Contractors Requirements Circled

MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

1. Administrative Measures

Permittee shall meet each administrative requirement described below.

- 1.1 <u>Documentation at Project Site</u>. Permittee shall make the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the Project site at all times and shall be presented to CDFW personnel, or personnel from another state, federal, or local agency upon request.
- 1.2 Providing Agreement to Persons at Project Site. Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the Project at the Project site behalf of Permittee, including but not limited to contractors, subcontractors, inspectors and monitors.
- 1.3 <u>Notification of Conflicting Provisions</u>. Permittee shall notify CDFW if Permittee determines or learns that a provision in the Agreement might conflict with a provision imposed on the Project by another local, state, or federal agency. In that event, CDFW shall contact Permittee to resolve any conflict.
- 1.4 <u>Project Site Entry</u>. Permittee agrees that CDFW personnel may enter the Project site any time to verify compliance with the Agreement.
- 1.5 <u>Traversing Another Property</u>. To the extent that any provisions of this Agreement provide for activities that require Permittee to traverse another owner's property, such provisions are agreed to with the understanding that Permittee possesses the legal right to so traverse. In the absence of such right, any such provision is void.

2. Avoidance and Minimization Measures

To avoid or minimize adverse impacts to fish and wildlife resources identified above, Permittee shall implement each measure listed below.

Work Period and Schedule

2.1 Work Period. Work within the active channel, streambank and riparian corridor of North Horse Creek and Horse Creek shall be confined to the period of June 15 to October 15. Revegetation using hand tools only is not confined to this time period, but shall be completed within the same work season that Project activities cease.

2.2 Work Period Modification. If Permittee needs more time to complete Project activities, work may be authorized outside of the work period and extended on a day-to-day basis by a CDFW representative through contact with the CDFW Bay Delta Regional Office by mail, phone (707-944-5500) or fax (707-944-5553).

If Permittee requests a work period variance, Permittee shall submit such a request in writing to the CDFW Bay Delta Office. The request shall: 1) describe the extent of work already completed; 2) detail the activities that remain to be completed; 3) detail the time required to complete each of the remaining activities; and 4) provide photographs of both the current work completed and the proposed site for continued work. The work period variance shall be issued at the discretion of CDFW. CDFW reserves the right to require additional measures to protect biological resources as a condition for granting the variance. CDFW shall have 10 calendar days to review the proposed work period variance.

- 2.3 <u>Notify CDFW of Work Start and End Dates.</u> Permittee shall notify CDFW in writing at least five (5) calendar days prior to the start of Project activities, including tree removal within the Project area and revegetation within the mitigation area, at least five (5) calendar days prior to completion of Project activities. Notification shall be made in writing to the CDFW Bay Delta Office.
- Work Period in Dry Weather Only. Project construction work conducted within the stream and riparian zone shall be restricted to periods of no stream flow and dry weather as allowed during the work period specified in Measure 2.1. Precipitation forecasts and potential increases in stream flow shall be considered when planning construction activities. Construction activities shall cease, all equipment and materials moved, and all necessary erosion control measures shall be implemented at least 12 hours prior to the onset of precipitation. Construction activities halted due to precipitation may resume when precipitation ceases and the National Weather Service (NWS) 72-hour weather forecast indicates a 20 percent or less chance of precipitation, provided no work occurs in the streambed if water is flowing. No work shall occur during a dry-out period of 24 hours after the above referenced wet weather. Weather forecasts shall be documented upon request by CDFW.

Construction Equipment and Materials

No Equipment in Streams. Permittee/contractor shall not operate any equipment in the streambed or wetted areas (including but not limited to flowing or ponded water) of North Horse Creek or Horse Creek without the prior written approval by a CDFW representative.

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- 2.6 Temporary Fencing. Permittee/contractor shall erect temporary construction fencing to designate the construction corridor within the stream and riparian areas. Temporary construction fencing shall be removed within 30 calendar days of the completion of construction work. Access paths and staging areas shall be adequately temporarily fenced or flagged to prevent damage to adjacent stream and riparian habitat.
- 2.7 <u>Staging Equipment</u>. Staging and storage areas for equipment, materials, fuels, lubricants and solvents, shall be located outside of the stream banks. Heavy equipment shall be limited to the existing maintenance access roads. Stationary equipment such as motors, pumps, generators, compressors and welders, located within or adjacent to the stream channel and riparian area shall be positioned over drip-pans. Any equipment or vehicles driven and/or operated within or adjacent to the stream channel and riparian areas must be checked and maintained daily to prevent leaks of materials that if introduced to water could be deleterious to aquatic life. Vehicles must be moved away at a minimum distance of 300 feet from these habitats prior to refueling and lubrication.
- 2.8 Imported Materials. Permittee/contractor shall not import, take from or move any rock, gravel, and/or other materials within the streambed or banks except as otherwise addressed in this Agreement
- 2.9 Contaminants. Debris, soil, silt, bark, rubbish, creosote-treated wood, raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil, gasoline or diesel fuel, or other petroleum products, or any other substances which could be hazardous to aquatic life resulting from Project activities shall be prevented from contaminating the soil and/or entering waters of the State. Permittee/contractor shall immediately remove any of these materials that are placed within or where they may enter a FGC section 1600 jurisdictional stream as a result of Project activities.
- 2.10 <u>Material/Debris Removal</u>. Upon completion of operations and/or onset of wet weather, Permittee/contractor shall remove all construction material, and/or debris from the Project work site to an area not subject to inundation. All removed vegetation and debris shall be disposed of according to State and local laws and ordinances.
- 2.11 Spoils. Permittee/contractor shall not place spoil where it could enter a stream or other sensitive habitat, such as riparian, or place over vegetation except as specifically noticed to and accepted by CDFW, in writing. Spoil shall be hauled offsite or stockpiled in an upland location where it shall be covered with plastic sheeting or visquine whenever it is evident that rainy conditions threaten to erode loose soils into sensitive habitats.

Restoration and Erosion Control

- 2.12 Return to Previous Grade and Slope. If the gradient of the streambed is altered during Project operations, Permittee shall return its contours as close as possible to pre-Project conditions. Permittee shall return bank slope as close as possible to pre-Project conditions, but shall not exceed 1:1 steepness. Permittee shall be liable for restoration of streambed and bank contours to pre-Project conditions in the event that subsequent erosion is caused by the Project. The gradient of the stream and banks shall be returned to pre-Project conditions unless Permittee requests a variance through a formal Agreement amendment process.
- 2.13 Erosion Control Measures. Permittee/contractor shall stabilize all exposed/disturbed soils within the Project area and offsite mitigation area to reduce erosion potential, both during and following construction and restoration work. Erosion control measures, such as, silt fences, straw hay bales, gravel or rock-lined ditches, water check bars, and broadcasted straw shall be used where ever silt-laden water has the potential to leave the work site and enter State waters. Erosion control measures shall be monitored during and after each storm event. Modifications, repairs and improvements to erosion control measures shall be made whenever they are needed.
- 2.14 Monofilament. Permittee/contractor shall not use erosion control materials containing plastic monofilament netting (erosion control matting) or similar material containing netting within the Project area or mitigation areas due to documented evidence of amphibians and reptiles becoming entangled or trapped in such material. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.
- 2.15 <u>Mulch</u>. If trees that are removed are limbed, chipped and mulched onsite, mulch shall be distributed away from the active channel and any floodprone areas. Felled trees shall not be left within the active channel.
- 2.16 Native Grass Seeding. Permittee/contractor shall place erosion protection in areas where vegetation cannot reasonably be expected to become re-established. All other areas of disturbed soil which drain toward State waters shall be planted with propagules (seeds, cuttings and/or divisions) of locally-collected native plants. Local native grass species include meadow barley (Hordeum brachyantherum ssp. Californicum), blue wildrye (Elymus glucus), California brome (Bromus carinatus), creeping wildrye (Elymus triticoides), California oatgrass (Danthonia californica) and California melic (Melica californica). Locally native wildflower and/or shrub seeds may also be included in the seed mix.

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- 2.17 Native Grass Seeding Alternative. If locally-collected native plants are not available, Permittee/contractor shall use sterile or short-lived revegetation plants (e.g. cereal barley or Regreen™). Where suitable vegetation cannot reasonably be expected to become established, non-erodible materials, such as coconut fiber matting, jute or coir logs shall be used for such stabilization.
- 2.18 Seeding Time Period. Permittee/contractor shall complete seeding of disturbed areas as soon as possible after Project activities in those areas cease. Seeding placed after October 31 shall be covered with broadcast straw, jute netting, coconut fiber blanket or similar erosion control blanket.

Biological Measures

Special-Status Species

- 2.19 Unauthorized Take. The Project area and surrounding lands have been identified as areas that are potentially inhabited by State or federally listed species. Permittee is required to comply with all applicable State and federal laws, including the California Endangered Species Act (CESA) and federal Endangered Species Act (ESA). This Agreement does not authorize the take of any State or federal endangered or threatened species. Liability for any take or incidental take of such listed species remains the responsibility of Permittee for the duration of the Project. Any unauthorized take of such listed species may result in prosecution and nullification of the Agreement.
- 2.20 <u>CDFW-Approved Qualified Biologist(s)</u> and <u>Biological Monitor(s)</u>. Within a minimum of seven (7) days prior to initiating wildlife surveys within the Project area, Permittee shall submit the names and resumes of all biologists and biological monitors involved in conducting survey and/or monitoring work to CDFW for review and written approval.

A qualified biologist is an individual who shall have a minimum of five (5) years of academic training in biological sciences and related resource management activities with a minimum of two (2) years conducting surveys for each special-status species that may be present within the Project area. During or following academic training, the qualified biologist shall have achieved a high level of professional experience and knowledge in biological sciences and special-status species identification, ecology and habitat requirements.

A biological monitor is an individual who shall have academic and professional experience in biological sciences and related resource management activities as it pertains to this Project, experience with construction-level biological monitoring, be able to recognize species that

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- 2.25 Active Nest Buffers. If an active nest is found during surveys, Permittee or the qualified biologist shall consult with CDFW and USFWS regarding appropriate action to comply with State and federal laws. Active nest sites shall be designated as "Ecologically Sensitive Areas" (ESA) and protected (while occupied) during Project construction with the establishment of a fence barrier surrounding each nest site. Typical protective buffers between each identified nest site and the construction site are as follows: i) 0.25 mile for Swainson's hawk; ii) 1,000 feet for other large raptors such as buteos; iii) 500 feet for small raptors such as accipiters; and iv) 250 feet for burrowing owl and passerines. A buffer should be established surrounding occupied burrowing owl nest sites during the owl non-breeding season, which is typically approximately 160 feet. The CDFW-qualified biologist shall monitor the behavior of the birds (adults and young, when present) at the nest site to ensure that they are not disturbed by Project construction work. Nest monitoring shall continue during construction until the young have fully fledged (have completely left the nest site and are no longer being fed by the parents), as determined by the qualified biologist.
- 2.26 Nesting Habitat Removal or Modification. No trees or shrubs shall be disturbed that contain active bird nests until all eggs have hatched, and young have fully fledged. No habitat removal or modification shall occur within the ESA-fenced nest zone even if the nest continues to be active beyond the typical nesting season for the species until the young have fully fledged and will no longer be adversely affected by the Project.
- 2.27 Pre-Construction Surveys. In addition to nesting bird surveys (Measure 2.21), the CDFW-approved qualified biologist shall conduct pre-construction surveys for presence of any special-status wildlife species that could be present within and immediately surrounding the Project work area within 48 hours prior to construction work. Surveys shall be conducted at the appropriate time of day and in suitable habitat for each species. If federally listed species are found, work shall not start until the qualified biologist has contacted the USFWS, and has been given approval for work to continue. If any special-status species are found, the qualified biologist shall contact the CDFW Bay Delta Regional Office at (707) 944-5500 within 24 hours. CDFW reserves the right provide additional measures to this Agreement designed to protect special-status species.
- 2.28 Special-Status Species Encountered During Work. If CDFW determines or if Permittee or the qualified biologist/biological monitor finds, that any special-status wildlife species, including CESA or ESA-listed species or State Species of Special Concern, are present within the Project area, construction work shall stop, and Permittee or qualified biologist/biological monitor shall notify CDFW and any other appropriate agency. If there is imminent danger of injury to special-status species, such as pacific pond turtle, and the

individual does not move out of the work area on its own, the CDFW-approved qualified biologist shall relocate the individual to suitable habitat located at a safe distance away (typically a minimum of 250 feet) from any construction work. For any CESA and/or ESA listed species, only a qualified biologist with the necessary permits issued by CDFW and/or the USFWS can handle and relocate listed species. The qualified biologist shall contact CDFW within 24 hours of relocation activities. Through consultation with CDFW, additional measures may be developed to protect special-status species.

- 2.29 <u>Construction Monitoring</u>. If special-status species are documented during surveys within the Project area, then all Project-related activities shall take place under the direct observation of the CDFW-approved qualified biologist or biological monitor. The qualified biologist/biological monitor shall ensure that impacts to wildlife habitat are avoided or minimized and Agreement measures are being met. Each day prior to the start of Project construction work, the qualified biologist/biological monitor shall check the work site for any special-status species in case individuals have moved into the work area. If there is a threat of harm to special-status species, including nesting birds, the qualified biologist/biological monitor shall be authorized to stop construction and notify the CDFW Regional office at (707) 944-5500 within 24 hours.
- 2.30 Training Session for Personnel. Prior to any Project construction work, the CDFW-qualified biologist or biological monitor shall provide a training session for all work personnel to identify special-status species which may be in the area, their general behavior, how they may be encountered in the work area, and procedures to follow when they are encountered. Interpretation shall be provided for non-English speaking workers. Any personnel joining the work crew later shall receive the same training before beginning work.

Plant and Wildlife-General

- 2.31 Habitat Protection. Disturbance or removal of vegetation shall not exceed the minimum necessary to complete Project construction work. Permittee/contractor shall not remove or damage vegetation outside the construction corridor without prior consultation and written approval of a CDFW representative.
- 2.32 <u>Plant Surveys</u>. Prior to the start of Project ground disturbance, a CDFW-approved qualified botanist shall conduct surveys for pappose tarplant (*Centromadia parryi* ssp. *parryi*; listed as 1B by the California Native Plant Society) and other sensitive plant species that may occur within the Project area, during the appropriate blooming season for each species. Surveys shall be conducted in accordance with CDFW's *Protocols for Surveying and*

Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (available at

http://dfg.ca.gov/biogeodata/cnddb/pdfs/Protocols for Surveying and Evaluating Impacts.pdf).

- 2.33 Special-Status Plant Buffer. If any special-status plant species are documented within the Project area during surveys, those plants shall be avoided by Project construction activities to the greatest extent feasible. Habitats that support special-status plants that can be avoided shall be flagged and encircled with orange construction fencing to protect them from disturbance during Project construction. CDFW shall be notified within 24 hours and plant protection measures such as appropriate buffer zones between plant occurrences and areas of development shall be developed in consultation with CDFW. CDFW reserves the right to incorporate additional measures in this Agreement to protect sensitive plants.
- 2.34 Prohibited Plant Species. Permittee shall not plant, seed or otherwise introduce invasive plant species within the Project area. Prohibited invasive plant species include those categorized as "High" and "Moderate" in the California Invasive Plant Council's inventory database, which is accessible at: http://www.cal-ipc.org/ip/inventory/weedlist.php.

3. Compensatory Measures

To compensate for adverse impacts to fish and wildlife resources identified above that cannot be avoided or minimized. Permittee shall implement each measure listed below.

- 3.1 Compensation for Permanent Impacts to Riparian Habitat. Permittee shall provide compensation for permanent impacts to 3.85 acres of riparian habitat by replanting a total of 1,150 native tree species within the PCNP. Permittee shall implement all mitigation measures described in the *Nut Tree Airport Western Grove Tree Removal and Mitigation Activities*, dated December 12, 2012, and the Notification supplemental document dated March 4, 2013, unless in conflict with measures in this Agreement. Any changes to the mitigation activities must be submitted to CDFW for review and written approval.
- 3.2 Revegetation. To compensate for loss of riparian trees, Permittee shall follow the plant species palette for the offsite mitigation area according to the Notification supplemental document, dated March 4, 2013, with the exception of black walnut (Juglans hindsii x regia). Native tree, shrub and grass species that are not listed in the tables but are appropriate to the local area may be used for replanting with CDFW written approval. Replacement plantings shall consist of 5-gallon saplings, locally-collected seeds or acorns, stakes, or other suitable nursery stock, as appropriate, and shall be native