the currently installed erosion control facilities at the site. NCPRD will check the fencing, especially after a rain event and make any needed repairs.

NCPRD will minimize all wind-blown dust from the site.

Any disturbed area that will return to natural landscapes will be seeded after work is completed.

Temporary erosion control measures will be applied if needed depending on weather and other field variables. NCPRD will submit for an erosion control permit form the City of Milwaukie.

All exposed soils will be protected from erosion by mulching, seeding or other approved measures. Soils will be stabilized before any long holiday breaks, long breaks in work, or based on weather forecast.

### Tree protection

NCPRD will pay special attention to all trees located within the work area and will minimize and work that encroaches in the dripline of any trees. At this time no trees are proposed to be remove. One tree may need to be salvaged and relocated on site, that tree is less than 6 DBH. If the work area encroached on any tree driplines, NCPRD will install tree protection fencing to help keep construction away from this protected zone.

### Planting plan and vegetation management

The existing conditions of the site area where this project is proposed is predominantly not native grasses and broad leaf weeds in the understory and then small trees that were planted by NCPRD along with partner groups (e.g. Downtown NDA) since 2008. NCPRD will be enhancing the work zone after construction is finished in addition to the larger area where the project resides. NCPRD proposes to seed with native upland meadow species over a half acre of the work zone area. The habitat goal is in line with the NCPRD Robert Kronberg Nature Park Master Plan. No bare areas are proposed to be left unseeded. Non native vegetation control is ongoing and will continue as part of NCPRD's management of the site. Interplanting or seeding will occur, as needed in future years as part of NCPRD's ongoing management of the site. A percentage of non-native vegetation cover will always exist at the site, but the goal is to improve composition and diversity of native understory plants and support enhancement of overstory structure specifically supporting Oregon white oak. Seeding will occur in the fall or as soon as the Multi-use trail construction is completed and we can pre p the site for seeding. Many native seeds normally like to overwinter with germination of native seeds the next spring, with some germinating in the fall to provide a quick vegetation cover over bare soil. Other efforts like spreading straw or mulch may be implemented to avoid erosion or bare areas until seeds germinate.

Species proposed: (may be modified based on availability form Heritage Seedlings)

Upland Prairie Flowers 1 \$142/lb 154,734 seeds/lb 5-7 lb/acre = 20-30 seeds/ft<sup>2</sup>

*Agoseris grandiflora*  
*Aquilegia Formosa*  
*Amsinckia menziesii* var. *menziesii*  
*Camassia leichtlinii*  
*Clarkia purpurea* ssp. *quadrivulnera*  
*Collomia grandiflora*  
*Gilia capitata*  
*Ligusticum apiifolium*  
*Lomatium utriculatum*  
*Lotus purshianus*  
*Lupinus polycarpus* (L. *micranthus*)  
*Potentilla gracilis*  
*Ranunculus orthorhyncus*  
*Rumex salicifolius*  
*Sidalcea malviflora* ssp. *Virgate*  
*Sisyrinchium idahoense*  
*Viola praemorsa*

Conifer removal will take place over time based on canopy closure of coniferous species and competition with Oregon white oak (*Quercus garreyana*) trees. In the open oak woodland, the technique of planting coniferous species in early restoration is used to help control understory weed species rapid growth and thus competition with native species. The shade that coniferous species provides slightly inhibits both density and cover of understory weed species. In addition, Oregon white oak trees grow slowly and take a long time to produce a significant overstory canopy. Since this open woodland started as almost 100% weedy grasses and other broadleaf weed meadow, with no trees, the oak trees that we planted in 2008 are still very small and provide very little shade to the open oak woodland. However, the conifer trees that we planted in 2008 have grown rapidly, even in the poor soil conditions, because species like Douglas fir are pioneering species that do not require nitrogen rich soil to grow fast while young. As the conifer trees grow and start to compete and inhibit light from reaching the oak trees, we will thin the conifers. The process will include leaving the thinned material on site to increase soil nutrients and habitat elements for birds, amphibians and insects. Our goal is to also thin before trees reach 6" DBH, in addition to planting more conifers to take the place of the recently thinned. Since 2008, conifers have been planted every couple of years in the open oak woodland area. This process will continue until the habitat does not need the assistance of the conifers to meet the habitat composition and structure goals of an open oak woodland.

NCPRD is working closely with the city of Milwaukie to plan and mitigate vegetation impacts and enhancements in relation to the multi-use trail. Revegetation efforts will be complimentary and coordinate timing of re-veg efforts.

Trees in the area will not be sued for any construction related needs, and will be protected following the tree protection plan in this narrative.

#### Slight Modification of soft surface plan compared to Robert Kronberg Master Plan

On page 11 of the 2015 Robert Kronberg Master Plan is the preferred Nature Park Concept Plan, April 2015. The soft surface trail is slightly modified from this master plan concept plan for the most part because the multi-use trails design was changed. As the multi-use trail crosses over Kellogg lake the original plan had the trail continuing straight, following the Max alignment and out towards Mcloughlin. The final designs of the multi-use trail re-aligned that trail to make a sharp turn after crossing Kellogg lake and headed south around the conserved large oak tree. The soft surface trail was supposed to start somewhere to the west of the conserved oak tree and called for a possible experiential node near that area out toward the lake. The concept plan also kept the main soft surface trail outside of the HCA, whereas now all of phase II developed elements will be constructed in the HCA. The new alignment of the soft surface trail is moved east of the concept plan alignment and will have only one experiential node, located in a similar location to the original concept plan.

#### Trail grade

This soft surface trail will remain under 5% and will most likely almost all be under 2-3% grade creating it a highly accessible path for visitors. In addition, the path will be constructed of materials that pack tightly so that rollability is easy, materials similar to decomposed granite will be used.

#### Signage

Directional signage will be installed near the multi-use trail and educational interpretive signage will be installed both at a small pullout along the trail and at the overlook. The interpretive signage has not been created/designed at this point in the project, but locations for the signs have been determined, see project map. The interpretive signs will be similar to the one installed at the Spring Park trailhead and consist of a single metal 4x4 post with a 24x36 metal frame and a colorful education interpretive sign. All signage will be coordinated with the City of Milwaukie and the multi-use trail project.

#### HCA

This current plan falls under 19.402.4 B.4. limited exceptions within the HCA as a low-impact outdoor recreation facility for public use- soft surface trail (not impervious surface) with a maximum width of 5 ft.

#### WQR

This project falls within 19.402.7 A.3., activities requiring a type II review, Special Use Walkways and Paths and needs The City of Milwaukie's Planning Directors approval.

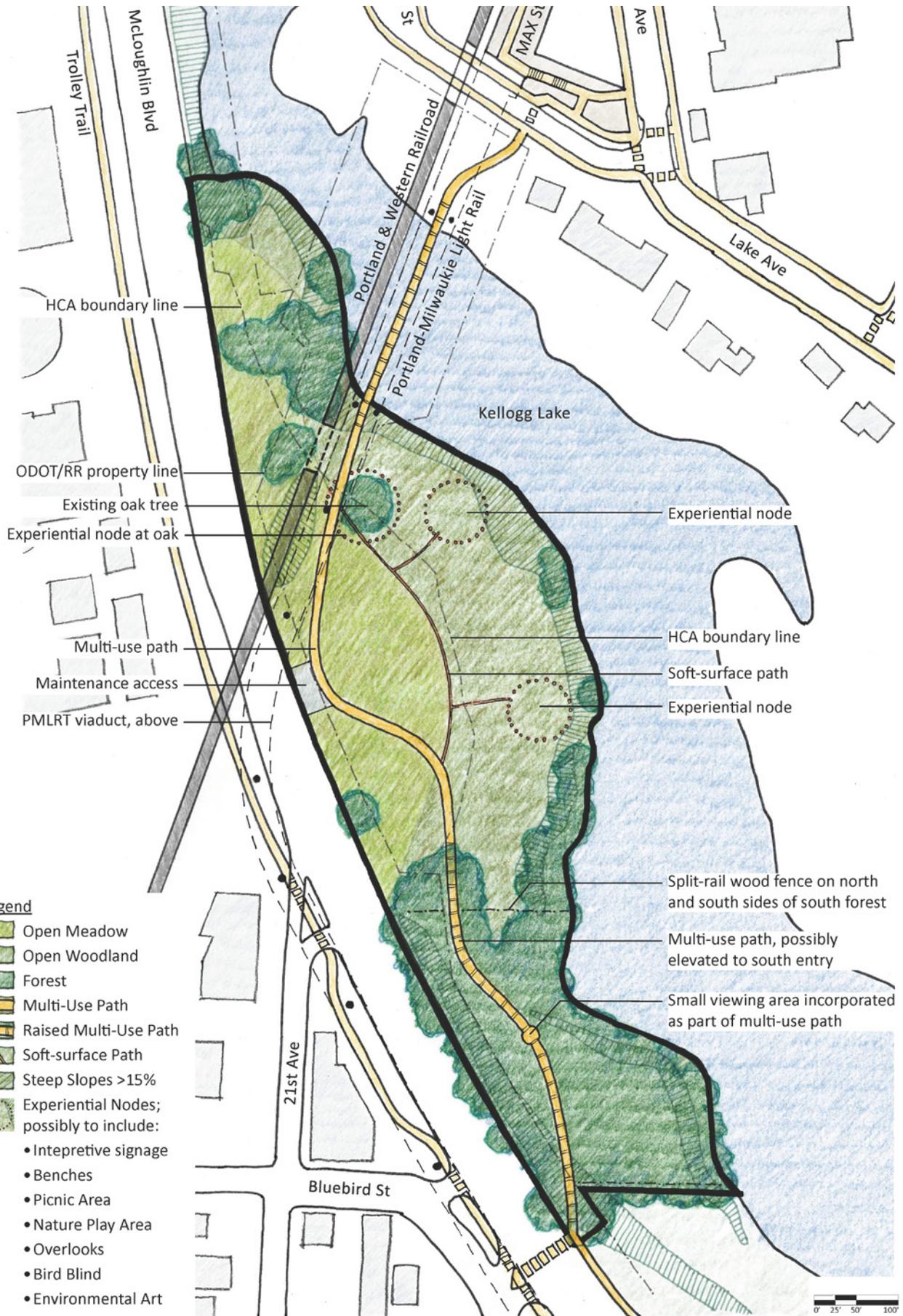
Within the WQR area there will be 425 sq ft of disturbance associated with the trail (100 ft<sup>2</sup>) and overlook (325 ft<sup>2</sup>).

#### Floodplain

The plan to every extent possible limits disturbance and proposed development within the floodplain, however, one goal of the project is to provide an overlook of Kellogg Lake to visitors therefore, getting visitors close enough to the water requires minimum development of the overlook and a couple linear ft of trail in the floodplain. This project will balance cut fill within the floodplain and the total amount of cut fill in the floodplain will be under 10 cubic yards.

The overlook and small trail portion in the WQR and the Floodplain will be 325 ft<sup>2</sup>. The overlook will be constructed of the same materials as the soft surface trail and as per the details attached in Appendix C. Boulders will be brought into the site to help delineate the overlook boundary while also providing a natural feel to this element. Large wood from trees taken down during the phase I multi-use trail construction will also be used to help delineate the trail. The tree materials were taken from an area of the site that is within the floodplain. Including the boulders the total balanced cut-fill will be less than 10 cubic yards and again, the cut materials will be removed from the floodplain to balance the fill, so no net fill will result from this project.

PREFERRED NATURE PARK MASTER PLAN MAP - APRIL 14, 2015



### MASTER PLAN PROCESS AND SCOPE

Lango Hansen Landscape Architects, NCPRD staff, and City staff met to discuss project scope and goals in August, 2014. At that time it was decided that the primary scope of the project would be on the parcels to the south of the trestle, with the option of including the north parcel if desired and if found to be feasible for future development. It was also agreed that there would be three public meetings, both to present information on the park planning process and to provide an opportunity for the public to provide input.

The first meeting was conducted on October 1st, 2014, and was focused on site assessment and analysis. The second meeting was held on November 5th, 2014, and was focused on the presentation of three options for the park development which ranged from a fairly minimal level of improvements to a highly developed program. Some suggestions from the public, such as sound-mitigating berms, were found to be infeasible or unnecessary and were not included in the preferred park master plan. The preferred park master plan, based on public feedback and input from NCPRD and City staff, was presented in the final public meeting on December 9th, 2014.

As part of this master plan process, the future park was confirmed and identified as a “Natural Preserve” with a “Linear Park” running through the property, as identified in the Milwaukie Comprehensive Plan, Chapter 4, Land Use. The future park will also be defined as a “Natural Area” in the NCPRD system.

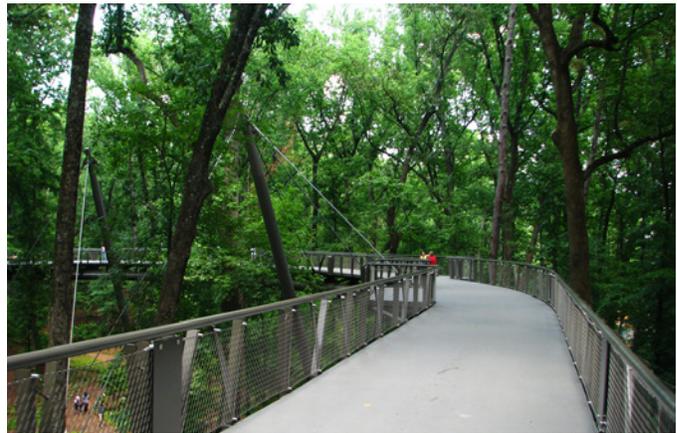
### PREFERRED MASTER PLAN PARK ELEMENTS

The physical and programmatic elements in the Preferred Park Master Plan are as follows:

**Multi-use pathway.** This is the highest priority for park development. This paved pathway will connect the TriMet bicycle-pedestrian bridge and downtown Milwaukie with the sidewalk, crosswalk and Trolley Trail at the south end of the park. The width of the pathway should be designed so that the path can accommodate both bicycle and pedestrian traffic; a 12' width is preferred, but the width may be adjusted through future design processes. Where the multi-use path traverses the south part of the site, some or all of the pathway will be elevated to limit disturbance within the south forest area, provide a consistent and gentle grade to the south entrance of the park, achieve accessibility standards, and set the path above the 100-year flood line. The exact alignment of the path through the south forest will need to avoid existing trees to the greatest extent possible, especially the sequoia near the south



Example of a multi-use pathway at grade



Example of a multi-use pathway, elevated through south forest area

park entry. The elevated portion of the path could also include a wider viewing area, generally located where the elevated path is closest to the lake. Lighting is preferred for safety along the entire length of the path, and would need to be designed to balance the need for user safety with habitat requirements. Lighting will be considered as part of future planning and design. Finally, the design and construction of the pathway will need to be coordinated with the connection to the TriMet bridge.

**Maintenance access.** A right-in-right-out maintenance-only access will need to be provided to connect McLoughlin to the multi-use pathway. The maintenance access will need to be sized to accommodate a typical NCPRD maintenance truck and trailer. It will also allow TriMet to access the bicycle-pedestrian bridge. The access will include a typical concrete driveway apron (width to be determined), and may include a vehicle-rated permeable unit paving, grasscrete, or similar permeable treatments to limit the visual impact of the maintenance access point on the site. The access will be signed to show that no public parking is allowed.



Example of a soft-surface path through forest area

**Soft surface pathways.** The soft surface pathways are intended to form a secondary circulation system within the park and will also provide access to the experiential nodes. They are proposed to be gravel paths, although the width and material may be adjusted through future design processes. While the paths are primarily shown outside of the Habitat Conservation Area (HCA), the exact alignment of the paths may be adjusted to include more or less of the HCA. There was also public interest in creating a soft-surface pathway connection to the north parcel; if the opportunity becomes available, NCPRD could work with others to create the preferred soft-surface pathway connection to the north portion of the site.

**Experiential nodes.** These may include any of the following elements: interpretive signage, benches, picnic tables, a single small nature play area, overlooks, bird blinds, and/or environmental art. The exact makeup, size, and location of each of these elements within the experiential nodes will be determined at the time of park design. If the elements in the experiential nodes are situated within HCA's, care should be taken to minimize the impact of the element within the HCA.



Example of a nature play element

**Habitat preservation and restoration.** Existing habitat areas on site will be preserved and habitat restoration will be enhanced. Fencing and signage will be added where appropriate to discourage the public from entering critical habitat areas; for instance, split-rail wood fencing is proposed for the north and south borders of the south forest area to discourage access.



Example of interpretive signage

**Phasing of Park Development.** Park improvements will likely need to be implemented in phases, depending on the availability of funding, coordination with partners and stakeholders, and regulatory requirements. The multi-use pathway and the secondary loop path could be Phase 1 improvements. The Experiential Node improvements could be built in future phases. Habitat restoration may occur in all phases; for instance, habitat improvements for the north parcel could be done with cooperation from neighbors and stakeholders, independent of development elsewhere in the park.

This plan is conceptual in nature. Initial cost estimates were developed and given to NCPRD to provide an assessment of construction cost for project budgeting and planning purposes. The cost estimates and project elements are subject to change due to further refinements that may occur as the final park design is completed. Final decisions, materials and precise locations of improvements will be determined per all applicable regulatory requirements and as funding is available.



Example of a picnic area

January 8, 2015

Pacific Habitat Services, Inc.

This memo provides an overview of vegetation communities within the Robert Kronberg Park study area, along with recommendations for future enhancements to each habitat type. Figure 1 depicts the approximate boundaries of each habitat area.

## CURRENT VEGETATION CONDITIONS

### Area A: South Forest

The South Forest area has a mostly open understory, likely due to recent clearing of blackberries and other invasives in preparation for enhancement plantings. The terrace appears to be upland and well elevated above the impounded creek; however, much of it still falls within the 100-year flood elevation. Several large older trees are located along the McLoughlin roadfill, with most of the trees on the terrace below being comparatively young. The few evergreens include a large redwood and a few smaller Douglas firs along the road bank. Several large black cottonwoods (reaching 48" dbh or greater) are clumped near the north end of Area A. The primarily deciduous overstory is otherwise comprised of bigleaf maple, black locust, and red oak, with red alder and Oregon ash also noted along the shoreline of Kellogg Creek.

Understory plants include both ornamental and native species, especially to the south nearer to the privately owned land. Portuguese laurel, camellia, and English ivy are present, along with snowberry and tall Oregon grape. Numerous native shrubs or saplings have been planted within the recently cleared understory as well, including seedling alder, cedar, Douglas fir, grand fir, bigleaf maple, Indian plum, and snowberry.

Groundcover identifiable at this time of year includes a small amount of Himalayan blackberry, mint, nipplewort, dock, geranium, and wood avens. Numerous cottonwood sprouts are coming up in the vicinity of the older tree clump. Yellow flag is also apparent in places along the flooded edge of Kellogg Creek.

### Area B: Central Meadow

This large, level open area is dominated by common introduced grasses and forbs (e.g. orchardgrass, tall fescue, bentgrass, geranium, and tansy, among others). In addition, a variety of maturing, widely scattered native trees and shrubs (including ponderosa pine, madrone, Douglas fir, and western red cedar) have been planted within Area B. The wide spacing between individual plants currently provides little habitat diversity within this open space.



Figure 1: Vegetation Areas

### Area C: Central Bluffs

The steep fill bank along Kellogg Creek has been cleared of invasives (primarily blackberries), but there is also evidence of previous virgins-bower infestation in the scattered red alder and Oregon ash trees along the lower bank. A large Pacific ninebark also persists near the bank. Yellow flag is apparent in places along the flooded edge of the creek.

The bank closest to the TriMet construction site in the north end of Area C has been most recently cleared of blackberries, and erosion control measures are in place. However, the cleared bank to the south (which is partly comprised of non-soil fill materials such as concrete chunks) is becoming reinfested with such weedy species as teasel, poison hemlock, and thistles, along with common pasture grasses.

### Area D: North Trestle

The area north of the trestle includes several tree clumps comprised of black cottonwood, black locust, red oak, bigleaf maple, western red cedar, and Lombardi poplar. The clumps are definitely a weedy mix, including both native and invasive species. Understory shrubs include Himalayan blackberry, Scots broom, multiflora rose, English hawthorn, English ivy, and English holly.

A small open grassy area closest to the highway includes common pasture grasses and forbs such as orchardgrass, bentgrass, tall fescue, oxeye daisy, Queen Anne's lace, and plantain.

## HABITAT PRESERVATION AND RESTORATION CONCEPTS

### Area A South Forest

Since a mature tree overstory along a riparian zone provides high habitat value for a variety of species, the overstory should be preserved, despite the presence of several non-native species. Understory enhancement is already underway with the recent clearing and planting activities; however the planting area could be expanded and/or densities may be increased. In addition, several pieces of debris (e.g. vehicle undercarriage, a stovepipe, and concrete chunks) should be removed from the site.

In terms of further understory enhancement, however, maintaining a relatively open understory near the future path may be the preferred course given the potential path safety/visibility concerns for this below grade area. Plantings of lower profile shrubs and groundcover (snowberry, Oregon grape, sword fern, and other shade tolerant grasses and forbs) would basically maintain the open condition within a certain distance of the path, while taller and denser native plantings could be concentrated closer to the streambank to provide the greatest wildlife value. Additional plantings of shade tolerant conifers (especially western red cedar and grand fir) would provide effective year round cover closer to the creek. Continuing control of invasive species is also warranted for this area.

### Area B Central Meadow

This area has significant potential for enhancement through both plantings and park elements, depending on the preferred uses for the park. Since the soil quality is unknown, sampling is advisable prior to any extensive regrading or planting of the site.

The upland conditions could support plantings to emulate oak savanna (i.e. concentrations of native trees/shrubs with wide spaces between). The clumping pattern could help maintain the current park-like visibility for safety's sake, while the tightly grouped native plantings would establish more structural diversity of value to a variety of wildlife.

### Area C Central Bluffs

Area C provides immediate access to the edge of Kellogg Lake; any future riparian restoration activities will necessarily involve this transition area. There are substantial chunks of mostly buried concrete along this edge; these could be considered a safety concern due

to several holes that have formed from erosion or other factors within the concrete. Some regrading should be considered (along with soil amendments) to clean up this bank, both to enable more effective replanting efforts and to address potential safety concerns.

With the bank substrate evaluated and possibly enhanced for replanting efforts, a variety of native riparian to wetland trees and shrubs may be considered, depending on their placement relative to prevailing water levels. Although the riparian planting zone will be increased significantly when water levels are lowered by dam removal, until that time plantings will necessarily be restricted to the immediate top of bank down to the elevation of existing alder and ash trees along this edge. Red alder, Oregon ash, and Pacific ninebark are already present near the base of the slope, and willows, red-osier dogwood, four line honeysuckle, Nootka rose, tall Oregon grape, black hawthorn, and snowberry are among other species suitable to various positions on this slope. Tree plantings should be clustered to maintain visual gaps along this edge to enable wildlife viewing, placement of viewing platforms, or other water-dependent activities.

### Area D North Trestle

A paved roadway passes between several tree clumps in this area, and likely provided access to points south of the trestle prior to the recent light rail construction. Currently the short paved area is being utilized to store building materials. Area D has relatively poor public access as compared to the other areas south of the trestle. However, this area could be cleaned up through a combination of weed control (given the extensive patch of Himalayan blackberry and several other invasives within the tree clumps) and trash removal. These efforts would need to be coordinated with owners of the adjacent properties (ODOT and the railroad).

### Summary

The above discussion provides conceptual approaches to improving habitats within each of the designated areas. More specific plant lists will be provided for each area as planning progresses and more is known about substrate conditions in the filled areas. Recommendations may need to be adjusted based on future conditions, Kellogg Creek restoration efforts, funding for improvements and maintenance, and regulatory and mitigation requirements.

Current Species List

Table 1 below provides a partial species list for each community, along with whether the species is native or has been introduced to the site. Several species are considered especially noxious or invasive, and may warrant continued control to avoid reinfestations.

Table 1: Partial Species List (compiled during site visit 12/30/2014)

Species name	Common name	Area	Native/ Introduced?*
<b>TREES</b>			
<i>Acer macrophyllum</i>	Bigleaf maple	A	N
<i>Alnus rubra</i>	Red alder	A,C	N
<i>Fraxinus latifolia</i>	Oregon ash	C	N
<i>Populus balsamifera ssp trichocarpa</i>	Black cottonwood	A,D	N
<i>Populus nigra 'Italica'</i>	Lombardi poplar	D	I
<i>Pseudotsuga menziesii</i>	Douglas fir	A, D	N
<i>Quercus rubra</i>	Red oak	A, D	I
<i>Robinia pseudoacacea</i>	Black locust	A, D	I
<i>Sequoia sempervirens</i>	Coast redwood	A	I
<i>Thuja plicata</i>	Western red cedar	A, B, D	N
<b>SHRUBS</b>			
<i>Berberis aquifolium</i>	Tall Oregon grape	A	N
<i>Camellia sp. (C. japonica?)</i>	Garden camellia	A	I
<i>Clematis vitalpa</i>	Virgin's bower	C	I*
<i>Crataegus monogyna</i>	One-seed hawthorn	D	I
<i>Cytisus scoparius</i>	Scots' broom	D	I*
<i>Hedera helix</i>	English ivy	A, D	I*
<i>Ilex aquifolium</i>	English holly	A, D	I
<i>Physocarpus capitatus</i>	Pacific ninebark	C	N
<i>Prunus lusitanica (?)</i>	Portuguese laurel	A	I
<i>Rosa multiflora</i>	Multiflora rose	D	I
<i>Rubus armeniacus</i>	Himalayan blackberry	A, C, D	I*
<i>Symphoricarpos albus</i>	Common snowberry	A, D	N
<b>HERBS</b>			
<i>Agrostis capillaris</i>	Colonial bentgrass	B, C, D	I
<i>Cirsium spp. (C. arvense, C. vulgare)</i>	Canada and bull thistles	C	I*
<i>Conium maculatum</i>	Poison hemlock	C	I*
<i>Dactylus glomerata</i>	Orchardgrass	B, C, D	I
<i>Daucus carota</i>	Queen Anne's lace	D	
<i>Dipsacus fullonum</i>	Teasel	C	I*
<i>Elymus glaucus</i>	Blue wildrye	A, C	N
<i>Festuca arundinacea (=Schedonorus arundinaceus)</i>	Tall fescue	B, D	I
<i>Geranium sp.</i>	Geranium sp.	A, B	I
<i>Geum urbanum</i>	Wood avens	A	I
<i>Holcus lanatus</i>	Common velvetgrass	B, C	I
<i>Iris pseudocorus</i>	Yellow flag	A, C	I*
<i>Lapsana communus</i>	Nipplewort	A	I
<i>Leucanthemum vulgare</i>	Oxeye daisy	D	I
<i>Mentha sp.</i>	Mint sp.	A	I
<i>Plantago lanceolata</i>	English plantain	B, D	I
<i>Rumex sp.</i>	Dock sp.	A	I
<i>Tanacetum vulgare</i>	Common tansy	B	I

\*These species tend to be especially invasive in disturbed habitats, warranting control efforts whenever possible.

### Site Natural Elements

The Kronberg site contains many natural elements including water features and various habitat types. The significance of these natural elements is based on their rarity, diversity, function and ability to create habitat for wildlife species of concern. Habitat types include upland mixed Oregon white oak and Douglas fir woodland, Oregon ash cottonwood riparian floodplain forest, and lake/creek. All of these habitat types have been classified as habitats in decline or of concern within state and regional conservation strategies. This site contains essential rearing habitat for migrating fish species that are included on the federal endangered species act (ESA) list because many of these floodplain off channel rearing habitats have been removed or are severely degraded by human development. ESA listed species within this site include: Lower Columbia River (LCR) Coho, Lower Columbia River (LCR) and Upper Willamette River (UWR) Chinook, LCR and UWR Steelhead, LCR chum, LCR eulachon. Species of concern include Pacific lamprey. The Oregon white oak habitat type has been listed as in peril because Oregon oak once dominated the Willamette Valley and now only 3% of this habitat type remains (even less in the urban area).

Oregon Department of Fish and Wildlife (ODFW) completed fish recovery plans in 2010 and 2011 to guide the implementation of actions needed to conserve and recover ESA listed salmon and steelhead. The plans help natural resources managers prioritize projects, activities and future investments. Specific recommended actions include: 1) establish or improve access to off-channel habitats; 2) protect intact riparian areas, floodplains, and high-quality off-channel habitats; and 3) restore areas that are degraded. ODFW characterized the Kronberg site as a high priority for both fish and wildlife. ODFW recommended actions include; enhancement floodplain/riparian enhancement for migrating ESA listed fish species, enhance the habitat for ESA listed and non-listed species of wildlife related to the Oregon white oak habitat, wetlands and floodplain/upland habitat among others.

### Site Habitat Descriptions

The Kronberg site contains various habitat types which are all in a degraded condition. After a through inventory of site conditions NCPRD lead trash cleanups, invasive species control and planting events. A great deal of work still needs to be implemented in order to rehabilitate the natural environment, however, the

invasive plant species that once dominated the site are now knocked back and the native species are starting to gain ground giving site stakeholders and volunteers hope for the future.

### Area A: South Forest

The South Forest Oregon ash and cottonwood riparian floodplain forest, which was once dominated by many nasty invasive species and party to frequent trash dumping and homeless camps, has been cleaned up. Implementation of invasive species control prepared the site for plantings with volunteer groups. ODOT owns a stretch along McLoughlin that is a small sliver of more upland habitat type including Oregon white oak and Douglas fir woodland. This area has been taken over by various laurel species and Norway maple. NCPRD has been slowly removing invasive trees and replanting with natives, both to meet regulatory requirements and to not open this sensitive riparian-floodplain habitat to southwest sun and heat. The direct sun and warmer temperatures would inhibit and could kill the native plants growing in this area that are adapted to cooler, moist and relatively shady environments. This higher upland area is well elevated above the impounded creek; however, much of Area A still falls within the 100-year flood elevation. Enhancement of the habitat should continue within this area. In addition, several pieces of debris (e.g. vehicle undercarriage, a stovepipe, and concrete chunks) should be removed from the site.

In terms of further understory enhancement, maintaining plantings of lower profile shrubs and groundcover near the future trail may be the preferred course given the potential trail safety/visibility concerns for this below grade area. Taller native plantings could be concentrated away from the trail especially closer to the lake to provide the greatest wildlife value.

Several large older trees are located along the McLoughlin roadfill, with most of the trees in the riparian forest and floodplain being comparatively young. The few evergreens include a large redwood and a few smaller Douglas firs along the road bank. Several large black cottonwoods (reaching 48" dbh or greater) are clumped near the north end of Area A.

### Area B: Central Meadow

This large, level open area once dominated by blackberry and knotweed has gone through a first stage of habitat enhancement toward Oregon white

Oak and Douglas fir woodland. NCPRD planted a few large diameter native trees (including Oregon white oak, Douglas fir, and ponderosa pine) in 2009, once blackberry was controlled and knotweed was knocked back. Additional plantings have occurred annually since that time as more ground is cleared of invasives or replaced because of mortality. Some of these trees are now five to ten feet in height and the understory is dominated by common introduced grasses and forbs (e.g. orchardgrass, tall fescue, bentgrass, geranium, teasel, and tansy, among others). The wide spacing between individual plants was agreed upon by NCPRD and the City of Milwaukie to keep the woodland open prior to the finalizing the master plan. Woodlands are defined by their more open canopy allowing trees such as Oregon white oak to form the more traditional mushroom shaped crown structure. The soil layer in this area is thin and fairly porous with cement chunks and other fill popping out of the very uneven terrain. Testing soil conditions will help guide future habitat enhancement and development decisions.

#### Area C: Central Bluffs

The steep bank along Kellogg Lake has a short transition from upland habitat to riparian to the lakes edge. Therefore, this area has the potential for species at the top of the slope that are consistent the Oregon white oak and Douglas fir woodland, transitioning downslope, to Oregon ash cottonwood riparian. This bank has been cleared of invasives (primarily blackberries), but there is also evidence of previous virgins-bower infestation in the scattered red alder and Oregon ash trees along the lower bank.

The bank closest to the TriMet construction site in the north end of Area C has been recently cleared of blackberries, and erosion control measures are in place. The cleared bank to the south is now infested with weedy species including teasel, poison hemlock, and thistles, along with common pasture grasses. Habitat enhancement should continue in this area taking into consideration the information gained from future soil testing. Adaptive management of vegetation may need to occur after development decisions determine the objectives and locations of the possible experimental nodes.

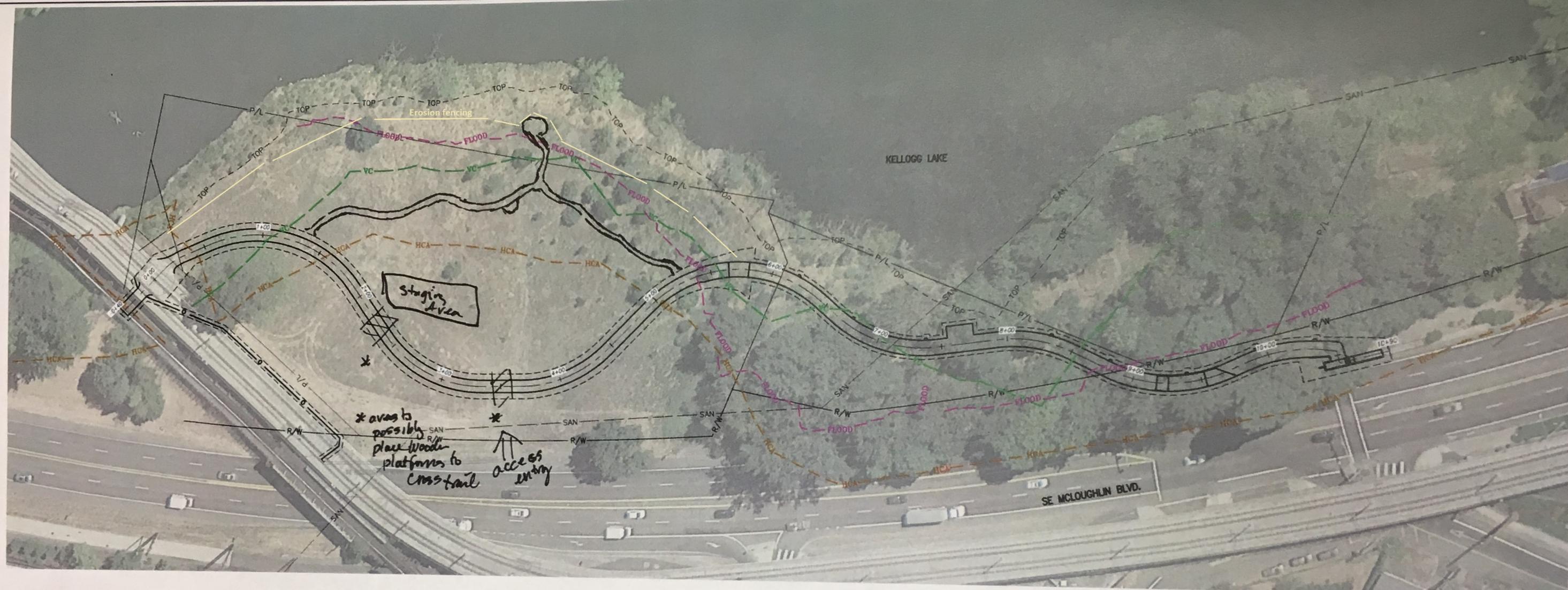
#### Area D: North Trestle

The area north of the trestle has similar habitat types as Area B and C, transitioning between the Oregon white oak and Douglas fir woodland and Oregon ash and Cottonwood riparian. Several tree clumps compromised of black cottonwood, black locust, red oak, bigleaf maple, western red cedar, and Lombardi poplar are present. The clumps are a mix, including both native and invasive species. Understory shrubs are dominated by invasive plants include Himalayan blackberry, Scots broom, multiflora rose, English hawthorn, English ivy, and English holly. A small open grassy area closest to the highway includes common pasture grasses and forbs such as orchardgrass, bentgrass, tall fescue, oxeeye daisy, Queen Anne's lace, and plantain. This area has been used for many years for construction staging and parking.

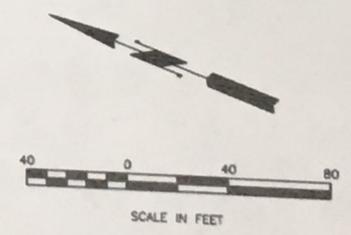
This area is in need of invasive species control prior to any revegetation efforts. Similar vegetation species to Areas B and C can be planted in this area, however, all habitat enhancement activities would need to be agreed upon by the multiple owners to ensure that access, and other issues are mitigated. NCPRD has not performed any work in this area due to the multiple owners and lack of clarity of future visioning.

#### Summary

The above discussion provides conceptual approaches to improving habitats within each of the designated areas. More specific plant lists will be provided for each area as planning progresses and more is known about substrate conditions in the filled areas. Pacific Habitat Services, Inc. completed a site visit on December 30, 2014 and has provided additional recommendations to NCPRD.



- - - - - FLOOD - - - - - FLOOD FLOODPLAIN
- - - - - VC VEGETATED CORRIDOR
- - - - - HCA - - - - - HCA HABITAT CONSERVATION AREA
- - - - - TOP - - - - - TOP TOP OF BANK
- - - - - R/W ODOT RIGHT-OF-WAY
- - - - - P/L PROPERTY LINE
- - - - - SAN EXISTING SANITARY LINE



NO.	DATE	BY	REVISIONS

DESIGNED	DATE
DRAFTED	DATE
CHECKED	DATE
APPROVED	DATE



# MILWAUKIE

*Dogwood City of the West*

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

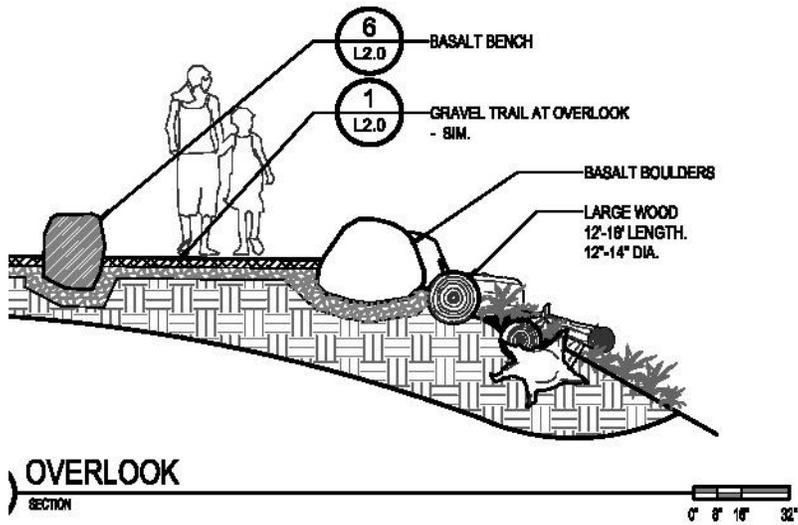


Otak, Inc.  
700 Washington St., Suite 300  
Vancouver, WA 98660  
360.737.9613  
www.otak.com

**KRONBERG PARK MULTI-USE WALKWAY**

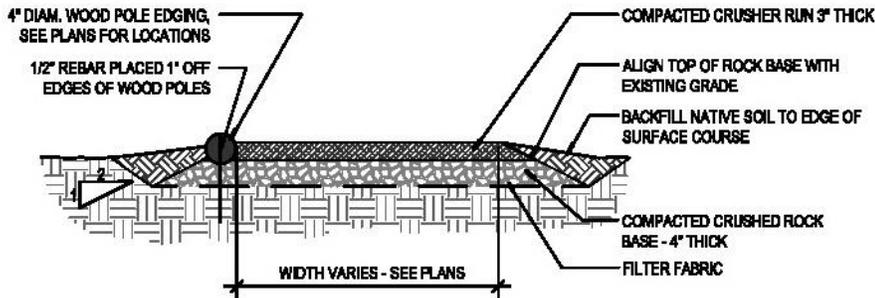
**ENVIRONMENTAL OVERLAYS EXHIBIT**

# Appendix C

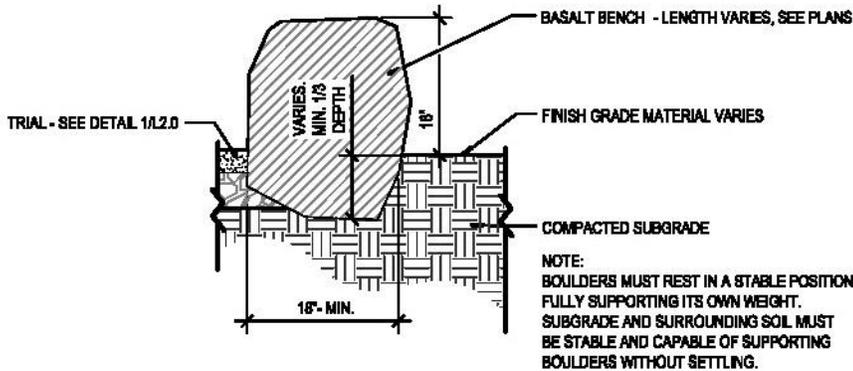


**NOTES:**

1. SLOPE PATH AS SHOWN ON GRADING PLAN. 2% MAX. CROSS SLOPE
2. PITCH TRAILS ON SLOPES TOWARDS THE DOWNHILL SIDE OF THE TRAIL
3. CROWN TRAILS ON FLAT TERRAIN.



**1** GRAVEL TRAIL SECTION NOT TO SCALE



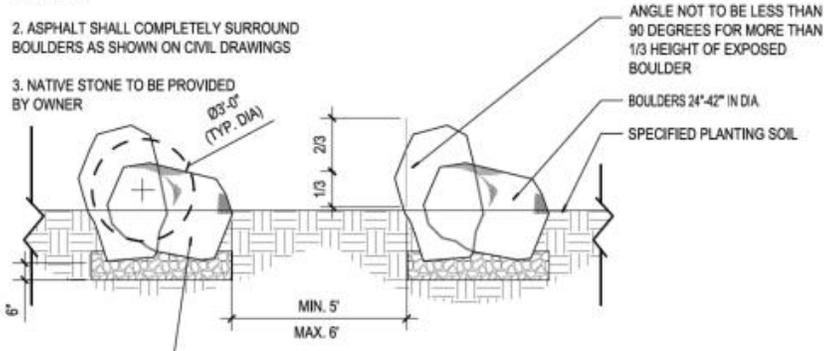
**6** BASALT BENCH SECTION 0' 3" 6" 12"

NOTES:

1. SEE FL.1 FOR BOULDER PLACEMENT

2. ASPHALT SHALL COMPLETELY SURROUND BOULDERS AS SHOWN ON CIVIL DRAWINGS

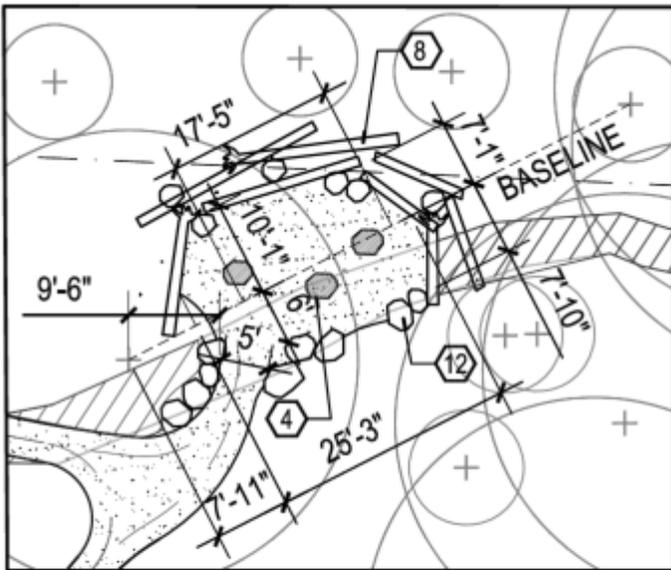
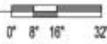
3. NATIVE STONE TO BE PROVIDED BY OWNER



BURY A MIN. OF 1/3 OF OVERALL MASS OF BOULDER BELOW GRADE. BOULDER MUST REST IN STABLE POSITION FULLY SUPPORTING ITS OWN WEIGHT. SUBGRADE AND SURROUNDING SOIL MUST BE STABLE AND CAPABLE OF SUPPORTING BOULDERS WITHOUT SETTLING.

9 LANDSCAPE BOULDERS

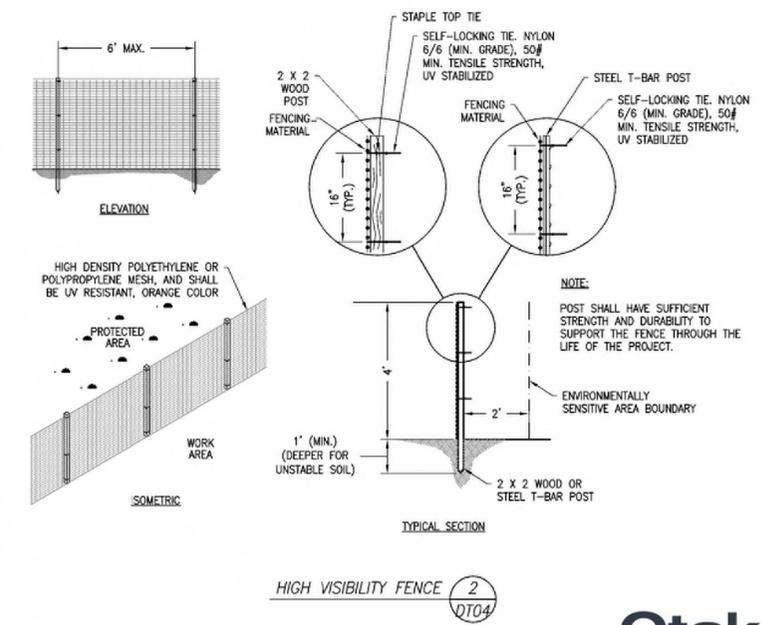
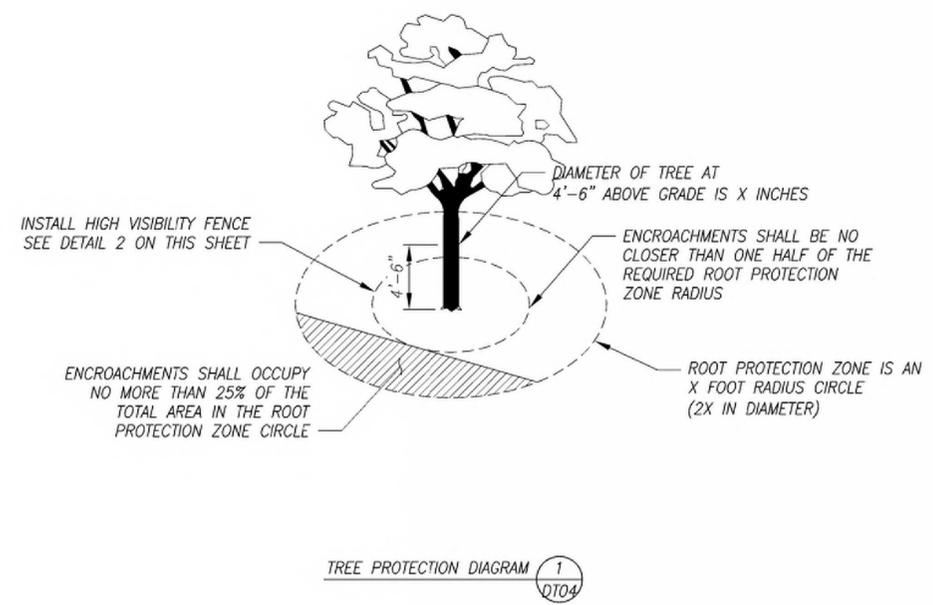
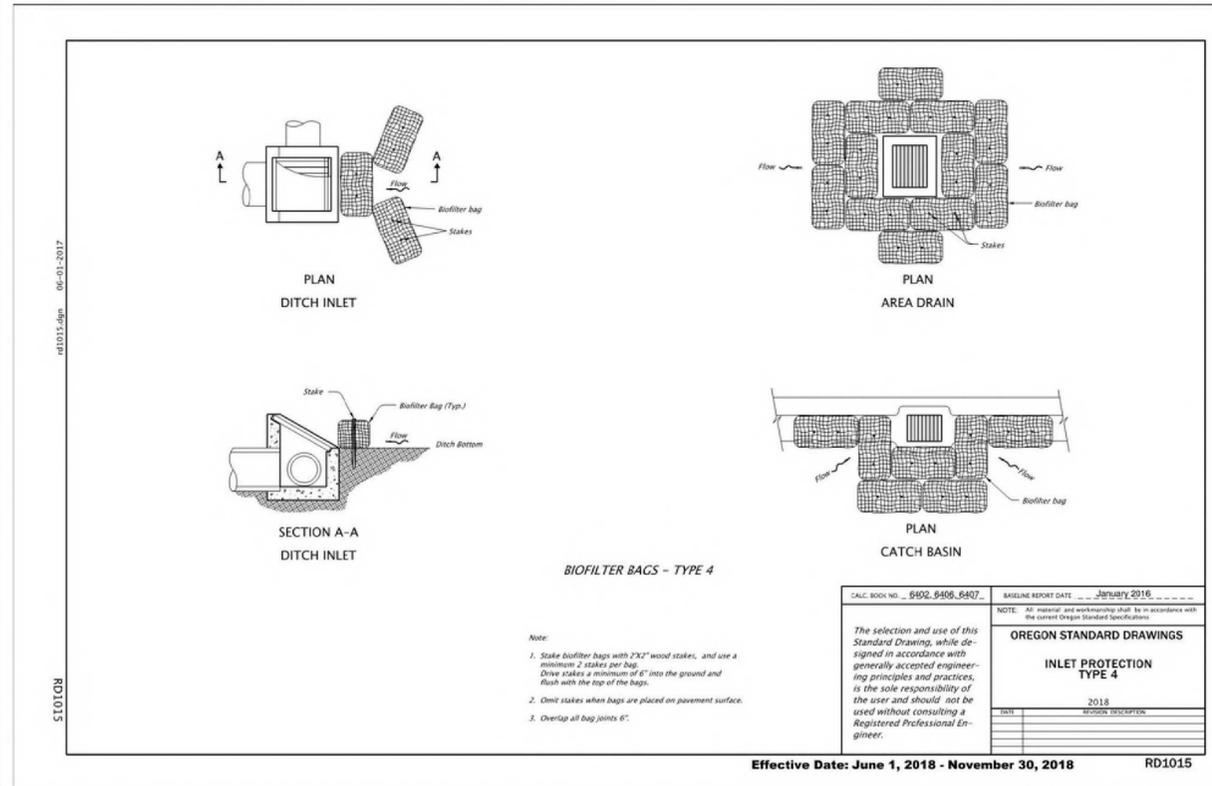
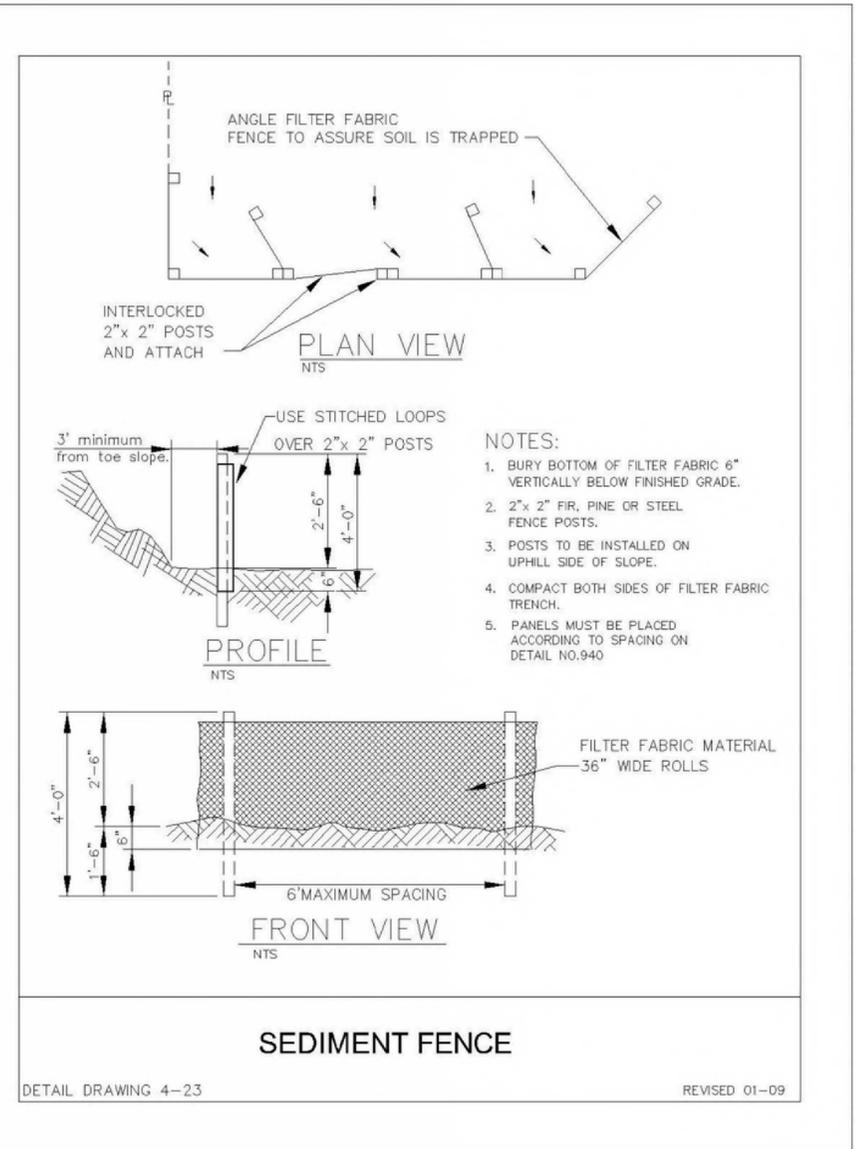
SECTION



A OVERLOOK ENLARGEMENT



SCALE 1" = 20'-0"



Feb 25, 2019 - 10:54am V:\PROJECT\18400\18408\CADD\ACAD\DWG\18408C\_Details.dwg

NO.	DATE	BY	REVISIONS

C. Green	DESIGNED	2/25/2019	DATE
N. Redinger	DRAFTED	2/25/2019	DATE
	CHECKED		DATE
A. Hendy	APPROVED	2/25/2019	DATE



**MILWAUKIE**  
*Dogwood City of the West*

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

**KRONBERG PARK MULTI-USE WALKWAY**

**STANDARD DETAILS**

PROJECT NO.: CIP2017-D29 CONTRACT NO.: DATE: FEBRUARY 2019 SHEET NO.: **DT04**

