## TREE PERMIT
City of Oakland, Public Works Agency

Permit # T1500049  
Approved: July 21, 2015  
Location: Oakland Zoo (9777 Golf Links Rd.)  
Expires: One year from date of issuance.  
Applicant: East Bay Zoological Society  
Permit Type: City-Owned

<table>
<thead>
<tr>
<th>Removal Approved</th>
<th>Preservation Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tree Quantity</td>
<td>Identified As</td>
</tr>
<tr>
<td>A Total of fifty-five (55) trees for the California Exhibit. See categories below:</td>
<td>424 Trees</td>
</tr>
<tr>
<td>Animal Exhibits (18Trees)</td>
<td>38, 40,42,43,58 484,484,563,783, 816,820, 828, Z850, Z862, 866, Z868, Z870 Z72</td>
</tr>
<tr>
<td>Service Road, Road to Pump House (4 Trees)</td>
<td>Z17,Z20, Z21, Z93</td>
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</tbody>
</table>

As per Chapter 12.36 of the Oakland Municipal Code, the Protected Trees Ordinance (PTO), this permit approves the removal of fifty-five (55) protected trees, based upon and subject to enclosed findings and conditions of approval. This permit is effective five (5) working days after the date of this decision unless appealed by 3:00 pm on July 28, 2015, as explained below.

The permit is necessary for the proposed construction at the Oakland Zoo, a City-owned property (and thus City-owned tree removal) consisting of (a) paving of the steep portion of an existing dirt service/maintenance road that travels uphill from the veterinary hospital to an area where it...
levels off near the southwest corner of the planned California Exhibit and (b) the California Exhibit, consistent with the 2011 approved, amended Zoo Master Plan.

If the applicant or any concerned resident seeks to challenge this decision, such appeal must be filed by no later than 3:00 p.m. on July 28, 2015. An appeal shall be on a form provided by Public Works Agency (PWA), Tree Section, submitted to same at 7101 Edgewater Dr., Oakland, California, 94621. The appeal shall state specifically wherein it is claimed there was error or abuse of discretion or wherein this decision is not supported by substantial evidence and must include payment of $509.00 in accordance with the City of Oakland Master Fee Schedule (note the Master Fee Schedule was amended by the City Council as of July 1, 2015). Failure to timely appeal will preclude the applicant, or concerned resident, from challenging the City’s decision in court. The appeal itself must raise each and every issue that is contested, along with all the arguments and evidence in the record which supports the basis of the appeal; failure to do so may preclude the applicant, or any concerned resident, from raising such issues during the appeal and/or in court.

**OAKLAND MUNICIPAL CODE SECTION 12.36.050(A) FINDINGS**

In order to grant a tree removal permit, the City must determine that removal is necessary in order to accomplish any one of five following objectives listed in Section 12.36.050(A) of the Oakland Municipal Code:

1. To insure the public health and safety as it relates to the health of the tree, potential hazard to life or property, proximity to existing or proposed structures, or interference with utilities or sewers;
2. To avoid an unconstitutional regulatory taking of property;
3. To take reasonable advantage of views, including such measures as are mandated by the resolution of a view claim in accordance with the view preservation ordinance (Chapter 15.52 of this code);
4. To pursue accepted, professional practices of forestry or landscape design. Submission of a landscape plan acceptable to the Director of Parks and Recreation shall constitute compliance with this criterion; or
5. To implement the vegetation management prescriptions in the S-11 site development review zone.

The Oakland Zoo’s application complies with Objective 1 of Section 12.36.050(A). Fifty-five (55) protected trees need to be removed to build the approved Project. The trees are located within the footprint of the buildings/Exhibits/Road or within the area of grading. As noted in Finding 1 below, the City Council originally approved the expansion of the Oakland Zoo when it approved the 1998 Master Plan. The Mitigated Negative Declaration prepared for the 1998 Master Plan approval estimated that ninety-eight (98) protected trees (seventy-three [73] of which were native trees) would be removed for the California Exhibit. In 2011, the City Council approved the amended Master Plan, which included revisions to the California Exhibit and a new veterinary hospital. Additionally, the Council approved (denied an appeal) the first tree permit for the project, which covered the construction of the veterinary hospital, the perimeter fence, and the service/maintenance road (this road is now covered by the 2015 tree permit). The Subsequent Mitigated Negative Declaration/Addendum (SMND/A) prepared for the 2011
amended Master Plan estimated that forty-nine (49) protected trees would be removed for the California Exhibit. In 2014, the Zoo obtained necessary approvals/authorizations from the California Department of Fish and Wildlife, the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and the Regional Water Quality Control Board. Additionally, in 2014 the City Council approved the proposed conservation easement in Knowland Park as part of the fulfillment of the conditions of the City and the state and federal agency approvals. Based on the conditions of the City approval and the approvals of the state and federal agencies, current site conditions, and the final construction plans for the California Exhibit, the Zoo applied for a permit to remove fifty-seven (57) trees. This number was subsequently reduced to fifty-five (55) trees.

**OAKLAND MUNICIPAL CODE SECTION 12.36.050(B) FINDINGS**

A finding of any one of four (4) situations is grounds for permit denial, regardless of the findings in subsection A noted above. No grounds for denial were determined as explained below:

1. Removal of a healthy tree of a protected species could be avoided by reasonable redesign of the site plan, prior to construction, Section 12.36.050(B)(1)(a), or by trimming, thinning, tree surgery or other reasonable treatment, Section 12.36.050(B)(1)(b).

**Finding:** In 2011, the City Council approved the site plan for California Exhibit and its various components, which requires removal of certain trees. In 1998, the City approved a plan for the California Exhibit that would have resulted in the removal of approximately ninety-eight (98) protected trees (seventy-three [73] of which were native trees). The 2011 SMND/A estimated that approximately forty-nine (49) protected trees would be removed for the California Exhibit. The location of project improvements is constrained by City, California Department of Fish and Wildlife, and U.S. Fish and Wildlife Service requirements to avoid chaparral near the Visitor/Interpretive Center buildings and City requirements to avoid existing native grasslands to the extent feasible. In November of 2014, the Oakland Zoo staff and consultants reviewed (in the field) every tree proposed for removal under the final construction plans designed to comply with various City and state and federal agency requirements. Based on this review, the Zoo made adjustments to roadways and access to animal exhibits to avoid more extensive tree removal. Given the 2011 City approval of the Zoo expansion for the California Exhibit, the necessity to balance tree avoidance with other environmental constraints and to locate project components within the approved development area, and the effort made by the Zoo to reduce tree removal, no other redesign would be reasonable. Trimming, thinning, etc. does not apply since doing this type of tree work will not create enough space to construct the project. Additionally, the extension of the service road will provide enhanced fire protection for the upper areas of Knowland Park outside of the Zoo expansion area.

2. Adequate provisions for drainage, erosion control, land stability or windscreen have not been made in situations where such problems are anticipated as a result of the removal, Section 12.36.050(B)(2).
Finding: Removal of the fifty-five (55) trees in question would not result in any of the problems listed above. The project must comply with the requirements of the Storm Water Pollution Protection Plan approved by the State Water Resources Control Board and the City. Additionally, City imposed Standard Conditions of Approval require installation of drainage improvements to control runoff during construction and project operation. Best management practices for erosion, sedimentation and debris control must be implemented. A post-construction stormwater management plan is required, which will improve management of rainwater runoff from the site. (See Standard Conditions of Approval SCA-GEO-1, SCA-HYDRO-1, 2, 3, 4, and 5.) The inclusion of bioretention planters and self-retaining rain water area will increase the water retained on-site. Post-construction monitoring of existing site vegetation will involve yearly inspections of drainage outfalls and creek channels to identify erosion issues that will be addressed.

3. The tree to be removed is a member of a group of trees in which each tree is dependent upon the others for survival, Section 12.36.050(B)(3).

Finding: This situation is intended for densely packed trees in a forest location where removals will cause trees on the interior of the stand to become perimeter trees, exposed to wind loads to which they are not adapted, creating an extreme risk of failure due to changed conditions. The approved removals are not part of such a forest and will not impact other trees in the area in this manner.

4. The value of the tree is greater than the cost of its preservation to the property owner. The value of the tree shall be measured by the City Arborist using the criteria established by the International Society of Arboriculture (ISA), and the cost of preservation shall include any additional design and construction expenses required thereby. This criterion shall apply only to development-related permit applications.

Finding: Not applicable since this is a City-owned Tree Removal.

**OAKLAND MUNICIPAL CODE SECTION 12.36.070(E) CEQA REVIEW**

On June 21, 2011, the Oakland City Council adopted/approved the Subsequent Mitigated Negative Declaration/Addendum (SMND/A) for the Amendment to the Oakland Zoo Master Plan and made the appropriate CEQA-related findings. An Alameda County Superior Court rejected a lawsuit filed by the Friends of Knowland Park and the California Native Plant Society after the City’s 2011 approval alleging violations of CEQA and planning law. An appeal was not filed; the Court’s judgment is final.

In December 2014, the City Council approved a Conservation Easement in Knowland Park. In approving the Conservation Easement, the City Council relied on the SMND/A and found that no further environmental review was required because none of the circumstances specified in CEQA or the CEQA Guidelines (as described below) were present.

Jim Martin of Environmental Collaborative submitted a memorandum dated May 7, 2015 to the City regarding “Updated Assessment of Potential Impacts on Tree Resources Oakland Zoo Californian Exhibit Expansion Project Oakland California.” Mr. Martin reviewed the current tree permit application and concluded that there are no new significant impacts nor a substantial
increase in the severity of previously identified significant impacts that would warrant further CEQA review. The impacts of tree removal would be mitigated through implementation of the Tree Protection and Revegetation Plan required by the SMND/A Mitigation Measure 13b, compliance with the City’s Tree Protection Ordinance, and compliance with the City’s Standard Conditions of Approval SCA-BIO 1 and 2. Thus, no new CEQA review is warranted or required.

On the basis of substantial evidence in the record, none of the circumstances necessitating preparation of additional CEQA review as specified in CEQA and the CEQA Guidelines, including without limitation Public Resources Code Section 21166 and CEQA Guidelines Sections 15162 and 15163 are present in that (1) there are no substantial changes to the Project that would result in new significant environmental impacts or a substantial increase in the severity of significant impacts already identified; (2) there are no substantial changes in circumstances that would result in new significant environmental impacts or a substantial increase in the severity of significant impacts already identified; and (3) there is no new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the 1998 MND and 2011 SMND/A were adopted/approved, which is expected to result in (a) new significant environmental effects or a substantial increase in the severity of significant environmental effects already identified or (b) mitigation measures which were previously determined not to be feasible would in fact be feasible or which are considerably different from those recommended previously and which would substantially reduce significant effects of the project, but the project applicant declines to adopt them.

The Public Works Agency, based upon its independent review, consideration, and the exercise of its independent judgment, relies upon, and adopts, the City Council’s June 21, 2011 CEQA-related findings and incorporates them by reference, as if fully set forth herein.

The monitoring and reporting of CEQA mitigation measures in connection with the Tree Removal Permit will be conducted in accordance with the Standard Conditions of Approval/Mitigation Monitoring and Reporting Program (SCAMMRP), which are hereby adopted as conditions of approval. Adoption of the Tree Removal SCAMMRP fulfills the CEQA monitoring and/or reporting requirement set forth in Section 21081.6 of CEQA. All proposed standard conditions/mitigation measures are capable of being fully implemented by the efforts of the City of Oakland or other identified public agencies of responsibility.

**OAKLAND MUNICIPAL CODE SECTION 12.36.060 CONDITIONS OF APPROVAL**

1. **Limitations on Tree Removals.** Tree removals, as defined in the Protected Trees Ordinance, Section 12.36.020 of the Oakland Municipal Code, may not commence unless and until the applicant has obtained all other necessary permits/authorizations pertinent to site alteration and construction.

2. **Defense, Indemnification & Hold Harmless.** To the maximum extent permitted by law, the applicant shall defend (with counsel acceptable to the City), indemnify, and hold harmless the City of Oakland, the Oakland City Council, the City of Oakland Redevelopment Agency, the Oakland City Planning Commission and its respective agents, officers, and employees (hereafter collectively called “City”) from any liability, damages, claim, judgment, loss (direct or indirect) action, causes of action, or proceeding (including legal costs, attorneys’ fees, expert witness or consultant fees, City Attorney or staff time, expenses or costs)
(collectively called "Action") against the City to attack, set aside, void or annul, (1) an approval by the City relating to a development-related application or subdivision or (2) implementation of an approved development-related project. The City may elect, in its sole discretion, to participate in the defense of said Action and the applicant shall reimburse the City for its reasonable legal costs and attorneys’ fees. Within ten (10) calendar days of the filing of any Action as specified above, the applicant shall execute a Letter of Agreement with the City, acceptable to the Office of the City Attorney, which memorializes the above obligations. These obligations and the Letter of Agreement shall survive termination, extinguishment, or invalidation of the Approval. Failure to timely execute the Letter of Agreement does not relieve the applicant of any of the obligations contained in the Approval, conditions of approval, mitigation measures, or other requirements that may be imposed by the City.

3. **Posting.** The applicant shall post a copy of the tree removal permit in plain view on site while tree removal work is underway.

4. **Debris.** All debris from the tree removal work shall be removed from the property within two weeks of debris creation, and such debris shall be properly disposed of by the applicant in accordance with all applicable laws, ordinances, and regulations.

5. **Tree Damage.** If any damage to a protected tree should occur during or as a result of work on the site, the contractor, builder or owner shall promptly notify the Tree Services Division of such damage. If such tree cannot be preserved in a healthy state, the Tree Services Division shall require replacement of any tree removed with another tree or trees on the same site deemed adequate to compensate for the loss of the tree that is removed.

6. **Protection Fencing.** Before the start of any clearing, excavation, construction or other work on the site, every protected tree deemed to be potentially endangered by said site work shall be securely fenced off at a distance from the base of the tree to be determined by the City Arborist. Such fences shall remain in place for the duration of all such work. All trees to be removed shall be clearly marked. A scheme shall be established for the removal and disposal of logs, brush, earth and other debris which will avoid injury to any protected tree.
   
   A. **Material.** All fencing shall be chain-link or welded wire mesh as detailed on the permit application Tree Protection Drawings, minimum five foot height, with vertical support poles installed in the ground. Support posts on moveable bases are not acceptable.

   B. **Service Road.** The trees are listed in order when traveling uphill from the veterinary hospital to the limit of paving. Fencing shall be installed the following distances from the base of each tree: #15 – 4 feet, #34 – 4 feet, #33 – 8 feet, #32 – 10 feet, #35 – 6 feet, #41 – 3 feet and #843 – at the toe of the slope. Alternative tree protection as shown on the permit application Tree Protection Drawings may be used when construction requirements do not allow the 9” per caliper that is required for the tree protection fencing.

7. **Encroachment.** Where proposed development or other site work is to encroach upon the protected perimeter of any protected tree, special measures shall be incorporated to allow the roots to breathe and obtain water and nutrients. Any excavation, cutting, filing, or compaction of the existing ground surface within the protected perimeter shall be minimized. Contractor shall use compressed air spade or horizontal drilling to avoid root destruction inside the tree protection zone. No change in existing ground level shall occur within the fenced, protected perimeter of any protected tree at any time. No burning or use of equipment with an open flame shall occur near or within the protected perimeter of any protected tree. Specific controls are identified in the Tree Protection plans.
8. **Miscellaneous.** No storage or dumping of oil, gas, chemicals, or other substances that may be harmful to trees shall occur within the drip line of any protected trees, or any other location on the site from which such substances might enter the protected perimeter. No heavy construction equipment or construction materials shall be operated or stored within the drip line any protected trees. Wires, ropes, or other devices shall not be attached to any protected tree, except as needed for support of the tree. No sign, other than a tag showing the botanical classification, shall be attached to any protected tree. Periodically during construction, the leaves of protected trees shall be thoroughly sprayed with water to prevent buildup of dust and other pollution that would inhibit leaf transpiration.

9. **Tree Damage.** If any damage to a protected tree should occur during or as a result of work on the site, the applicant shall immediately notify the Tree Services Division of such damage. If, in the professional opinion of the City Arborist, such tree cannot be preserved in a healthy state, the Arborist shall require replacement of any tree removed with another tree or trees on the same site deemed adequate by the Arborist to compensate for the loss of the tree that is removed.

10. **Tree Contractors.** Workers compensation, public liability, and property damage insurance shall be provided by any person(s) performing tree removal work authorized by a tree removal permit.

11. **Root Protection - General.** Roots shall be preserved and no activities shall affect the health and safety of existing trees. If roots are encountered during grading or construction, they may be cut only if they are less than 2"-inch diameter. Hand tools must be used to cut the roots; the use of excavators, backhoes, or similar equipment is prohibited. Roots 2"-diameter or larger may be cut only if inspected and approved by a Certified Arborist or a Consulting Arborist.

12. **Pruning.** Construction personnel shall not prune trees on the site. Tree pruning shall be performed by qualified Zoo staff or a licensed, insured tree work contractor that has an arborist on staff certified by the International Society of Arboriculture.

13. **Tree Removal During Breeding Season.** To the extent feasible, removal of any tree and/or other vegetation suitable for nesting of raptors shall not occur during the breeding season of March 15 and August 15. If tree removal must occur during the breeding season, all sites shall be surveyed by a qualified biologist to verify the presence or absence of nesting raptors or other birds. Pre-removal surveys shall be conducted within 15 days prior to start of work from March 15 through May 31, and within 30 days prior to the start of work from June 1 through August 15. The pre-removal surveys shall be submitted to the Planning and Zoning Division and the Tree Services Division of the Public Works Agency. If the survey indicates the potential presences of nesting raptors or other birds, the biologist shall determine an appropriately sized buffer around the nest in which no work will be allowed until the young have successfully fledged. The size of the nest buffer will be determined by the biologist in consultation with the CDFG, and will be based to a large extent on the nesting species and its sensitivity to disturbance. In general, buffer sizes of 200 feet for raptors and 50 feet for other birds should suffice to prevent disturbance to birds nesting in the urban environment, but these buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest.

14. **Tree Replacement Plantings.** Replacement plantings shall be required for erosion control, groundwater replenishment, visual screening and wildlife habitat, and in order to prevent excessive loss of shade, in accordance with the following criteria:
A. No tree replacement shall be required for the removal of nonnative species, for the removal of trees which is required for the benefit of remaining trees, or where insufficient planting area exists for a mature tree of the species being considered.

B. Replacement tree species shall consist of *Sequoia sempervirens* (Coast Redwood), *Quercus agrifolia* (Coast Live Oak), *Arbutus menziesii* (Madrone), *Aesculus californica* (California Buckeye) or other tree species acceptable to the Tree Services Division.

C. Replacement trees shall be at least of twenty-four (24) inch box size, unless a smaller size is recommended by the arborist, except that three fifteen (15) gallon size trees may be substituted for each twenty-four (24) inch box size tree where appropriate.

D. Minimum planting areas must be available on site as follows:
   1) For *Sequoia sempervirens*, three hundred fifteen square feet per tree;
   2) For all other species listed in (B) above, seven hundred (700) square feet per tree.

E. In the event that replacement trees are required but cannot be planted due to site constraints, an in lieu fee as determined by the master fee schedule of the City may be substituted for required replacement plantings, with all such revenues applied toward tree planting in city parks, streets and medians.

F. Plantings shall be installed prior to the issuance of a final inspection of the building permit, subject to seasonal constraints, and shall be maintained by the project applicant until established. The Tree Reviewer of the Tree Division of the Public Works Agency may require a landscape plan showing the replacement planting and the method of irrigation. Any replacement planting which fails to become established within one year of planting shall be replanted at the project applicant’s expense.

15. **Conditions of Approval.** All Tree-Removal Related conditions from the 2011 approved Standard Conditions of Approval/Mitigation Monitoring and Reporting Program (SCAMMRP) are hereby (re)adopted as conditions of approval.

16. **Recordation of Conditions.** The applicant/owner(s) shall record the conditions of approval attached to this permit with the Alameda County Recorder’s Office in a form prescribed by the Director of Public Works.

If you have any questions, please contact the undersigned at (510) 615-5852, however, this does no substitute for filing of an appeal as described above.

[Signature]

Date 7/21/15

Robert Zahn
Senior Forester
Certified Arborist WE-8102A
I certify that on July 21, 2015, a copy of this permit (Permit #T1500049) was placed in the U.S. mail system, postage prepaid for first class mail, and sent to:

Dr. Joel Parrott
Oakland Zoo
PO Box 5238
Oakland, CA 94605

King Smith
111 Shadow Mountain
Oakland, CA 94605

Rochelle Rodgers
4717 Fairfax Ave
Oakland, CA 94601

Victor Ross
10701 Lochard St
Oakland, CA 94605

[Signature]
NAME AND SIGNATURE OF PERSON PLACING IN MAIL

7-21-15
DATE

Gay Luster