



City of Portland, Oregon
Bureau of Development Services
Land Use Services

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Date: June 28, 2010
To: Interested Person
From: Stacey Castleberry, Land Use Services
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NOTICE OF A TYPE II DECISION ON A PROPOSAL IN YOUR NEIGHBORHOOD

The Bureau of Development Services has approved a proposal in your neighborhood. The reasons for the decision are included in this notice. If you disagree with the decision, you can appeal it and request a public hearing. Information on how to appeal this decision is listed at the end of this notice.

CASE FILE NUMBER: LU 10-113106 EN

GENERAL INFORMATION

Applicant: Metro/Oregon Zoo
Attention: Doug Strickler
4001 SW Canyon Road
Portland, OR 97221

Metro/Oregon Zoo
Attention: Jim Mitchell
4001 SW Canyon Road
Portland, OR 97221

Metro
600 NE Grand Ave
Portland, OR 97232-2736

Representative: Peck Smiley Ettlin Architects
Attention: Stephen Smiley
4412 SW Corbett
Portland, OR 97239

Site Address: 4001 SW Canyon Road
Legal Description: TL 1400 60.69 ACRES, SECTION 05 1S 1E
Tax Account No.: R991050750
State ID No.: 1S1E05 01400
Quarter Section: 3225, 3226
Neighborhood: Arlington Heights, contact Jeff Boly at 503-223 4781.
Business District: None
District Coalition: Neighbors West/Northwest, contact Mark Sieber at 503-823-4212.
Plan District: None
Zoning: OScps –Open Space base zone, with Environmental Coservation, Environmental Protection, and Scenic Resource overlay zones.

Case Type: EN – Environmental Review
Procedure: Type II, an administrative decision with appeal to the Hearings Officer.

Proposal: This application is for an Environmental Review for a proposed veterinary medical center at the Metro Oregon Zoo. The zoo is located within Washington Park in southwest Portland. An earlier application for a Conditional Use Master Plan amendment with an Environmental Review (LU 09-136788 CUMS EN) was approved with conditions on September 2, 2009, but budgetary considerations for the project led to a change in the project site.

The approval for the Conditional Use Master Plan amendment remains valid because 1) the Zoo is not expanding the size of the building, (2) the function of the approved hospital (i.e. medical center) is not changing, and (3) the building is not moving closer to a perimeter property line. The original Environmental Review, however, must be revised because the veterinary hospital will be constructed in a different location.

The proposed 15,500 square foot veterinary medical center would be constructed on the site of the zoo's existing quarantine building, which is to be demolished. The veterinary hospital would include: a new animal quarantine area, procedure and surgery, necropsy, multiuse spaces and loading dock. The number of employees working at the proposed facility will not change from the current level of veterinary staff. The hours of operation are continuous, 24 hours a day, as needed, to care for the animals.

The Veterinary Medical Center will include 3 retaining walls, a soil nail wall and two cast in place concrete walls. The soil nail wall (Wall #1) is approximately 31 feet high at its highest point). Wall #2 is on the west side of the project. It is cast-in-place concrete and approximately 10 feet high at its highest point (where it meets the soil nail wall). Wall #3 is located on the east side of the project and it is similar to Wall #2 in that it is cast-in-place concrete. It is approximately 20 feet high at its highest point (where it meets the soil nail wall), and it quickly tapers to approximately 10 feet in height.

A water quality swale is proposed for treating stormwater at the location currently occupied by some greenhouses and plant nursery structures along the edge of the railroad tracks just below the veterinary hospital access drive. All of the nursery structures and greenhouses are to be removed. The swale will be planted with native species.

Stormwater falling on the roof of the proposed building will be collected and re-used on site. That rainwater from the roof will drain to a pre-treatment system that will filter out any sediment. Once this water goes through that system, it will be collected and stored in a tank (approximately 25,000 gallons) to the west of the loading dock. The main re-use of this water will be for the toilets and animal wash areas, but it can also be used for irrigation. The final feature of the re-use water system will include an overflow system that will drain to the proposed water quality swale and pipe conveyance to the south of the facility. The ultimate discharge point is approximately 120 feet south of the water quality swale.

Off-site surface stormwater (from north of SW Kingston Drive) will be directed into a stormwater diversion ditch to the east of the proposed hospital building. When that ditch reaches a catch basin at the driveway, the water will flow into a pipe and be directed to an outfall approximately 200 feet south of the proposed hospital.

The majority of the site is within the City's Environmental Conservation overlay zone. Certain standards must be met to allow the work to occur by right. If the standards are not met, an Environmental Review is required. In this case, the proposed veterinary hospital and associated construction area includes approximately 51,385 square feet of disturbance area, and removal of 71 native trees, totaling 984 diameter inches. Standards 33.430.140 D and J are not met by the proposal; therefore the work must be approved through an Environmental Review.

Relevant Approval Criteria:

In order to be approved, this proposal must comply with the approval criteria of Title 33. The relevant criteria are:

- Section **33.430.250 E** Other Development in the Environmental Conservation zone

FACTS

Description of the Site: The Oregon Zoo is located approximately 2 miles west of downtown Portland, in Washington Park. It is Oregon's largest paid attraction with more than 1.5 million visitors annually. The zoo was founded in 1887, making it the oldest North American zoo west of the Mississippi. The zoo has over a thousand specimens representing two hundred species, twenty-one of which are endangered. The site of the Oregon Zoo occupies 64 acres in Portland's west hills. It is located on a southwest facing ridge line, within an area of steep slopes and streams.

The project site is located in the northern part of the zoo, approximately 600 feet east of the main entrance. It is currently occupied by the existing quarantine and veterinary hospital buildings, cages for quarantine, a paved roadway, an electrical generator and natural areas.

The site, in this case, is defined by the applicant as the areas within 400 feet of the project construction area. SW Kingston Drive connects the zoo with the northern portion of Washington Park within this vicinity.

Note that the applicant has identified a "Staging and Equipment Storage Area" shown on Exhibit C.9 in the application file. All activities depicted in the storage area will occur outside of the resource area of the environmental zone and are not evaluated in this land use review. Therefore the Staging and Equipment Storage Area is not part of the site for this review.

Infrastructure: The site is served by SW Kingston Drive to the north and by driveways and the Zoo Railroad to the south. Sanitary flows from the Oregon Zoo are directed to an existing public combination sewer in US Hwy 26. The proposed stormwater diversion swale/conveyance channel will convey upstream, off-site flows around the proposed veterinary hospital. There is a 10-inch master water meter which provides water to this site from the existing 12-inch Steel main in SW Zoo Road. The estimated static pressure range for this location is 53 psi to 67 psi at the service elevation of 711 feet.

There are generally poor soil infiltration characteristics at this location, and the area has a history of landslides. Therefore on-site infiltration of stormwater is not recommended.

Zoning: The site is zoned OScps (Open Space with Environmental Conservation Zone, Environmental Protection Zone and Scenic Resource Zone overlays). The Open Space zone is intended to preserve and enhance public and private open, natural and improved park and recreational areas identified in the Comprehensive Plan.

Environmental overlay zones protect environmental resources and functional values that have been identified by the City as providing benefits to the public. The environmental regulations encourage flexibility and innovation in site planning and provide for development that is carefully designed to preserve the site's protected resources. They protect the most important environmental features and resources while allowing environmentally sensitive urban development where resources are less significant. The purpose of this land use review is to ensure compliance with the regulations of the environmental zones.

The Scenic Resources Zone is intended to protect Portland's significant scenic resources. The purposes of the Scenic Resource zone, to enhance the city's appearance and protect scenic views, are achieved by establishing height limits, establishing landscaping and screening requirements, and requiring preservation of identified scenic resources.

The Scenic Resources overlay zone is situated north of the project area, and the Environmental Protection overlay zone is located east of the work area. No new development is proposed in either of these overlay zones.

Environmental Resources: The application of the environmental overlay zones is based on detailed studies that have been carried out within eight separate areas of the City.

Environmental resources and functional values present in environmental zones are described in environmental inventory reports for these study areas.

The site is located in Resource Site 111 of the Southwest Hills Resource Protection Plan. Resource Site 111 is a 540-acre site that includes the Metro Park Zoo, a developed area west of the Zoo, a good portion of the Highway 26 canyon, and a large area southeast of the Highway. Natural resources and functional values identified by the City for Resource Site 111 are cultural, scenic, open space, intermittent creeks, groundwater, wildlife habitat and corridor, and forest. The wildlife habitat and intermittent stream resources are of moderate to high value. The site has high scenic value especially in combination with Resource site 112 to the east. This resource site also provides important connections between the northwest and southwest hills. The resources, functions and values of concern on the site include forest, wildlife habitat, scenic, open space, and groundwater.

Native forest tree species are present on the site. The groundcover and shrub layer throughout the majority of the disturbance area is dominated by English Ivy, English hawthorn, and Himalayan Blackberry. The area on the west side of the proposed disturbance area does have a more extensive native groundcover layer.

Impact Analysis and Mitigation Plan: A full description of the proposal was provided on page two of this report. The following discusses development alternatives other than the one proposed, that were considered by the applicant. The following additionally outlines the proposed construction management plan, mitigation and monitoring proposal (see Exhibits A.1 and A.6 in the application case file for a complete description).

Development Alternatives:

Locating the Veterinary Hospital: Several alternate sites for the veterinary hospital were evaluated. Location options on the site are limited because the new veterinary hospital and quarantine area need to be in close proximity to the existing animal care facilities that are to remain. Alternatives evaluated by the applicant included: a single building to replace both the quarantine area and the hospital; replacing the veterinary and quarantine facilities completely outside of the environmental overlay zone; and siting the new facilities on Kingston Road out of the conservation zone and within the Transition Area.

These alternatives would have either resulted in greater disturbance (if a larger, single building were used), or were impracticable do to a lack of available land or the need to house the facilities away from public activity.

Retaining wall design: The Veterinary Medical Center will include 3 retaining walls as shown on Exhibit C.4. The soil nail wall (Retaining Wall #1) is approximately 31 feet high at its highest point).

Soil nail walls are built from the excavation side and from the top down using spray applied concrete. The use of this construction technique virtually eliminates any impact to the area that is on the uphill side of the wall.

The alternative to the soil nail wall design for Wall #1 would be poured-in-place concrete wall. That additional excavation would produce a greater volume of excavated material (compared to the soil nail wall) to either stockpile or dispose of and would also impact the surface of the hillside. That increased surface disturbance would result in the expansion of the "Limits of Disturbance" boundary and the removal of more trees along the north side of the building site.

Wall #1 will be of the soil nail wall design, and this method of construction does not disturb areas uphill of the wall. Portions of the wall below 10 feet in the case of Wall# 2, and below 20 feet in the case of Wall #3, will be cast-in-place concrete. The footing for those walls (Walls #2 and #3) is facing the building side so the disturbance will be minimized.

Construction Management Plan (CMP):

The project will be sequenced in the following phases:

- Staging and mobilization for the project.
- Erosion Control installed.
- Site grading for the diversion ditch.
- Demolition of the Quarantine Building.
- The site will be cleared, grubbed, and excavated.
- Construction of the concrete soil nail retaining wall on the North side.
- Construction of Walls #2 and 3, and the building.
- Construction of the final storm water management system, including the rainwater harvesting tank, after the shell of the building is complete.
- The permanent development south of the access road, which includes a permanent water quality swale, will then be completed.

Unavoidable Impacts:

The proposed structure has a disturbance area of approximately 51,385 square feet. The existing disturbance area within the immediate project site is approximately 29,384 square feet. The increase in disturbance area over existing is approximately 22,001 square feet.

A total of 71 native trees greater than six-inches diameter will have to be removed from the Resource Area. The total diameter (DBH) of native trees proposed to be removed is 984 inches.

Impact Reduction:

The location of the existing quarantine area was chosen to minimize the amount of new excavation and vegetation removal. A stormwater swale will be constructed in an area that is currently occupied by greenhouses and nursery structures. The greenhouses will be removed and not replaced. No impacts to any native vegetation will result from the removal of the greenhouses and construction of the stormwater swale to the south of the road. An existing rock retaining wall to the west of the greenhouses will be demolished to make space available for the swale.

A soil nail retaining wall is proposed for the north side of the veterinary facility to reduce the amount of excavation necessary and further reduce the size of the disturbance area (see retaining wall alternatives analysis, above). This reduction in disturbance area saves a number of trees and patches of native vegetation.

Stormwater generated from the roof of the proposed building will be collected and re-used on site. Off-site surface stormwater (from north of SW Kingston Drive) will be directed into a stormwater diversion ditch to the east of the proposed hospital building. When that ditch reaches a catch basin at the driveway, the water will flow into a pipe and be directed to an outfall approximately 200 feet south of the proposed hospital.

A water quality swale is proposed for treating stormwater at the location currently occupied by some greenhouses and plant nursery structures along the edge of the railroad tracks just below the veterinary hospital access drive. The short extension of decorative rock retaining wall along the tracks at the west end of the greenhouse area will be demolished to make space for the water quality swale. The swale will be planted with native species.

Groundwater resources entering and exiting the site will not be materially affected because the applicant will simply direct that water to swales and catch basins where they will be discharged to the storm water system and from there to the storm water outfall approximately 180 feet south of the Veterinary Hospital building. The slope stability of the site will be improved and there will be no significant impact on groundwater resources in the resource area overall.

The scenic and open space resources of the site should not be impacted since the only trees removed are near the existing quarantine structure. Only one tree near the edge of the zoo property at the top of the slope within the Scenic Overlay setback is at risk for removal (see Exhibit C.4 – Proposed Development), and that is a small (less than 12" DBH) Douglas fir.

Proposed Mitigation:

Mitigation is required to compensate for unavoidable environmental impacts that are approved through environmental review. This mitigation plan is designed to increase the density and variety of native plant species on the project site and around the zoo to provide for more diverse habitat for wildlife.

The proposed mitigation includes planting 173 native trees and 162 native shrubs as a minimum for tree replacement using the Section 33.430.140.L, Tree Replacement Table 430-3, Option B standard. Additionally, 25 trees and 9 shrubs will be planted as further mitigation for other resource impacts, specifically for the potential loss of 9 additional trees. Every effort will be made to protect those trees, but the applicant realizes that those trees must be mitigated for in the case that they do not survive the effects of construction.

The proposed mitigation will be planted throughout the site around the facility below SW Kingston Drive. Groundcover plants will be planted in the areas around the facility that are disturbed by construction and trees and shrubs will be planted in appropriate areas throughout the forested slope. Non-native invasive species will be removed from the hill slope. The diversity of native species will be greatly increased with the addition of western red cedar, hemlock, and grand fir trees. The proposed native vegetation planting will also provide slope/soil stabilization and erosion control, and some water quality benefits. Additionally, the increase in density and variety of native plant species will result in a more diverse habitat for wildlife.

Monitoring Plan for Mitigation:

The mitigation plantings will be closely monitored on a regular basis by the applicant's General Contractor and their landscape contractor for a minimum of two years to ensure the survival and replacement of the plantings. After the initial two year period, the landscape contractor will establish a somewhat less frequent program that will still monitor the survival of the required plantings on an ongoing basis. To document that process, the landscape contractor will:

Provide a minimum of two letters (to serve as monitoring and maintenance reports) to the Arlington Heights Neighborhood Association and to the Land Use Services Division of the Bureau of Development Services containing the monitoring information described below. The first letter will be submitted within 12 months following the approval of the Permanent Erosion Control Inspection of the required mitigation plantings. A second letter will be submitted within 24 months after the date of the first monitoring letter. The letters will contain the following information:

- a.) A count of the number of planted trees that have died. (One replacement tree will be planted for each dead tree and replacement will take place within one planting season.)
- b.) The percentage coverage of native shrubs and ground covers. If less than 80 percent of the mitigation planting area is covered with native shrubs or groundcovers at the time of the annual count, additional shrubs and groundcovers will be planted to reach 80 percent cover and replacement will occur within one planting season.
- c.) A list of replacement plants that were installed.
- d.) Photographs of the mitigation area and a site plan showing the location and direction of photos.
- e.) A description of the method used and the frequency for watering mitigation trees, shrubs, and groundcovers for the first two summers after planting. Any irrigation systems that may be employed will be temporary and above ground.
- f.) An estimate of percent cover of invasive species (English ivy, Himalayan blackberry, etc.) within 10 feet of all plantings. Invasive species will be limited so that they do not exceed 20 percent cover during the monitoring period.

Land Use History: City records indicate numerous prior land use reviews for this site, which includes the Oregon Zoo and the World Forestry Center, as well as the Children's Museum. None of these land use reviews are specifically relevant to the current proposal. (A list of the prior land use reviews for the site is included as Exhibit G-1 in the case file). The current

master plan for the Oregon Zoo (**97-00127 CU MS EN**) approved various development projects, amended the site boundary, allowed expansion and new construction within the environmental overlay. The current master plan received approval in February, 2003, and therefore has not expired.

LU 09-136788 CU MS EN approved a Conditional Use Master Plan amendment of a new connection between the existing and proposed animal hospitals. This decision approved an Environmental Review for construction of a new veterinary hospital, regrading an existing access road and raising it by 5 feet, constructing a stormwater swale system, and trenching for an approximately 150-foot long outfall pipe and discharge apron. The current land use review effectively revises the Environmental Review portion of this land use review.

Agency and Neighborhood Review: A Notice of Proposal in your Neighborhood was mailed on April 16, 2010.

1. Agency Review: Several Bureaus and agencies have responded to this proposal (see Exhibits E.1 – E.9 in the application case file). Their comments are discussed below where they relate to the approval criteria.

2. Neighborhood Review: No written responses have been received from either the Neighborhood Association or notified property owners in response to the proposal.

ZONING CODE APPROVAL CRITERIA

33.430.250 Approval Criteria for Environmental Review

An environmental review application will be approved if the review body finds that the applicant has shown that all of the applicable approval criteria are met. When environmental review is required because a proposal does not meet one or more of the development standards of Section 33.430.140 through .190, then the approval criteria will only be applied to the aspect of the proposal that does not meet the development standard or standards.

Response: The approval criteria which apply to the proposed new veterinary hospital and associated utilities are found in Section 33.430.250 E. The applicant has provided findings for these approval criteria and BDS Land Use Services staff has revised these findings or added conditions, where necessary to meet the approval criteria. Findings for approval criteria that are similar are grouped together, as appropriate, below.

33.430.250. E. Other development in the Environmental Conservation zone or within the Transition Area only. In Environmental Conservation zones or for development within the Transition Area only, the applicant's impact evaluation must demonstrate that all of the following are met:

- 1. Proposed development minimizes the loss of resources and functional values, consistent with allowing those uses generally permitted or allowed in the base zone without a land use review;**
- 2. Proposed development locations, designs, and construction methods are less detrimental to identified resources and functional values than other practicable and significantly different alternatives;**
- 3. There will be no significant detrimental impact on resources and functional values in areas designated to be left undisturbed;**

Findings: Based on the construction management plan (CMP) and mitigation plan, described on pages 4 and 5 of this report, there will be no significant detrimental impact on resources and functional values in areas designated to be left undisturbed because the proposed construction management plan ensures that construction impacts are controlled and limited to the proposed disturbance area. All construction will be accessed from

existing roads and driveways. Some staging will occur off site, and completely outside of the resource area. A small amount of the work on the SW Kingston culvert may be staged from Kingston. Erosion control will be in place but nearly all habitat areas to remain are upslope from the construction.

Protection of trees to remain will consist of fencing in accordance with the arborist's report. For trees close to construction areas an arborist will be on site to monitor construction and ensure tree protection. The arborist recommended specific tree protection measures which the applicant will be required to follow, as these recommendations are attached to this report as Exhibit A.3.

In summary, proposed development minimizes the loss of resources and functional values and the proposed development location, design, and construction methods are less detrimental to identified resources and functional values than other practicable and significantly different alternatives. The impact evaluation shows that the proposed project site is primarily in the location of existing development that will be replaced. Selecting a site with existing development reduces the amount of new site disturbance and loss of native vegetation. Impacts beyond the disturbance area will be offset by effective construction management during construction and stormwater management after the project is complete. These criteria are met.

- 4. The mitigation plan demonstrates that all significant detrimental impacts on resources and functional values will be compensated for;**
- 5. Mitigation will occur within the same watershed as the proposed use or development and within the Portland city limits except when the purpose of the mitigation could be better provided elsewhere; and**
- 6. The applicant owns the mitigation site; possesses a legal instrument that is approved by the City (such as an easement or deed restriction) sufficient to carry out and ensure the success of the mitigation program; or can demonstrate legal authority to acquire property through eminent domain.**

Findings: The mitigation plan demonstrates that all significant detrimental impacts on resources and functional values will be compensated for because the limited impacts identified in the impact evaluation will be mitigated through extensive planting of native trees and shrubs and habitat enhancement. The proposed mitigation is designed to increase the density and variety of native plant species on the project site and around the zoo to provide a more diverse habitat for wildlife.

The proposed Mitigation Plan will be installed and maintained under the regulations outlined in Zoning Code Section 33.248.040.A-D A two-year monitoring report is described on page 4 and will ensure survival of all proposed mitigation plantings.

The proposed mitigation will occur on site around the proposed disturbance area and within the zoo grounds. The mitigation areas are owned by the applicant and they are within the same watershed as the proposed development. The applicant owns the subject site and will adhere to the environmental regulations and can ensure the success of the mitigation program. Therefore, these criteria are met.

DEVELOPMENT STANDARDS

Unless specifically required in the approval criteria listed above, this proposal does not have to meet the development standards in order to be approved during this review process. The plans submitted for a building or zoning permit must demonstrate that all development standards of Title 33 can be met, or have received an Adjustment or Modification via a land use review prior to the approval of a building or zoning permit.

CONCLUSIONS

The applicant proposes to demolish the existing quarantine building at the Oregon Zoo, and replace it with a new veterinary hospital, with associated retaining walls and stormwater facilities. The applicant has demonstrated that their alternative design minimized impacts on environmental resources and that impacts will be mitigated. Therefore, this proposal should be approved, subject to the conditions described above and specified below.

ADMINISTRATIVE DECISION

Approval of an Environmental Review for:

- Demolition of existing quarantine buildings and greenhouses;
- Construction of a new veterinary hospital; and
- Construction of associated utilities, retaining walls, and stormwater facilities.

all within the Environmental Conservation overlay zone, and in substantial conformance with Exhibits C.4 through C.8, and C.10 through C.17, as signed, and dated by the City of Portland Bureau of Development Services on **June 24, 2010**. Approval is subject to the following conditions:

- A. All permits:** Copies of the stamped Exhibits C.4 through C.8, and C.10 from LU 10-113106 EN and Conditions of Approval listed below, shall be included within all plan sets submitted for permits (building, grading, Site Development, erosion control, etc.). These exhibits shall be included on a sheet that is the same size as the plans submitted for the permit and shall include the following statement, "**Any field changes shall be in substantial conformance with approved Exhibits C.4 through C.8, and C.10.**"
- B.** Temporary construction fencing shall be installed according to Section 33.248.068 (Tree Protection Requirements), except as noted below. Construction fencing shall be placed along the Limits of Construction Disturbance for the approved development, as depicted on Exhibit C.6 Construction Management Plan, and as required in Exhibit A.3 Arborist's Report (attached), and as required by inspection staff during the plan review and/or inspection stages.
 1. No mechanized construction vehicles are permitted outside of the approved "Limits of Construction Disturbance" delineated by the temporary construction fence. All planting work, invasive vegetation removal, and other work to be done outside the Limits of Construction Disturbance, shall be conducted using hand held equipment.
 2. Tree protection shall be provided as described in the applicant's arborist's report, attached to this decision as Exhibit A.3.
- C.** A total of 198 trees, 171 shrubs, in the mitigation areas, as well as 815 ground cover plants and 600 shrubs in the temporary construction disturbance areas. All plants shall be selected from the Portland Plant List, and shall be planted in substantial conformance with Exhibit C.10 Mitigation Plan.
 1. Plantings shall be installed between October 1 and March 31 (the planting season).
 2. Prior to installing required mitigation plantings, non-native invasive plants shall be removed from all areas within 10 feet of mitigation plantings, using handheld equipment.
 3. All mitigation and remediation shrubs and trees shall be marked in the field by a tag attached to the top of the plant for easy identification by the City Inspector. All tape shall be a contrasting color that is easily seen and identified.
 4. After installing the required mitigation plantings, the applicant shall request inspection of Permanent Erosion Control Measures (IVR 210) by the Bureau of Development Services, who will confirm that all required mitigation plantings have been installed. A letter of certification from the landscape professional or designer of record may be requested by the Bureau of Development Services to document that the plantings have been installed according to the approved plans.

D. An inspection of Permanent Erosion Control Measures shall be required to document installation of the required mitigation plantings.

1. The **Permanent Erosion Control Measures** inspection (IVR 210) shall not be approved until the required mitigation plantings have been installed (as described in Condition C above);

--OR--

2. If the **Permanent Erosion Control Measures** inspection (IVR 210) occurs outside the planting season (as described in Condition C above), then the Permanent Erosion Control Measures inspection may be approved prior to installation of the required mitigation plantings – if the applicant obtains a separate **Zoning Permit** for the purpose of ensuring an inspection of the required mitigation plantings by March 31 of the following year.

E. The land owner or designer of record shall monitor the required plantings for two years to ensure survival and replacement as described below. The land owner is responsible for ongoing survival of required plantings beyond the designated two-year monitoring period. The landowner or landscape professional shall:

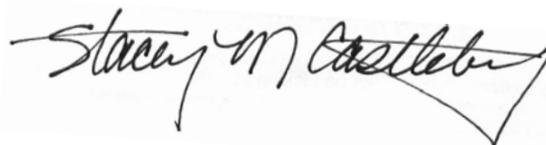
1. Provide a minimum of two letters (to serve as monitoring and maintenance reports) to the Arlington Heights Neighborhood Association, and to the Land Use Services Division of the Bureau of Development Services (Attention: Environmental Review LU 10-113106 EN) containing the monitoring information described below. Submit the first letter within 12 months following approval of the Permanent Erosion Control Inspection of the required mitigation plantings. Submit subsequent letters every 12 months following the date of the first monitoring letter. All letters shall contain the following information:
 - a. A count of the number of planted trees that have died. One replacement tree must be planted for each dead tree (replacement must occur within one planting season).
 - b. The percent coverage of native shrubs and ground covers. If less than 80 percent of the mitigation planting area is covered with native shrubs or groundcovers at the time of the annual count, additional shrubs and groundcovers shall be planted to reach 80 percent cover (replacement must occur within one planting season).
 - c. A list of replacement plants that were installed.
 - d. Photographs of the mitigation area and a site plan, in conformance with approved Exhibit C.10 Proposed Mitigation Plan, showing the location and direction of photos.
 - e. A description of the method used and the frequency for watering mitigation trees, shrubs, and groundcovers for the first two summers after planting. All irrigation systems shall be temporary and above-ground.
 - f. An estimate of percent cover of invasive species (English ivy, Himalayan blackberry, reed canarygrass, teasel, clematis) within 10 feet of all plantings. Invasive species must not exceed 20 percent cover during the monitoring period.

F. Failure to comply with any of these conditions may result in the City's reconsideration of this land use approval pursuant to Portland Zoning Code Section 33.700.040 and /or enforcement of these conditions in any manner authorized by law.

Note: In addition to the requirements of the Zoning Code, all uses and development must comply with other applicable City, regional, state and federal regulations.

This decision applies to only the City's environmental regulations. Activities which the City regulates through PCC 33.430 may also be regulated by other agencies. In cases of overlapping City, Special District, Regional, State, or Federal regulations, the more stringent regulations will control. City approval does not imply approval by other agencies.

Staff Planner: Stacey M Castleberry



Decision rendered by: _____ **on June 24, 2010.**

By authority of the Director of the Bureau of Development Services

Decision mailed: June 28, 2010.

About this Decision. This land use decision is **not a permit** for development. Permits may be required prior to any work. Contact the Development Services Center at 503-823-7310 for information about permits.

Procedural Information. The application for this land use review was submitted on February 19, 2010, and was determined to be complete on April 9, 2010.

Zoning Code Section 33.700.080 states that Land Use Review applications are reviewed under the regulations in effect at the time the application was submitted, provided that the application is complete at the time of submittal, or complete within 180 days. Therefore this application was reviewed against the Zoning Code in effect on February 19, 2010.

ORS 227.178 states the City must issue a final decision on Land Use Review applications within 120-days of the application being deemed complete. The 120-day review period may be waived or extended at the request of the applicant. In this case, the applicant waived the 120-day review period, as stated with Exhibit (Exhibit A.9) Unless further extended by the applicant, **the 120 days will expire on: February 19, 2011.**

Some of the information contained in this report was provided by the applicant.

As required by Section 33.800.060 of the Portland Zoning Code, the burden of proof is on the applicant to show that the approval criteria are met. The Bureau of Development Services has independently reviewed the information submitted by the applicant and has included this information only where the Bureau of Development Services has determined the information satisfactorily demonstrates compliance with the applicable approval criteria. This report is the decision of the Bureau of Development Services with input from other City and public agencies.

Conditions of Approval. If approved, this project may be subject to a number of specific conditions, listed above. Compliance with the applicable conditions of approval must be documented in all related permit applications. Plans and drawings submitted during the permitting process must illustrate how applicable conditions of approval are met. Any project elements that are specifically required by conditions of approval must be shown on the plans, and labeled as such.

These conditions of approval run with the land, unless modified by future land use reviews. As used in the conditions, the term "applicant" includes the applicant for this land use review, any person undertaking development pursuant to this land use review, the proprietor of the use or development approved by this land use review, and the current owner and future owners of the property subject to this land use review.

Appealing this decision. This decision may be appealed to the Hearings Officer, which will hold a public hearing. Appeals must be filed **by 4:30 PM on July 12, 2010** at 1900 SW Fourth Ave. Appeals can be filed Tuesday through Friday on the first floor of the Development Services Center until 3 p.m. After 3 p.m. and Mondays, appeals must be submitted to the receptionist at the front desk on the fifth floor. **An appeal fee of \$250 will be charged.** The appeal fee will be refunded if the appellant prevails. There is no fee for ONI recognized organizations appealing a land use decision for property within the organization's boundaries. The vote to appeal must be in accordance with the organization's bylaws. Low-income individuals appealing a decision for their personal residence that they own in whole or in part may qualify for an appeal fee waiver. In addition, an appeal fee may be waived for a low income individual if the individual resides within the required notification area for the review, and the individual has resided at that address for at least 60 days. Assistance in filing the appeal and information on fee waivers is available from BDS in the Development Services Center. Fee

waivers for low-income individuals must be approved prior to filing the appeal; please allow 3 working days for fee waiver approval. Please see the appeal form for additional information.

The file and all evidence on this case are available for your review by appointment only. Please call the Request Line at our office, 1900 SW Fourth Avenue, Suite 5000, phone 503-823-7617, to schedule an appointment. I can provide some information over the phone. Copies of all information in the file can be obtained for a fee equal to the cost of services. Additional information about the City of Portland, city bureaus, and a digital copy of the Portland Zoning Code is available on the internet at www.portlandonline.com.

Attending the hearing. If this decision is appealed, a hearing will be scheduled, and you will be notified of the date and time of the hearing. The decision of the Hearings Officer is final; any further appeal must be made to the Oregon Land Use Board of Appeals (LUBA) within 21 days of the date of mailing the decision, pursuant to ORS 197.620 and 197.830. Contact LUBA at 550 Capitol St. NE, Suite 235, Salem, Oregon 97301, or phone 1-503-373-1265 for further information.

Failure to raise an issue by the close of the record at or following the final hearing on this case, in person or by letter, may preclude an appeal to the Land Use Board of Appeals (LUBA) on that issue. Also, if you do not raise an issue with enough specificity to give the Hearings Officer an opportunity to respond to it, that also may preclude an appeal to LUBA on that issue.

Recording the final decision.

If this Land Use Review is approved the final decision must be recorded with the Multnomah County Recorder. A few days prior to the last day to appeal, the City will mail instructions to the applicant for recording the documents associated with their final land use decision.

- *Unless appealed*, The final decision may be recorded on or after **July 13, 2010 – (the day following the last day to appeal)**.
- A building or zoning permit will be issued only after the final decision is recorded.

The applicant, builder, or a representative may record the final decision as follows:

- **By Mail:** Send the two recording sheets (sent in separate mailing) and the final Land Use Review decision with a check made payable to the Multnomah County Recorder to: Multnomah County Recorder, P.O. Box 5007, Portland OR 97208. The recording fee is identified on the recording sheet. Please include a self-addressed, stamped envelope.
- **In Person:** Bring the two recording sheets (sent in separate mailing) and the final Land Use Review decision with a check made payable to the Multnomah County Recorder to the County Recorder's office located at 501 SE Hawthorne Boulevard, #158, Portland OR 97214. The recording fee is identified on the recording sheet.

For further information on recording, please call the County Recorder at 503-988-3034
For further information on your recording documents please call the Bureau of Development Services Land Use Services Division at 503-823-0625.

Expiration of this approval. An approval expires three years from the date the final decision is rendered unless a building permit has been issued, or the approved activity has begun.

Where a site has received approval for multiple developments, and a building permit is not issued for all of the approved development within three years of the date of the final decision, a new land use review will be required before a permit will be issued for the remaining development, subject to the Zoning Code in effect at that time.

Applying for your permits. A building permit, occupancy permit, or development permit may be required before carrying out an approved project. At the time they apply for a permit, permittees must demonstrate compliance with:

- All conditions imposed herein;
- All applicable development standards, unless specifically exempted as part of this land use review;
- All requirements of the building code; and
- All provisions of the Municipal Code of the City of Portland, and all other applicable ordinances, provisions and regulations of the City.

EXHIBITS

NOT ATTACHED UNLESS INDICATED

- A. Applicant's Statements
 1. Environmental Review Application
 2. Soil Nail Wall Geotechnical Assessment
 3. Arborist's Report (attached)
 4. Storm Drainage Report
 5. Supplemental Application Cover letter
 6. Environmental Review Completeness Response
 7. Offsite Stormwater Bypass Swale analysis
 8. Supplemental Material on staging/stockpile area
 9. 120-Day Waiver
- B. Zoning Map (attached)
- C. Site Plans (**See Full-Sized Versions of Approved Site Plans in Application Case File**)
 1. Existing Conditions Site Plan
 2. Tree Inventory Plan
 3. Tree Inventory Table
 4. Proposed Development Plan (attached)
 5. Diversion Swale Section and Detail (attached)
 6. Construction Management Plan (attached)
 7. Erosion and Sediment Control Plan (attached)
 8. Composite Utility Plan
 9. Staging area Plan
 10. Mitigation Plan (attached)
 11. General Planting Plan
 12. Mass grading/Erosion Control Plan
 13. Fine Grading/Erosion Control Plan
 14. Retaining Wall Plan and Profiles
 15. Grading / Erosion Control Details
 16. Fence & Bollard Details
 17. Retaining Wall notes and Schedules
- D. Notification information:
 1. Mailing list
 2. Mailed notice
- E. Agency Responses:
 1. Bureau of Environmental Services
 2. Bureau of Transportation Engineering and Development Review
 3. Water Bureau
 4. Fire Bureau
 5. Site Development Review Section of BDS
 6. Life Safety
 7. BDS Land Use Services
 8. Site Development Review Section of BDS
 9. Bureau of Environmental Services
- F. Correspondence:

No letters were received from neighboring property owners.
- G. Other:
 1. Original LU Application
 2. Site History Research
 3. Incomplete Letter



ZONING

- Site
- Also Owned



File No.	LU 10-113106 EN
1/4 Section	3225,3226
Scale	1 inch = 400 feet
State_Id	1S1E05 1400
Exhibit	B (Feb 23,2010)



Engineering + Environmental

RECEIVED

APR 9 2010

April 6, 2010

City of Portland Oregon
Bureau of Development Services
1900 SW 4th Avenue, Suite 5000
Portland, Oregon 97201

Approved

City of Portland - Bureau of Development Services
LU # 10-113106 EN
Date 6/24/2010
Planner Stacy Cooper

*Approval for environmental review only. Not a building permit.
Additional zoning requirements may apply.

Re: Alternative Tree Preservation Plan
The Oregon Zoo Veterinary Hospital
Portland, Oregon
PBS Project No: 30052.000

To Whom This May Concern:

This letter is the Arborist Report provided for land use review #10-113106EN, Item 6 (Letter from Bureau of Development Services to Jim Mitchell, Metro/Oregon Zoo, dated 3-11-10). This land use review item notes that an arborist report is needed because the tree preservation plan that was submitted does not meet the standard for placing tree protections fencing at the City's root protection zone (RPZ).

This report explains how trees to be preserved within 40-feet of any grading, staging, or construction work will be protected during and following construction, and meets the requirements of City of Portland Zoning Code Sections 33.248.065 and 33.248.068. This Plan includes alternative means for tree protection and preservation that provide the same level of protection as the requirements of Section 33.248.068. The Plan describes specific measures to adequately protect trees that are to remain on site given a reduction in the standard RPZ. The alternative tree preservation plan is illustrated on Plan Sheet EX.4.

Site Description

I visited the site on April 6, 2010 to evaluate the trees scheduled for preservation in terms of the proposed construction. Overall the site is forested, primarily with a mix of Douglas-fir (*Pseudotsuga menziesii*), bigleaf maple (*Acer macrophyllum*), and red alder (*Alnus rubra*). Plan Sheet EX.2A provides complete tree inventory data which was collected prior to my involvement with this project. Most of the trees appear in good or fair condition. A few trees in poor condition are scheduled for preservation where there is low target potential; these trees will need to be monitored closely during construction to ensure that they are not within striking distance of people and property. In addition, the trees scheduled for preservation should be re-evaluated following tree removal activities to verify that they are suitable for retention—this is because many of the trees are stand-grown and removal of adjacent trees may expose formerly sheltered trees that could have increased probability for failure given the adjacent tree removal.

Recommendations for Alternative Tree Preservation

Where feasible, trees to be preserved will be protected with tree protection fencing established at the standard RPZ (1-foot of protection radius for each diameter inch). The standard RPZ is not feasible for many of the trees on-site because of construction, yet adequate protection can be provided by implementing alternative tree protection measures. The tree protection measures presented herein will provide adequate protection for the trees to remain on site as required by Section 33.248.068.

Bandon | Bend | Boise | Eugene | Portland | Seattle | Tri-Cities | Vancouver

4412 SW Corbett Avenue, Portland, OR 97239
503.248.1939 Main
503.248.0223 Fax
888.248.1939 Toll-Free
www.pbsenv.com

Exhibit A.3

The general location of tree protection fencing is shown on Plan Sheet EX.4; the specific location will be determined on-site by the project arborist. Note that Plan Sheet EX.4 illustrates the standard RPZ with circles drawn around individual trees, as well as the location of tree protection fencing based on my recommendations and coordination with LanPacific.

Arborist recommendations for tree protection before, during, and after construction, are provided below and should be incorporated into construction drawings.

Before Construction:

1. **Tree Protection Zone.** The project arborist should designate the Root Protection Zone (RPZ). Where feasible, the RPZ should be established at the City's standard RPZ, otherwise the RPZ should be established at the dripline of the tree or grove, or as otherwise directed by the project arborist. The location of the RPZ is illustrated on Plan Sheet EX.4.
2. **Protection Fencing.** All trees to be retained should be protected by chain link fencing. Protection fencing should be 6-foot high chain link, secured to the ground with 8-foot metal posts. Fencing should be inspected and verified prior to construction, and be maintained and remain in place until construction is complete.
3. **Designation of Cut Trees.** Trees to be removed should be clearly marked with construction flagging, tree-marking paint, or other methods approved in advance by the project arborist.
4. **Preconstruction Conference.** The project arborist should be on-site to discuss methods of tree removal and tree protection prior to any construction.

During Construction:

1. **Root Protection Zone Maintenance.** The protection fencing should not be moved, removed, or entered by equipment except under direction of the project arborist.
2. **Arborist Coordination.** The developer should be responsible for coordinating with the project arborist whenever work is necessary beneath the dripline of protected trees, even if the work is outside of the establish alternative RPZ. The project arborist should be available during construction to provide on-the-ground recommendations as needed and to document construction activity adjacent to protected trees.
3. **Development Limitations.** Within the RPZ, the following development is not allowed:
 - New buildings;
 - Grade change of cut and fill during or after construction;
 - New impervious surfaces;
 - Utility or drainage field placement;
 - Staging or storage of materials and equipment;
 - Vehicle maneuvering.
4. **Excavation Beneath the Dripline of Protected Trees.** *This recommendation applies to trees with alternative RPZs and where the dripline of protected trees extends beyond the location of tree protection fencing.*
 - Excavation should be avoided beneath the dripline of protected trees if alternatives are available.
 - If excavation beneath the dripline of protected trees is unavoidable, the project arborist should evaluate the proposed excavation to determine methods to minimize impacts to trees. This can include tunneling, hand digging, or other approaches.
 - All construction beneath the dripline of protected trees should be under the on-site technical supervision of the project arborist.
4. **Tree Protection Inspections.** The project arborist should monitor construction activities and progress, and provide written reports to the developer and the City at regular intervals.

Approved

30052.000 City of Portland - Bureau of Development Services **Exhibit A.3**
LU # 10-113106 EN
Planner Stacy M. Cost Date 6/24/2010
* Approval for Environmental Review only. Not a building permit.
Additional zoning requirements may apply.

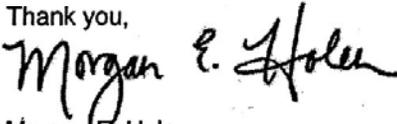
To Whom This May Concern
Re: Alternative Tree Preservation Plan for The Oregon Zoo Veterinary Hospital
April 6, 2010
Page 3 of 3

After Construction:

1. **Final Report.** After the project has been completed, the project arborist should provide a final report that describes the measures needed to maintain and protect the remaining trees.

Please contact me if you have any questions, concerns, or need for additional information.

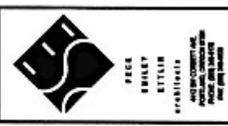
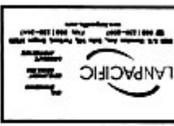
Thank you,



Morgan E. Holen
ISA Certified Arborist (PN-6145A)
ISA Certified Tree Risk Assessor (No. 449)
Forest Biologist
morgan_holen@pbsenv.com
971-409-9354 (mobile)

Approved	
City of Portland - Bureau of Development Services	
LU # <u>10-113106 EN</u>	
Planner <u>Stacey M. Coats</u>	Date <u>6/24/2010</u>
* Approval for Environmental Review only. Not a building permit. Additional zoning requirements may apply.	

Exhibit A.3



OREGON ZOO
 VETERINARY MEDICAL CENTER
 PORTLAND, OREGON
 4001 SW CANTON RD, CITY OF PORTLAND, WASHINGTON COUNTY, OREGON



ENVIRONMENTAL
REVIEW PLAN SET
PROPOSED
DEVELOPMENT
UNAPPROVED
DATE
SCALE
REVISION

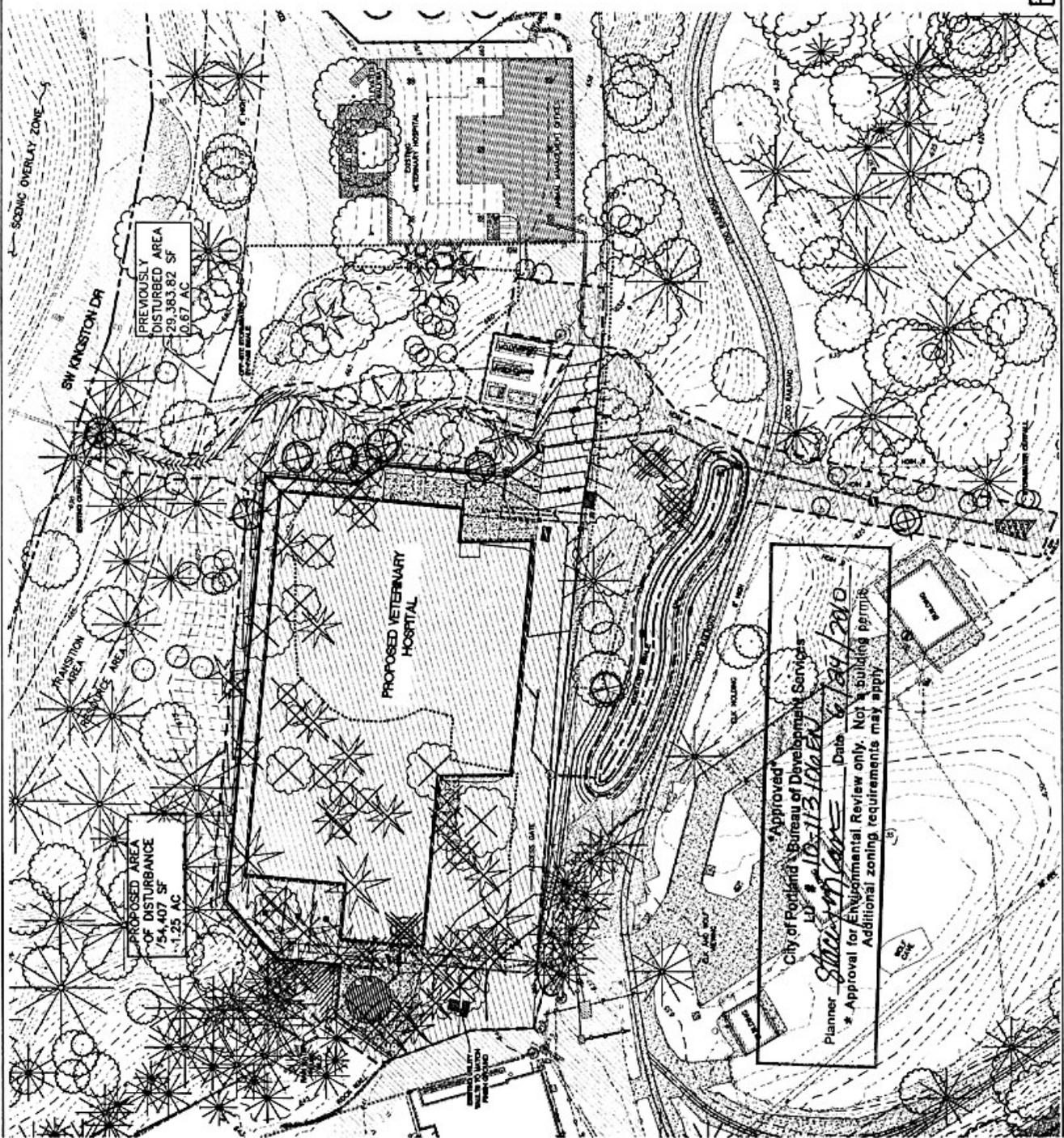
EX. 3

NOTE: SEE SHEETS EX. 2 AND EX. 2A FOR TREE INVENTORY AND REMOVAL PLAN

AREAS OF DISTURBANCE
 PREVIOUSLY DISTURBED = 29,383.82 SF
 PROPOSED DISTURBANCE = 54,407 SF

- LEGEND**
- LIGHT POLE
 - MANHOLE - SANITARY SEWER
 - MANHOLE - STORM SEWER
 - MANHOLE - COMBINED SANITARY/STORM
 - CATCH BASIN
 - CLEAN-OUT
 - ROOF DRAIN
 - FIRE HYDRANT
 - WATER WALK
 - REGULATION VALVE
 - SHOOT
 - GAS METER
 - GAS VALVE
 - GAS RISER
 - TELEPHONE RISER
 - SIGN
 - GATE POST
 - ASPHALT
 - DECADUOUS TREE TO BE REMOVED
 - EVERGREEN TREE TO REMAIN
 - EVERGREEN TREE TO BE REMOVED
 - EVERGREEN TREE TO BE REMOVED
 - CONCRETE
 - GRAVEL
 - ROCK WALL
 - PREVIOUSLY DISTURBED AREA
 - SANITARY/STORM PIPE
 - CHAIN LINK FENCE
 - CHAIN LINK FENCE EXCLUDED
 - 20' BUFFER FENCE LINES
 - 1' CONTOUR
 - 5' CONTOUR
 - DESTROYED LAKE
 - EXISTING COMMUNICATIONS LINE
 - PROPOSED AREA OF DISTURBANCE
 - PROPOSED ASPHALT
 - PROPOSED CONCRETE
 - PROPOSED CURB
 - PROPOSED STONE LINE
 - PROPOSED CATCH-BASIN
 - PROPOSED ROOF DRAIN
 - PROPOSED SANITARY LINE
 - PROPOSED WATER LINE
 - PROPOSED DOUBLE-CHECK ASSEMBLY
 - PROPOSED FIRE DEPARTMENT CONNECTION
 - PROPOSED SOIL LAKE WALL
 - CHAIN LINK FENCE
 - PROPOSED BUILDING LAKE
 - PROPOSED STRIPING
 - PROPOSED GROUND COVER
 - PROPOSED TREE TO BE REMOVED
 - PROPOSED 1' CONTOUR
 - PROPOSED 5' CONTOUR
 - POSSIBLE TREE REMOVAL/CONSTRUCTION ACTIVITIES

BY
 JUN 4 2010
 LUISO-113106



Approved
 City of Portland Bureau of Development Services
 LU # 10-113106-EX
 Planner *Shirley Lane* Date *6/24/2010*
 * Approval for Environmental Review only. Not a building permit.
 Additional zoning requirements may apply.

SCALE 1"=30'
 Exhibit C.4



OREGON ZOO
VETERINARY MEDICAL CENTER
PORTLAND, OREGON
4001 SW CANTON RD, CITY OF PORTLAND, WASHINGTON COUNTY, OREGON



ENVIRONMENTAL
REVIEW PLAN SET
PROPOSED DEVELOPMENT
IN PROJECT
PREVIOUS
OWNER
DATE
REVISION

EX.3A

NOTE: SEE SHEETS EX. 2 AND EX. 2A FOR TREE INVENTORY AND REMOVAL PLAN
AREAS OF DISTURBANCE:
PREVIOUSLY DISTURBED = 29,383.82 SF
PROPOSED DISTURBANCE = 54,407 SF

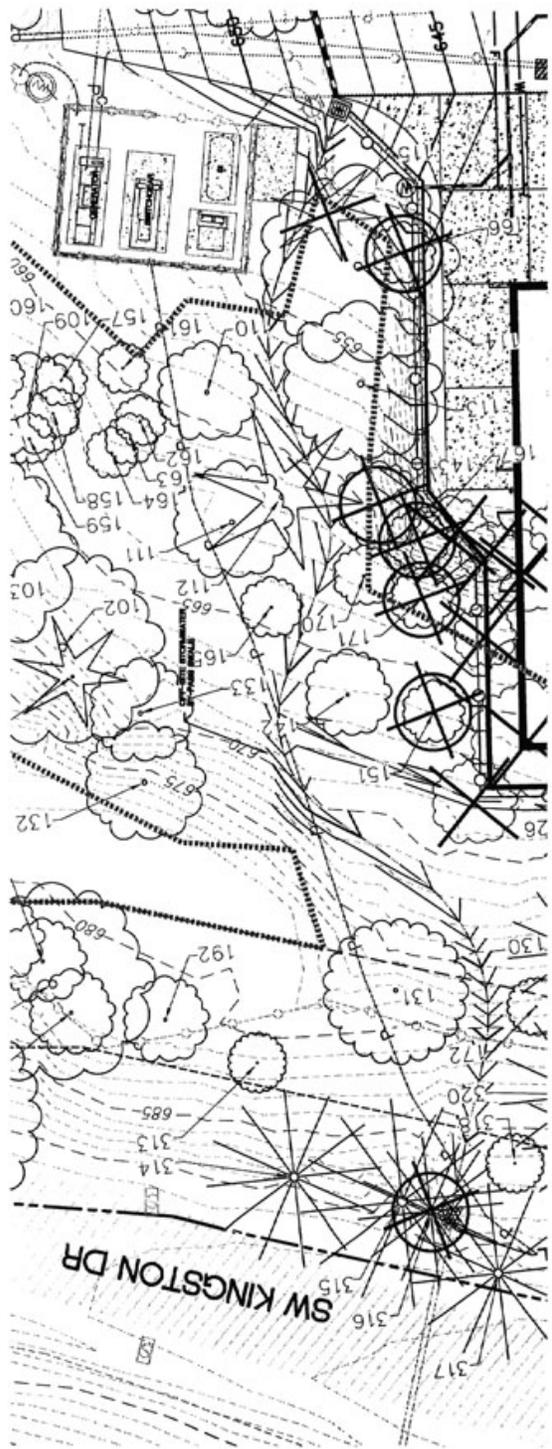
LEGEND

○	LIGHT POLE
○	MANHOLE - SANITARY SEWER
○	MANHOLE - STORM SEWER
○	MANHOLE - COMBINED SANITARY/STORM
○	CATCH BASIN
○	CLEAN-OUT
○	ROOF DRAIN
○	FIRE HYDRANT
○	WATER VALVE
○	IRIGATION VALVE
○	SHOBT
○	GAS VALVE
○	GAS RISER
○	TELEPHONE RISER
○	SKIN
○	GATE POST
○	ASPHALT
○	DECIDUOUS TREE TO REMAIN
○	EMERGENCY TREE TO REMAIN
○	DECIDUOUS TREE TO BE REMOVED
○	EMERGENCY TREE TO BE REMOVED
○	PREVIOUSLY DISTURBED AREA
○	SANITARY/STORM PIPE
○	APPROXIMATE BUILDING FOOTPRINT
○	CHAIN LINK FENCE UNDER CONSTRUCTION
○	OVERHEAD SERVICE LINE
○	ZOO BOUNDARY
○	5' CONTOUR
○	EXISTING POWER LINE
○	EXISTING COMMUNICATIONS LINE
○	PROPOSED ASPHALT
○	PROPOSED CONCRETE
○	PROPOSED CURB
○	PROPOSED STONE LINE
○	PROPOSED STORM MANHOLE
○	PROPOSED CATCH-BASIN
○	PROPOSED RIP RAP
○	PROPOSED SANITARY LINE
○	PROPOSED SANITARY MANHOLE
○	PROPOSED WATER LINE
○	PROPOSED DOUBLE-CHECK ASSEMBLY
○	PROPOSED FIRE DEPARTMENT CONNECTION
○	PROPOSED SOIL NAIL WALL
○	PROPOSED CAST-IN-PLACE WALL
○	CHAIN LINK FENCE
○	PROPOSED BUILDING LINE
○	PROPOSED STRIPING
○	PROPOSED GROUND COVER
○	PROPOSED TREE TO BE REMOVED
○	PROPOSED 1' CONTOUR
○	PROPOSED 5' CONTOUR
○	REMOVE TREE REMOVAL DUE TO CONSTRUCTION ACTIVITIES

By JUN 4 2010

L1010-113106

SCALE: 1"=10'



Approved
City of Portland - Bureau of Development Services
LU # W-113106-PK Date 6/24/2010
Planner Stacy M. Galt
* Approval for Environmental Review only. Not a building permit.
Additional zoning requirements may apply.

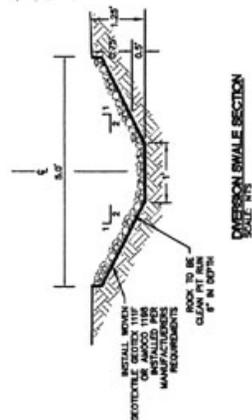
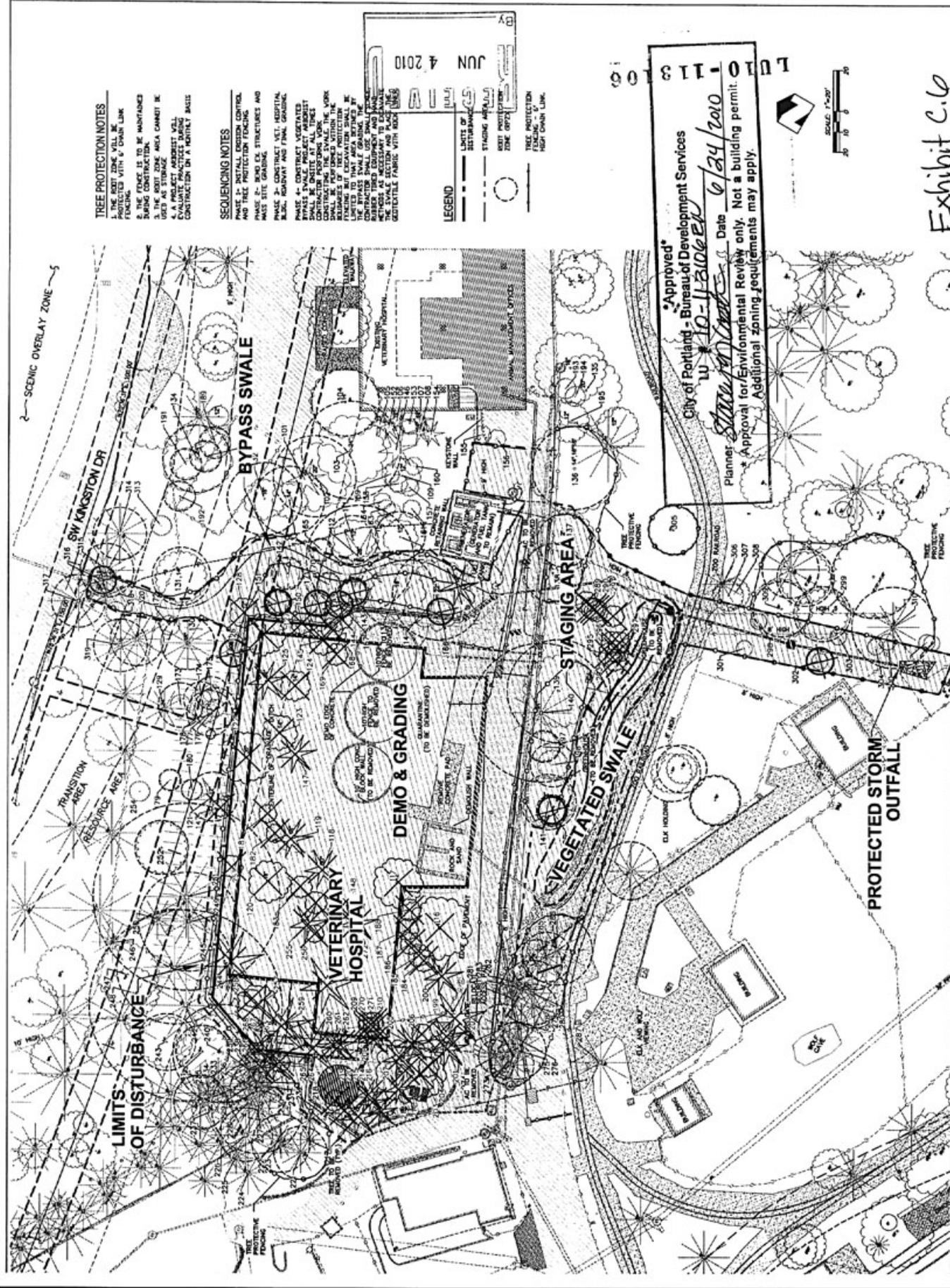
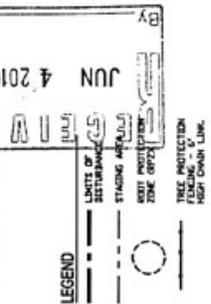


Exhibit C.5



TREE PROTECTION NOTES
 1. THE BEST ZONE WILL BE PROTECTED WITH A CHAIN LINK FENCING.
 2. THE BEST ZONE AREA CANNOT BE USED AS STAGING.
 3. THE BEST ZONE AREA CANNOT BE CONSTRUCTED ON A MONTHLY BASIS.

SEQUENCING NOTES
 PHASE 1- INSTALL EROSION CONTROL AND TREE PROTECTION FENCING.
 PHASE 2- DEMO EX. STRUCTURES AND EX. SITE GRADING.
 PHASE 3- CONSTRUCT ASPHALT DRIVEWAY AND PAVT. DRIVEWAY.
 PHASE 4- CONSTRUCT ASPHALT DRIVEWAY AND PAVT. DRIVEWAY.
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 PHASE 78- CONSTRUCT ASPHALT DRIVEWAY AND PAVT. DRIVEWAY.
 PHASE 79- CONSTRUCT ASPHALT DRIVEWAY AND PAVT. DRIVEWAY.
 PHASE 80- CONSTRUCT ASPHALT DRIVEWAY AND PAVT. DRIVEWAY.
 PHASE 81- CONSTRUCT ASPHALT DRIVEWAY AND PAVT. DRIVEWAY.
 PHASE 82- CONSTRUCT ASPHALT DRIVEWAY AND PAVT. DRIVEWAY.
 PHASE 83- CONSTRUCT ASPHALT DRIVEWAY AND PAVT. DRIVEWAY.
 PHASE 84- CONSTRUCT ASPHALT DRIVEWAY AND PAVT. DRIVEWAY.
 PHASE 85- CONSTRUCT ASPHALT DRIVEWAY AND PAVT. DRIVEWAY.
 PHASE 86- CONSTRUCT ASPHALT DRIVEWAY AND PAVT. DRIVEWAY.
 PHASE 87- CONSTRUCT ASPHALT DRIVEWAY AND PAVT. DRIVEWAY.
 PHASE 88- CONSTRUCT ASPHALT DRIVEWAY AND PAVT. DRIVEWAY.
 PHASE 89- CONSTRUCT ASPHALT DRIVEWAY AND PAVT. DRIVEWAY.
 PHASE 90- CONSTRUCT ASPHALT DRIVEWAY AND PAVT. DRIVEWAY.
 PHASE 91- CONSTRUCT ASPHALT DRIVEWAY AND PAVT. DRIVEWAY.
 PHASE 92- CONSTRUCT ASPHALT DRIVEWAY AND PAVT. DRIVEWAY.
 PHASE 93- CONSTRUCT ASPHALT DRIVEWAY AND PAVT. DRIVEWAY.
 PHASE 94- CONSTRUCT ASPHALT DRIVEWAY AND PAVT. DRIVEWAY.
 PHASE 95- CONSTRUCT ASPHALT DRIVEWAY AND PAVT. DRIVEWAY.
 PHASE 96- CONSTRUCT ASPHALT DRIVEWAY AND PAVT. DRIVEWAY.
 PHASE 97- CONSTRUCT ASPHALT DRIVEWAY AND PAVT. DRIVEWAY.
 PHASE 98- CONSTRUCT ASPHALT DRIVEWAY AND PAVT. DRIVEWAY.
 PHASE 99- CONSTRUCT ASPHALT DRIVEWAY AND PAVT. DRIVEWAY.
 PHASE 100- CONSTRUCT ASPHALT DRIVEWAY AND PAVT. DRIVEWAY.



Approved*
 City of Portland - Bureau of Development Services
 LU 10-11306
 Date 6/24/2010
 Planner *Shawn [Signature]*
 * Approval for Environmental Review only. Not a building permit.
 Additional zoning requirements may apply.

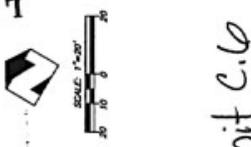
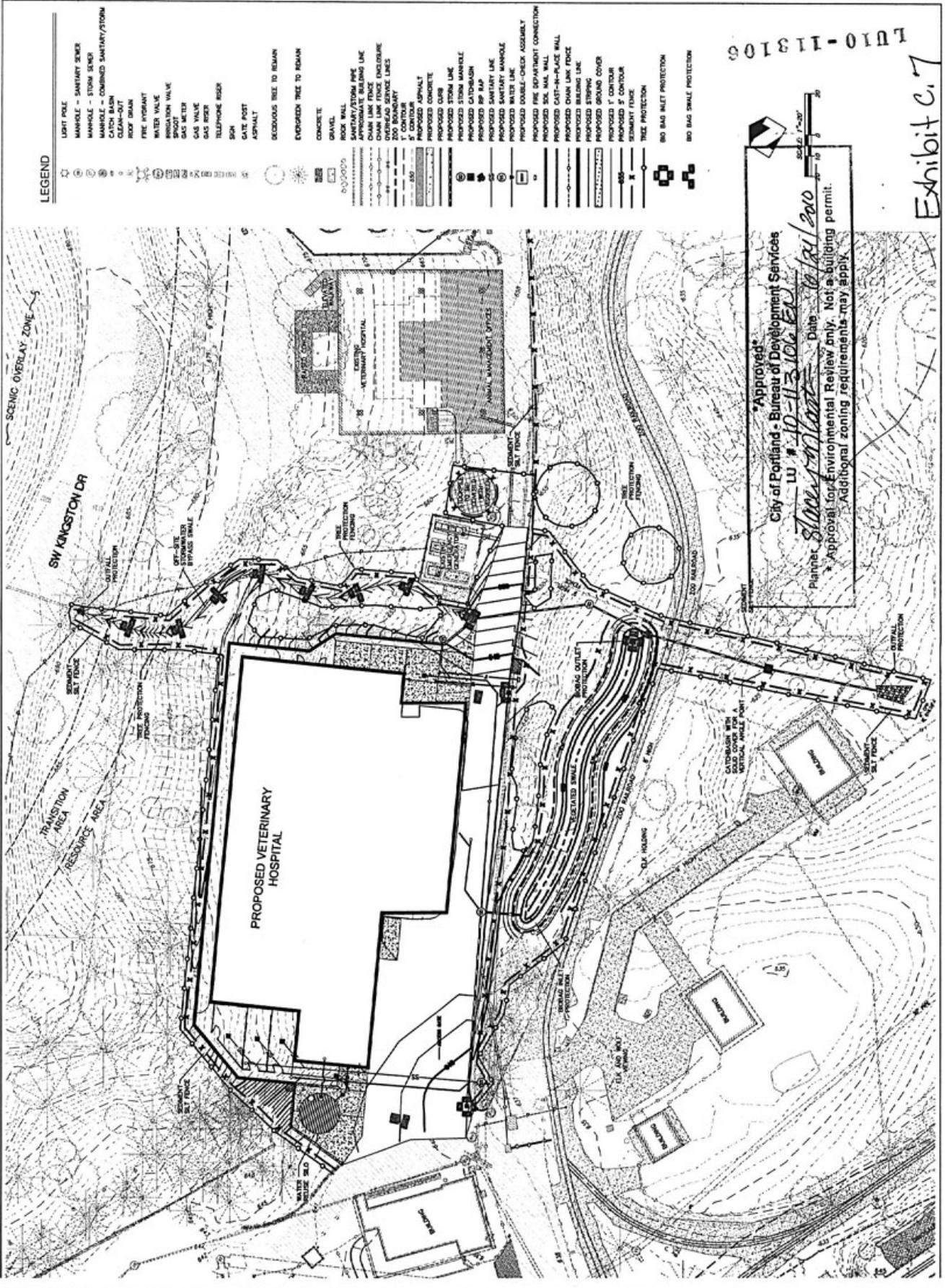


Exhibit C.6



LEGEND

- LIGHT POLE
- MANHOLE - SANITARY SEWER
- MANHOLE - STORM SEWER
- MANHOLE - COMBINED SANITARY/STORM
- CATCH BASIN
- CLEAN-OUT
- ROOF DRAIN
- FIRE HYDRANT
- WATER VALVE
- IRRIGATION VALVE
- FLOOD CONTROL
- BACKFLOW
- GAS VALVE
- GAS ROVER
- TELEPHONE RISER
- SIGN
- GATE POST
- ASPHALT
- DECADUOUS TREE TO REMAIN
- EVERGREEN TREE TO REMAIN
- CONCRETE
- GRAVEL
- ROCK WALL
- SANITARY/STORM PIPE
- APPROXIMATE BUILDING LINE
- CHAIN LINK FENCE ENCLOSURE
- OVERHEAD SERVICE LINES
- ZOO BOUNDARY
- 5' CONTIGUOUS
- PROPOSED ASPHALT
- PROPOSED CONCRETE
- PROPOSED GRASS
- PROPOSED STORM LINE
- PROPOSED SANITARY LINE
- PROPOSED GATED MANHOLE
- PROPOSED BIP RAP
- PROPOSED SANITARY MANHOLE
- PROPOSED WATER LINE
- PROPOSED DOUBLE-OVERHEAD ASSEMBLY
- PROPOSED FIRE DEPARTMENT CONNECTION
- PROPOSED S&L WALL
- PROPOSED CAST-IN-PLACE WALL
- PROPOSED CHAIN LINK FENCE
- PROPOSED BLDG LINE
- PROPOSED STRIPING
- PROPOSED GROUND COVER
- PROPOSED 1' CONTOUR
- PROPOSED 2' CONTOUR
- EXHIBIT FENCE
- TREE PROTECTION
- NO BAG INLET PROTECTION
- NO BAG SHALE PROTECTION

1010-113102

Approved*

 City of Portland - Bureau of Development Services

 LU # 10-113102 ED

 Planner: *Stephanie* Date: *10/18/200*

Approval for Environmental Review only. Not a building permit.

 Additional zoning requirements may apply.

Exhibit C.7

MITIGATION PLANTING MAINTENANCE & MONITORING PLAN:

MAINTENANCE & MONITORING: The Landscape Contractor is responsible for the maintenance & monitoring of all mitigation plantings for a minimum of two years following their installation. One hundred percent of the planted trees are required to survive the two-year maintenance period. Shrub and groundcover survival must provide a minimum of 80% plant coverage of the planted areas.

Landscape Contractor shall provide maintenance & monitoring during the two-year period. Mitigation plantings shall be inspected twice annually, once in the Spring and once in the Fall. Maintenance includes limiting intrusion of invasive species into the planted areas and providing water during the dry season. If the survival rate of the planted trees is less than 100% at the end of the two-year maintenance period, they must be replaced. The two-year maintenance period shall begin again from the date of replanting.

Maintenance and monitoring practices shall be documented and included in an annual report. Monitoring reports are required until all of the replacement and maintenance requirements have been achieved.

GENERAL NOTES:

- Contractor is to verify all plant quantities.
- Adjust plantings in the field as necessary.
- All plants are to be fully irrigated, well mulched and live to form.
- Mitigation planting plan is schematic only. Trees & shrubs are to be located in the field in accordance with existing plans and environmental zone planting instructions & irrigation details.
- (Sheet L2.0) for environmental zone planting instructions & irrigation details.

PLANT LIST: MITIGATION	SIZE	QUANTITY	SPACING
SPRINGS			
21 AC	4" GAL NERPA SHALLOW	2	10' x 6'
22 AC	4" GAL NERPA SHALLOW	2	10' x 6'
23 AC	4" GAL NERPA SHALLOW	2	10' x 6'
24 AC	4" GAL NERPA SHALLOW	2	10' x 6'
25 AC	4" GAL NERPA SHALLOW	2	10' x 6'
26 AC	4" GAL NERPA SHALLOW	2	10' x 6'
27 AC	4" GAL NERPA SHALLOW	2	10' x 6'
28 AC	4" GAL NERPA SHALLOW	2	10' x 6'
29 AC	4" GAL NERPA SHALLOW	2	10' x 6'
30 AC	4" GAL NERPA SHALLOW	2	10' x 6'
31 AC	4" GAL NERPA SHALLOW	2	10' x 6'
32 AC	4" GAL NERPA SHALLOW	2	10' x 6'
33 AC	4" GAL NERPA SHALLOW	2	10' x 6'
34 AC	4" GAL NERPA SHALLOW	2	10' x 6'
35 AC	4" GAL NERPA SHALLOW	2	10' x 6'
36 AC	4" GAL NERPA SHALLOW	2	10' x 6'
37 AC	4" GAL NERPA SHALLOW	2	10' x 6'
38 AC	4" GAL NERPA SHALLOW	2	10' x 6'
39 AC	4" GAL NERPA SHALLOW	2	10' x 6'
40 AC	4" GAL NERPA SHALLOW	2	10' x 6'
41 AC	4" GAL NERPA SHALLOW	2	10' x 6'
42 AC	4" GAL NERPA SHALLOW	2	10' x 6'
43 AC	4" GAL NERPA SHALLOW	2	10' x 6'
44 AC	4" GAL NERPA SHALLOW	2	10' x 6'
45 AC	4" GAL NERPA SHALLOW	2	10' x 6'
46 AC	4" GAL NERPA SHALLOW	2	10' x 6'
47 AC	4" GAL NERPA SHALLOW	2	10' x 6'
48 AC	4" GAL NERPA SHALLOW	2	10' x 6'
49 AC	4" GAL NERPA SHALLOW	2	10' x 6'
50 AC	4" GAL NERPA SHALLOW	2	10' x 6'
51 AC	4" GAL NERPA SHALLOW	2	10' x 6'
52 AC	4" GAL NERPA SHALLOW	2	10' x 6'
53 AC	4" GAL NERPA SHALLOW	2	10' x 6'
54 AC	4" GAL NERPA SHALLOW	2	10' x 6'
55 AC	4" GAL NERPA SHALLOW	2	10' x 6'
56 AC	4" GAL NERPA SHALLOW	2	10' x 6'
57 AC	4" GAL NERPA SHALLOW	2	10' x 6'
58 AC	4" GAL NERPA SHALLOW	2	10' x 6'
59 AC	4" GAL NERPA SHALLOW	2	10' x 6'
60 AC	4" GAL NERPA SHALLOW	2	10' x 6'
61 AC	4" GAL NERPA SHALLOW	2	10' x 6'
62 AC	4" GAL NERPA SHALLOW	2	10' x 6'
63 AC	4" GAL NERPA SHALLOW	2	10' x 6'
64 AC	4" GAL NERPA SHALLOW	2	10' x 6'
65 AC	4" GAL NERPA SHALLOW	2	10' x 6'
66 AC	4" GAL NERPA SHALLOW	2	10' x 6'
67 AC	4" GAL NERPA SHALLOW	2	10' x 6'
68 AC	4" GAL NERPA SHALLOW	2	10' x 6'
69 AC	4" GAL NERPA SHALLOW	2	10' x 6'
70 AC	4" GAL NERPA SHALLOW	2	10' x 6'
71 AC	4" GAL NERPA SHALLOW	2	10' x 6'
72 AC	4" GAL NERPA SHALLOW	2	10' x 6'
73 AC	4" GAL NERPA SHALLOW	2	10' x 6'
74 AC	4" GAL NERPA SHALLOW	2	10' x 6'
75 AC	4" GAL NERPA SHALLOW	2	10' x 6'
76 AC	4" GAL NERPA SHALLOW	2	10' x 6'
77 AC	4" GAL NERPA SHALLOW	2	10' x 6'
78 AC	4" GAL NERPA SHALLOW	2	10' x 6'
79 AC	4" GAL NERPA SHALLOW	2	10' x 6'
80 AC	4" GAL NERPA SHALLOW	2	10' x 6'
81 AC	4" GAL NERPA SHALLOW	2	10' x 6'
82 AC	4" GAL NERPA SHALLOW	2	10' x 6'
83 AC	4" GAL NERPA SHALLOW	2	10' x 6'
84 AC	4" GAL NERPA SHALLOW	2	10' x 6'
85 AC	4" GAL NERPA SHALLOW	2	10' x 6'
86 AC	4" GAL NERPA SHALLOW	2	10' x 6'
87 AC	4" GAL NERPA SHALLOW	2	10' x 6'
88 AC	4" GAL NERPA SHALLOW	2	10' x 6'
89 AC	4" GAL NERPA SHALLOW	2	10' x 6'
90 AC	4" GAL NERPA SHALLOW	2	10' x 6'
91 AC	4" GAL NERPA SHALLOW	2	10' x 6'
92 AC	4" GAL NERPA SHALLOW	2	10' x 6'
93 AC	4" GAL NERPA SHALLOW	2	10' x 6'
94 AC	4" GAL NERPA SHALLOW	2	10' x 6'
95 AC	4" GAL NERPA SHALLOW	2	10' x 6'
96 AC	4" GAL NERPA SHALLOW	2	10' x 6'
97 AC	4" GAL NERPA SHALLOW	2	10' x 6'
98 AC	4" GAL NERPA SHALLOW	2	10' x 6'
99 AC	4" GAL NERPA SHALLOW	2	10' x 6'
100 AC	4" GAL NERPA SHALLOW	2	10' x 6'

PLANT LIST: WATER QUALITY FACILITY	SIZE	QUANTITY	SPACING
SPRINGS			
101 AC	4" GAL NERPA SHALLOW	2	10' x 6'
102 AC	4" GAL NERPA SHALLOW	2	10' x 6'
103 AC	4" GAL NERPA SHALLOW	2	10' x 6'
104 AC	4" GAL NERPA SHALLOW	2	10' x 6'
105 AC	4" GAL NERPA SHALLOW	2	10' x 6'
106 AC	4" GAL NERPA SHALLOW	2	10' x 6'
107 AC	4" GAL NERPA SHALLOW	2	10' x 6'
108 AC	4" GAL NERPA SHALLOW	2	10' x 6'
109 AC	4" GAL NERPA SHALLOW	2	10' x 6'
110 AC	4" GAL NERPA SHALLOW	2	10' x 6'
111 AC	4" GAL NERPA SHALLOW	2	10' x 6'
112 AC	4" GAL NERPA SHALLOW	2	10' x 6'
113 AC	4" GAL NERPA SHALLOW	2	10' x 6'
114 AC	4" GAL NERPA SHALLOW	2	10' x 6'
115 AC	4" GAL NERPA SHALLOW	2	10' x 6'
116 AC	4" GAL NERPA SHALLOW	2	10' x 6'
117 AC	4" GAL NERPA SHALLOW	2	10' x 6'
118 AC	4" GAL NERPA SHALLOW	2	10' x 6'
119 AC	4" GAL NERPA SHALLOW	2	10' x 6'
120 AC	4" GAL NERPA SHALLOW	2	10' x 6'
121 AC	4" GAL NERPA SHALLOW	2	10' x 6'
122 AC	4" GAL NERPA SHALLOW	2	10' x 6'
123 AC	4" GAL NERPA SHALLOW	2	10' x 6'
124 AC	4" GAL NERPA SHALLOW	2	10' x 6'
125 AC	4" GAL NERPA SHALLOW	2	10' x 6'
126 AC	4" GAL NERPA SHALLOW	2	10' x 6'
127 AC	4" GAL NERPA SHALLOW	2	10' x 6'
128 AC	4" GAL NERPA SHALLOW	2	10' x 6'
129 AC	4" GAL NERPA SHALLOW	2	10' x 6'
130 AC	4" GAL NERPA SHALLOW	2	10' x 6'
131 AC	4" GAL NERPA SHALLOW	2	10' x 6'
132 AC	4" GAL NERPA SHALLOW	2	10' x 6'
133 AC	4" GAL NERPA SHALLOW	2	10' x 6'
134 AC	4" GAL NERPA SHALLOW	2	10' x 6'
135 AC	4" GAL NERPA SHALLOW	2	10' x 6'
136 AC	4" GAL NERPA SHALLOW	2	10' x 6'
137 AC	4" GAL NERPA SHALLOW	2	10' x 6'
138 AC	4" GAL NERPA SHALLOW	2	10' x 6'
139 AC	4" GAL NERPA SHALLOW	2	10' x 6'
140 AC	4" GAL NERPA SHALLOW	2	10' x 6'
141 AC	4" GAL NERPA SHALLOW	2	10' x 6'
142 AC	4" GAL NERPA SHALLOW	2	10' x 6'
143 AC	4" GAL NERPA SHALLOW	2	10' x 6'
144 AC	4" GAL NERPA SHALLOW	2	10' x 6'
145 AC	4" GAL NERPA SHALLOW	2	10' x 6'
146 AC	4" GAL NERPA SHALLOW	2	10' x 6'
147 AC	4" GAL NERPA SHALLOW	2	10' x 6'
148 AC	4" GAL NERPA SHALLOW	2	10' x 6'
149 AC	4" GAL NERPA SHALLOW	2	10' x 6'
150 AC	4" GAL NERPA SHALLOW	2	10' x 6'
151 AC	4" GAL NERPA SHALLOW	2	10' x 6'
152 AC	4" GAL NERPA SHALLOW	2	10' x 6'
153 AC	4" GAL NERPA SHALLOW	2	10' x 6'
154 AC	4" GAL NERPA SHALLOW	2	10' x 6'
155 AC	4" GAL NERPA SHALLOW	2	10' x 6'
156 AC	4" GAL NERPA SHALLOW	2	10' x 6'
157 AC	4" GAL NERPA SHALLOW	2	10' x 6'
158 AC	4" GAL NERPA SHALLOW	2	10' x 6'
159 AC	4" GAL NERPA SHALLOW	2	10' x 6'
160 AC	4" GAL NERPA SHALLOW	2	10' x 6'
161 AC	4" GAL NERPA SHALLOW	2	10' x 6'
162 AC	4" GAL NERPA SHALLOW	2	10' x 6'
163 AC	4" GAL NERPA SHALLOW	2	10' x 6'
164 AC	4" GAL NERPA SHALLOW	2	10' x 6'
165 AC	4" GAL NERPA SHALLOW	2	10' x 6'
166 AC	4" GAL NERPA SHALLOW	2	10' x 6'
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170 AC	4" GAL NERPA SHALLOW	2	10' x 6'
171 AC	4" GAL NERPA SHALLOW	2	10' x 6'
172 AC	4" GAL NERPA SHALLOW	2	10' x 6'
173 AC	4" GAL NERPA SHALLOW	2	10' x 6'
174 AC	4" GAL NERPA SHALLOW	2	10' x 6'
175 AC	4" GAL NERPA SHALLOW	2	10' x 6'
176 AC	4" GAL NERPA SHALLOW	2	10' x 6'
177 AC	4" GAL NERPA SHALLOW	2	10' x 6'
178 AC	4" GAL NERPA SHALLOW	2	10' x 6'
179 AC	4" GAL NERPA SHALLOW	2	10' x 6'
180 AC	4" GAL NERPA SHALLOW	2	10' x 6'
181 AC	4" GAL NERPA SHALLOW	2	10' x 6'
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190 AC	4" GAL NERPA SHALLOW	2	10' x 6'
191 AC	4" GAL NERPA SHALLOW	2	10' x 6'
192 AC	4" GAL NERPA SHALLOW	2	10' x 6'
193 AC	4" GAL NERPA SHALLOW	2	10' x 6'
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197 AC	4" GAL NERPA SHALLOW	2	10' x 6'
198 AC	4" GAL NERPA SHALLOW	2	10' x 6'
199 AC	4" GAL NERPA SHALLOW	2	10' x 6'
200 AC	4" GAL NERPA SHALLOW	2	10' x 6'

PLANT LIST: SITE DISTURBANCE AREA	SIZE	QUANTITY	SPACING
SPRINGS			
201 AC	4" GAL NERPA SHALLOW	2	10' x 6'
202 AC	4" GAL NERPA SHALLOW	2	10' x 6'
203 AC	4" GAL NERPA SHALLOW	2	10' x 6'
204 AC	4" GAL NERPA SHALLOW	2	10' x 6'
205 AC	4" GAL NERPA SHALLOW	2	10' x 6'
206 AC	4" GAL NERPA SHALLOW	2	10' x 6'
207 AC	4" GAL NERPA SHALLOW	2	10' x 6'
208 AC	4" GAL NERPA SHALLOW	2	10' x 6'
209 AC	4" GAL NERPA SHALLOW	2	10' x 6'
210 AC	4" GAL NERPA SHALLOW	2	10' x 6'
211 AC	4" GAL NERPA SHALLOW	2	10' x 6'
212 AC	4" GAL NERPA SHALLOW	2	10' x 6'
213 AC	4" GAL NERPA SHALLOW	2	10' x 6'
214 AC	4" GAL NERPA SHALLOW	2	10' x 6'
215 AC	4" GAL NERPA SHALLOW	2	10' x 6'
216 AC	4" GAL NERPA SHALLOW	2	10' x 6'
217 AC	4" GAL NERPA SHALLOW	2	10' x 6'
218 AC	4" GAL NERPA SHALLOW	2	10' x 6'
219 AC	4" GAL NERPA SHALLOW	2	10' x 6'
220 AC	4" GAL NERPA SHALLOW	2	10' x 6'
221 AC	4" GAL NERPA SHALLOW	2	10' x 6'
222 AC	4" GAL NERPA SHALLOW	2	10' x 6'
223 AC	4" GAL NERPA SHALLOW	2	10' x 6'
224 AC	4" GAL NERPA SHALLOW	2	10' x 6'
225 AC	4" GAL NERPA SHALLOW	2	10' x 6'
226 AC	4" GAL NERPA SHALLOW	2	10' x 6'
227 AC	4" GAL NERPA SHALLOW	2	10' x 6'
228 AC	4" GAL NERPA SHALLOW	2	10' x 6'
229 AC	4" GAL NERPA SHALLOW	2	10' x 6'
230 AC	4" GAL NERPA SHALLOW	2	10' x 6'
231 AC	4" GAL NERPA SHALLOW	2	10' x 6'
232 AC	4" GAL NERPA SHALLOW	2	10' x 6'
233 AC	4" GAL NERPA SHALLOW	2	10' x 6'
234 AC	4" GAL NERPA SHALLOW	2	10' x 6'
235 AC	4" GAL NERPA SHALLOW	2	10' x 6'
236 AC	4" GAL NERPA SHALLOW	2	10' x 6'
237 AC	4" GAL NERPA SHALLOW	2	10' x 6'
238 AC	4" GAL NERPA SHALLOW	2	10' x 6'
239 AC	4" GAL NERPA SHALLOW	2	10' x 6'
240 AC	4" GAL NERPA SHALLOW	2	10' x 6'
241 AC	4" GAL NERPA SHALLOW	2	10' x 6'
242 AC	4" GAL NERPA SHALLOW	2	10' x 6'
243 AC	4" GAL NERPA SHALLOW	2	10' x 6'
244 AC	4" GAL NERPA SHALLOW	2	10' x 6'
245 AC	4" GAL NERPA SHALLOW	2	10' x 6'
246 AC	4" GAL NERPA SHALLOW	2	10' x 6'
247 AC	4" GAL NERPA SHALLOW	2	10' x 6'
248 AC	4" GAL NERPA SHALLOW	2	10' x 6'
249 AC	4" GAL NERPA SHALLOW	2	10' x 6'
250 AC	4" GAL NERPA SHALLOW	2	10' x 6'