

Panhandle Annexation and Planned Unit Development (P16-013) Mitigation Monitoring Plan

In January 1989, Assembly Bill 3180 went into effect requiring the City to monitor all mitigation measures applicable to this project and included in the Mitigated Negative Declaration. For this project, mitigation reporting will be performed by the City of Sacramento in accordance with the monitoring and reporting program developed by the City to implement AB 3180.

This Mitigation Monitoring Plan is being prepared for the Community Development Department, Environmental Planning Services, 300 Richards Boulevard, 3rd Floor, Sacramento, CA 95811, pursuant to the California Environmental Quality Guidelines, California Public Resources Code 21081.

Project Name (number): Panhandle Annexation and Planned Unit Development (P16-013)

Project Location: Approximately 590 acres in the City's Sphere of Influence between West Elkhorn Boulevard on the north and Del Paso Road to the south.

Project Description: The project consists of the annexation of 589.4 acres into the City, amendment to the 2035 General Plan, pre-zoning/rezoning of the project area, establishment of the Panhandle PUD master parcel map, tax exchange agreement, development agreement, Mixed Income Housing Strategy, site plan and design review of the master parcel map. The approval of the project would result in the development of the private, mixed-use development consisting of residential, elementary school, roadways, and park uses north of Del Paso Road. The remaining 119 acres between the proposed PUD project area and extending north to West Elkhorn Boulevard (referred to herein as "Krumenacher Ranch") would be designated as Planned Development (PD) and zoned Agriculture (A). No land use entitlements are proposed for this area.

**MITIGATION MONITORING PLAN CHECKLIST FOR THE
 PANHANDLE ANNEXATION AND PLANNED UNIT DEVELOPMENT PROJECT (Project P16-013)**

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| AIR QUALITY | | | | |
| <p>Mitigation Measure 5.2-1: Construction exhaust and fugitive dust emissions controls All individual public and private subsequent projects within the project area shall implement SMAQMD's Basic Construction Emission Control Practices and SMAQMD's Enhanced Exhaust Control Practices during any construction or ground disturbance activities to reduce construction-related fugitive dust emissions, diesel PM, and NOX emissions. These measures are included below.</p> <p><u>Basic Construction Fugitive Dust Emissions Control Practices</u></p> <ul style="list-style-type: none"> ▲ Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads. ▲ Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered. ▲ Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited. ▲ Limit vehicle speeds on unpaved roads to 15 miles per hour (mph). ▲ All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used. ▲ Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site. ▲ Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated. <p><u>Enhanced Exhaust Control Practices</u></p> <ul style="list-style-type: none"> ▲ The project developer shall submit to the City and SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project prior to any grading activities. The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment. The project | <p>Prior to and during construction. Payment of the fee would occur with start of each phase on construction. Monthly construction monitoring reports to Sacramento Metropolitan Air Quality Management District (SMAQMD) are required.</p> <p>Mitigation measures shall be included in all construction documents for implementation during construction.</p> | <p>City of Sacramento Community Development Department/ Sacramento Metropolitan Air Quality Management District and Contractor</p> | | |

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| <p>developer shall provide the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman. The information shall be submitted at least 4 business days prior to the use of subject heavy-duty off-road equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs.</p> <ul style="list-style-type: none"> ▲ Prior to any grading activities, the project developer shall provide a plan for approval by the City and SMAQMD demonstrating that the heavy-duty off-road vehicles (50 horsepower or more) to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20-90 percent NO_x reduction (depending on available technology and engine Tier) and 45 percent particulate reduction compared to the most recent ARB fleet average. This plan shall be submitted in conjunction with the equipment inventory. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. ▲ The project developer shall ensure that emissions from all off-road diesel powered equipment used on the project area do not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately. Non-compliant equipment will be documented and a summary provided to the lead agency and SMAQMD monthly. A visual survey of all in-operation equipment shall be made at least weekly. A monthly summary of the visual survey shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. ▲ If modeled construction-generated emissions of NO_x are not reduced to a level below SMAQMD's thresholds of significance by the application of Enhanced Exhaust Control Practices, then the project developer must pay a mitigation fee into SMAQMD's off-site mitigation program. By paying the appropriate off-site mitigation fee, construction-generated emissions of NO_x are reduced to a less-than-significant level. The fee calculation to offset daily NO_x emissions is based on the SMAQMD-determined cost to reduce one ton of NO_x (currently \$30,000 per ton but subject to change in future years). <p>The fee calculation shall be based on the sum of emissions associated with all individual construction activities or phases occurring within the project area boundary at any one time during the buildout period. Payment schedules shall be negotiated between SMAQMD and the developer and based on finalized construction parameters prior to the issuance of any grading permit or groundbreaking activities. If, for instance, the construction contractor of one builder is</p> | | | | |

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| <p>constructing one village while the construction contractor of another builder is constructing another village the developer is responsible for determining the proportion of necessary combined offset fees that each builder must contribute. Once initial construction activities are finalized by the developer, quantification of construction-related emissions shall be verified. As each individual construction phase is finalized throughout the duration of the project buildout, the mitigation fee shall be calculated based on current information, available construction equipment, and proposed construction activities. As construction activities occur over the buildout period, the developer shall work with SMAQMD to continually update mitigation fees based on actual on-the-ground emissions. The final mitigation fees shall be based on contractor equipment inventories provided by the developer to SMAQMD and shall reconcile any fee discrepancies due to schedule adjustments, and increased or decreased equipment inventories. Equipment inventories and NO_x emission estimates for subsequent construction phases shall be coordinated with SMAQMD, and the off-site mitigation fee measure shall be assessed to any construction phase that would result in an exceedance of SMAQMD's mass emission threshold for NO_x.</p> | | | | |
| <p>Mitigation Measure 5.2-2: Implement provisions of the Air Quality Mitigation Plan to reduce operational emissions Implementation of the following measure requires compliance with the project's AQMP, which would reduce the project's operational ozone precursors by 35 percent in comparison to the unmitigated project. The final Panhandle PUD master parcel map shall include the following reduction measures, which are detailed within the AQMP (Appendix A of the Final EIR), as conditions of approval:</p> <ul style="list-style-type: none"> ▲ Incorporate traffic calming measures <ul style="list-style-type: none"> ▲ Design project roads to reduce motor vehicle speed through the use of on street parking, planter strips, rumble strips, and other available methods. ▲ Reduce speeds at project intersections by including marked intersections, count-down signal timers, median islands, curb extensions, traffic circles, and other available methods ▲ Incorporate pedestrian network through <ul style="list-style-type: none"> ▲ Removal of pedestrian barriers ▲ Inclusion of sidewalks, a minimum of 5 feet wide, on all internal streets (with the exception of alleys if applicable) ▲ Inclusion of designated pedestrian routes to existing external pedestrian facilities and streets ▲ Incorporate walkable design elements by: | <p>The Air Quality Mitigation Plan and payment of the fee identified in the Plan will be implemented with each project phase and compliance verification will be tied to small lot subdivision map submittals and improvement plans.</p> | <p>City of Sacramento Community Development Department/ Sacramento Metropolitan Air Quality Management District and Project applicant</p> | | |

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| <ul style="list-style-type: none"> ▲ providing connections to all roadways, bicycle paths, and pedestrian facilities touching the project boundaries ▲ providing at least 36 intersections per square mile <ul style="list-style-type: none"> ▲ Participate in permanent trip reduction program through membership in a transportation management association ▲ Participate in SMAQMD's operational offset program for the purpose of reducing ROG, NOx, and PM emissions that would involve the funding of the replacement of existing wood-burning devices in the region. <p>In addition to the conditions of approval required by this mitigation measure, the following text shall also be included in the Panhandle PUD:</p> <p>“All amendments to the Panhandle PUD Guidelines with the potential to result in a change in ozone precursor emissions shall include an analysis which quantifies, to the extent practicable, the effect of the proposed Panhandle PUD Guidelines on ozone precursor emissions. The amendment shall not increase total ozone precursor emissions above what was considered in the AQMP for the entire project area and shall achieve the original 35 percent reduction in total overall project emissions. If the amendment would require a change in the AQMP to meet that requirement, then the proponent of the Panhandle PUD shall consult with SMAQMD on the revised analysis and shall prepare a revised AQMP for approval by the City, in consultation with SMAQMD.”</p> | | | | |
| BIOLOGICAL RESOURCES | | | | |
| <p>Mitigation Measure 5.3-2</p> <p>1. Conduct Pre-Construction Surveys (Measure V.A.1 from NBHCP)</p> <p>Not less than 30 days or more than 6 months prior to commencement of construction activities on specific Authorized Development sites in the NBHCP area, a pre-construction survey of the site shall be conducted to determine the status and presence of, and likely impacts to, all Covered Species on the site. However, pre-construction surveys for an individual species may be completed up to one year in advance if the sole period for reliable detection of that species is between May 1 and December 31. The applicant seeking to develop land will be responsible for contracting with qualified biological consultants to carry out the pre-construction surveys, and as necessary, to implement specific take minimization, and other Conservation Measures set forth in the NBHCP and approved by the Wildlife Agencies.</p> <p>The results of the pre-construction surveys along with recommended take minimization measures shall be documented in a report and shall be submitted to the Land Use Agency, USFWS, CDFW, and TNBC. Based upon the survey results, the Land Use Permittees will identify applicable take avoidance and other site specific Conservation</p> | <p>Prior to (preconstruction surveys) and during construction for pre-construction and avoidance measures.</p> <p>Payment of the North Natomas Basin Habitat Conservation Plan (NBHCP) fees and required land dedication will be implemented with each project phase</p> | <p>City of Sacramento Community Development Department/Natomas Basin Conservancy and Contractor/Project applicant</p> | | |

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| <p>Measures, consistent with the NBHCP, required to be carried out on the site. The approved pre-construction survey documents and list of Conservation Measures will be submitted by the developer of the Authorized Development project to the applicable Land Use Agency to demonstrate compliance with the NBHCP. Reconnaissance level surveys should be conducted prior to species specific surveys to determine what habitats are present on a specific development site and what, if any, more intensive survey activities should be conducted to accurately determine the status of the Covered Species on the site. It shall be the obligation of the developer/landowner to complete such surveys and the Land Use Agency Permittees' responsibility to ensure the surveys are properly completed prior to disturbance of habitat. Surveys shall be conducted by qualified personnel (e.g., persons with suitable biological, botanical, or related expertise). Note: negative species-specific survey results generally do not obviate the requirement to implement minimization measures prescribed in the revised NBHCP where a pre-construction survey indicates that habitat for a particular listed species exists onsite.</p> <p>2. General Measures to Minimize Take of Vernal Pool Species (Measure V.A.4 from NBHCP)</p> <p>A. General Biological Survey and Information Required</p> <p>In the event a biological reconnaissance survey or the pre-construction survey identifies that vernal pool resources are on-site, a vernal pool species specific biological assessment must be provided by the developer to the Land Use Agency during the appropriate season (as established by USFWS) to determine the type and abundance of species present. The species specific biological assessment must address covered vernal pool plants (i.e., Sacramento Orcutt grass, slender Orcutt grass, Colusa grass, legenere, and Bogg's lake hedge-hyssop), crustaceans (i.e., vernal pool tadpole shrimp, vernal pool fairy shrimp, and midvalley fairy shrimp), and amphibians (i.e., California tiger salamander and western spadefoot toad). The vernal pool plant survey must be a USFWS-approved plant survey prepared by a USFWS-approved qualified field biologist and shall list the methods of field analysis, condition of habitat, size and acreage of direct and indirect impact (as defined by seasonal inundation and hydric soils and other appropriate characteristics), and species present. The vernal pool crustacean species survey shall be in accordance with the USFWS Interim Survey Guidelines to Permittees for Recovery Permits under Section 10(a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods (April 19, 1996) or the most recent approved USFWS survey guidelines for vernal pool species. This assessment must be submitted with the urban development permit application and prior to approval of an Urban Development Permit by the Land Use Agency.</p> | <p>and compliance verification will be tied to small lot subdivision map submittals.</p> <p>Mitigation measures shall be included in all construction documents for implementation during construction.</p> | | | |

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| <p>If it is determined that wetland and/or vernal pool resources would be disturbed by a project, then take of vernal pool associated Covered Species would be covered under the NBHCP, subject to the following limitation and guidelines:</p> <ol style="list-style-type: none"> (1) Where site investigations indicate vernal pool species may occur, the developer shall notify the Land Use Agency regarding the potential for impacts to vernal pool species. Such notification shall include biological data (see Section A above regarding biological information required) adequate to allow the Land Use Agency, and the USFWS and CDFW to determine the potential for impacts to vernal pool species resulting from the proposed development. (2) Following notification by the Land Use Agency, USFWS and CDFW shall identify specific measures required to avoid, minimize and mitigate impacts to vernal pool species to be implemented prior to disturbance and in accordance with adopted standards or established guidelines (e.g., the USFWS programmatic biological opinion for vernal pool species attached as Appendix G to the NBHCP as it may be amended from time to time). In some cases, USFWS and CDFW may require complete avoidance of vernal pool species, such as where Covered Species such as slender orcutt grass, Sacramento orcutt grass, Colusa grass and/or vernal pool tadpole shrimp are found to be present. Such measures shall be identified by USFWS and CDFW within 30 days or as soon as possible thereafter of notification and submittal of biological data to the agencies by the Land Use Agency. (3) The requirement by USFWS to preserve a vernal pool within development would be based on identification of an intact vernal pool with minimal disturbance where the presence of one or more of the following species is recorded: slender orcutt grass, Sacramento orcutt grass, Colusa grass, or vernal pool tadpole shrimp. Prior to requiring on-site preservation of a vernal pool area, USFWS shall consider the suitability of the vernal pool as TNBC Mitigation Lands. No such preservation requirement shall be made unless the vernal pool is a suitable site for The Natomas Basin Conservancy (TNBC) Mitigation Lands. Such vernal pool areas, including any required buffer land dedication, shall apply toward the Land Acquisition Fee component of the development project's NBHCP mitigation obligation. <p>B. Mitigation Strategies</p> <p>Vernal pool resources (i.e., vernal pool fairy shrimp, vernal pool tadpole shrimp, midvalley fairy shrimp, Sacramento Orcutt grass, slender Orcutt grass, Colusa grass, legenere, and Bogg's Lake hedge-hyssop) identified through site specific investigations shall be mitigated in one of three general approaches as described</p> | | | | |

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| <p>below. Strategies to minimize and mitigate the take of the California tiger salamander and western spadefoot toad shall be conducted according to Sections V.A.5 and V.B.4 of the NBHCP.</p> <p><i>Avoidance and Preservation On-Site as a Means to Minimize Impacts</i></p> <p>In the event USFWS requires on-site preservation in accordance with Section A.3 above, on-site mitigation shall be required. In the event USFWS does not require on-site mitigation, a developer or private land owner may still propose to dedicate fee title or conservation easement for that portion of the property with vernal pool resources and an associated 250-foot buffer surrounding the vernal pool resource to the TNBC. Acceptance of the offer to dedicate shall be subject to review and approval by the Land Use Agency, TNBC Board and the Wildlife Agencies. The TNBC Board and the Wildlife Agencies shall consider the location, connections, species present, condition of the proposed site to be dedicated, and may decide to accept the dedication in lieu of payment of the Land Acquisition Fee portion of the NBHCP Mitigation Fee for the affected acreage. TNBC Board may accept or decline the offer based on the balance of habitat needs and the biological goals of the HCP. If the dedication is accepted, a reduction in the Land Acquisition Fee portion of the habitat Mitigation Fee shall be granted the developer for the portion (calculated on an acreage basis) of the site permanently preserved by easement or dedication. However, habitat Mitigation Fees, in full, must be paid on the remaining developable acreage on the site, and all fees other than Land Acquisition Fees shall be paid for all acres on the site. Additional conditions to preserve the biological integrity of the site (such as reasonable drainage conditions) may be imposed by the Land Use Agency in consultation with TNBC and the Technical Advisory Committee (TAC).</p> <p>In the event the developer does not support on-site preservation or TNBC does not accept the offer to dedicate, then one of the following mitigation approaches shall be employed.</p> <p><i>Construction Period Avoidance and Relocation of Vernal Pool Resources</i></p> <p>Relocation of vernal pool resources and commencement of Authorized Development shall be subject to the following mitigation measures will be required:</p> <ul style="list-style-type: none"> ▲ No grading, development or modification of the vernal pool site or the buffer area extending 250 feet around the perimeter of the vernal pool site may occur during the vernal pool “wet” season as identified by USFWS. Protective fencing shall be established around the perimeter of the vernal pool site and the buffer area during the vernal pool wet season. ▲ In consultation with TNBC and the TAC, soils and cysts from the vernal pool may | | | | |

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| <p>be relocated as soon as practicable during the dry season to a suitable TNBC or other reserve site provided the relocation/recreation site is approved by TNBC, and the USFWS.</p> <p>If it is not practicable to relocate vernal pool resources, and/or TNBC or USFWS determine that TNBC does not have a suitable reserve site for relocation of resources, then the applicant shall follow the mitigation approach outlined below.</p> <p><i>Payment into USFWS-Approved Conservation Bank</i></p> <p>In the event all of the above approaches are not appropriate for the site, the Land Use Agency shall require the developer to purchase credits from a USFWS-approved mitigation bank in accordance with the standards set forth in the following Table 5.3-4. USFWS shall determine the type and amount of credits to be purchased based on the impacts associated with the development. Mitigation ratios for credits dedicated in USFWS-approved mitigation banks or for acres of habitat outside of mitigation banks shall be as follows:</p> <table border="1" data-bbox="254 787 1054 930"> <thead> <tr> <th colspan="3">Table 5.3-4 Mitigation Ratios for Loss of Vernal Pool Habitat</th> </tr> <tr> <th>Mitigation Type</th> <th>Bank</th> <th>Non-Bank</th> </tr> </thead> <tbody> <tr> <td>Preservation</td> <td>2:1</td> <td>3:1</td> </tr> <tr> <td>Creation</td> <td>1:1</td> <td>2:1</td> </tr> </tbody> </table> <p>Preservation Component: For every acre of habitat directly or indirectly affected, at least two vernal pool credits will be dedicated within a USFWS-approved ecosystem preservation bank, or based on USFWS evaluation of site-specific conservation values, three acres of vernal pool habitat may be preserved on the project site or on another non-bank site as approved by USFWS.</p> <p>Creation Component: For every acre of habitat directly affected, at least one vernal pool creation credit will be dedicated within a USFWS-approved habitat mitigation bank, or based on USFWS evaluation of site-specific conservation values, two acres of vernal pool habitat created and monitored on the project site or on another non-bank site as approved by USFWS.</p> <p>3. Measures to Reduce Take of Individual Species</p> <p>A. Reduce Take of Vernal Pool Species</p> <p><i>Measures to Reduce Take on Boggs Lake Hedge-Hyssop, Sacramento Orcutt Grass, Slender Orcutt Grass, Colusa Grass, and Legenere (Measure V.A.5.p from NBHCP)</i></p> <p>(1) Prior to approval of an Urban Development Permit, the involved Land Use</p> | Table 5.3-4 Mitigation Ratios for Loss of Vernal Pool Habitat | | | Mitigation Type | Bank | Non-Bank | Preservation | 2:1 | 3:1 | Creation | 1:1 | 2:1 | | | | |
| Table 5.3-4 Mitigation Ratios for Loss of Vernal Pool Habitat | | | | | | | | | | | | | | | | |
| Mitigation Type | Bank | Non-Bank | | | | | | | | | | | | | | |
| Preservation | 2:1 | 3:1 | | | | | | | | | | | | | | |
| Creation | 1:1 | 2:1 | | | | | | | | | | | | | | |

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| <p>Agency shall require a pre-construction survey. If such survey determines Boggs Lake hedge-hyssop, Sacramento orcutt grass, Slender orcutt grass, Colusa grass, or legenere are present, the Land Use Agency shall require the developer to consult with USFWS to determine appropriate measures to avoid and minimize loss of individuals. If Authorized Development is proposed for areas containing vernal pools, the applicant will be required to complete additional review, permitting and mitigation as described under Section V.A.4 of NBHCP.</p> <p><i>Measures to Reduce Take of Dwarf Downingia, Ahart's Dwarf Rush, Red Bluff Dwarf Rush, Sanford's arrowhead, and Suisun marsh aster (Not Covered by NBHCP)</i></p> <p>(1) Prior to project initiation and during the blooming period for the special-status plant species with potential to occur in the project area, a qualified botanist will conduct protocol-level surveys for special-status plants in areas where potentially suitable habitat would be removed or disturbed by project activities.</p> <p>(2) If no special-status plants are found, the botanist shall document the findings in a letter report to the project developer and no further mitigation will be required.</p> <p>(3) If special-status plant species are found that cannot be avoided during construction, the project developer shall consult with CDFW and/or USFWS, as appropriate depending on species status, to determine the appropriate mitigation measures for direct and indirect impacts that could occur as a result of project construction and will implement the agreed-upon mitigation measures to achieve no net loss of occupied habitat or individuals. Mitigation measures may include preserving and enhancing existing populations, creation of offsite populations on project mitigation sites through seed collection or transplantation, and/or restoring or creating suitable habitat in sufficient quantities to achieve no net loss of occupied habitat and/or individuals. A mitigation and monitoring plan shall be developed describing how unavoidable losses of special-status plants will be compensated.</p> <p>(4) If relocation efforts are part of the mitigation plan, the plan shall include details on the methods to be used, including collection, storage, propagation, receptor site preparation, installation, long-term protection and management, monitoring and reporting requirements, success criteria, and remedial action responsibilities should the initial effort fail to meet long-term monitoring requirements.</p> <p>(5) Success criteria for preserved and compensatory populations shall include:</p> <ul style="list-style-type: none"> ▲ The extent of occupied area and plant density (number of plants per unit area) in compensatory populations shall be equal to or greater than the affected occupied habitat. | | | | |

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| <p>▲ Compensatory and preserved populations shall be self-producing. Populations shall be considered self-producing when: (1) plants reestablish annually for a minimum of five years with no human intervention such as supplemental seeding; and (2) reestablished and preserved habitats contain an occupied area and flower density comparable to existing occupied habitat areas in similar habitat types in the project vicinity.</p> <p>(6) If offsite mitigation includes dedication of conservation easements, purchase of mitigation credits, or other offsite conservation measures, the details of these measures shall be included in the mitigation plan, including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, success criteria such as those listed above and other details, as appropriate to target the preservation of long term viable populations.</p> <p><i>Measures to Reduce Take of Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp, and Midvalley Fairy Shrimp (Measure V.A.5.m from NBHCP)</i></p> <p>(1) Prior to approval of an Urban Development Permit, the involved Land Use Agency shall require a pre-construction survey. If such survey determine vernal pool fairy shrimp, vernal pool tadpole shrimp, and midvalley fairy shrimp are present, the Land Use Agency shall require the developer to consult with USFWS to determine appropriate measures to avoid and minimize take of individuals. Procedures for reviewing projects that could affect vernal pools and vernal pool species are discussed under Section V.A.4 of NBHCP.</p> <p><i>Measures to Reduce Take on Western Spadefoot Toad (Measure V.A.5.l from NBHCP)</i></p> <p>(1) Prior to approval of an Urban Development Permit, the involved Land Use Agency shall require a pre-construction survey. If such survey determines western spadefoot toad are present, the Land Use Agency shall require the developer to consult with CDFW and USFWS to determine appropriate measures to avoid and minimize take of individuals.</p> <p>B. Reduce Take of Giant Garter Snake (Measure V.A.5.a from NBHCP)</p> <p>(1) Within the Natomas Basin, all construction activity involving disturbance of habitat, such as site preparation and initial grading, is restricted to the period between May 1 and September 30. This is the active period for the giant garter snake and direct mortality is lessened, because snakes are expected to actively move and avoid danger.</p> <p>(2) Pre-construction surveys for giant garter snake, as well as other NBHCP Covered</p> | | | | |

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| <p>Species, must be completed for all development projects by a qualified biologist approved by USFWS. If any giant garter snake habitat is found within a specific site, the following additional measures shall be implemented to minimize disturbance of habitat and harassment of giant garter snake, unless such project is specifically exempted by USFWS.</p> <p>(3) Between April 15 and September 30, all irrigation ditches, canals, or other aquatic habitat should be completely dewatered, with no puddled water remaining, for at least 15 consecutive days prior to the excavation or filling in of the dewatered habitat. Make sure dewatered habitat does not continue to support giant garter snake prey, which could detain or attract snakes into the area. If a site cannot be completely dewatered, netting and salvage of prey items may be necessary. This measure removes aquatic habitat component and allows giant garter snake to leave on their own.</p> <p>(4) For sites that contain giant garter snake habitat, no more than 24-hours prior to start of construction activities (site preparation and/or grading), the project area shall be surveyed for the presence of giant garter snake. If construction activities stop on the project site for a period of two weeks or more, a new giant garter snake survey shall be completed no more than 24-hours prior to the re-start of construction activities.</p> <p>(5) Confine clearing to the minimal area necessary to facilitate construction activities. Flag and designate avoided giant garter snake habitat within or adjacent to the project as Environmentally Sensitive Areas. This area shall be avoided by all construction personnel.</p> <p>(6) Construction personnel completing site preparation and grading operations shall receive USFWS approved environmental awareness training. This training instructs workers on how to identify giant garter snakes and their habitats, and what to do if a giant garter snake is encountered during construction activities. During this training, an on-site biological monitor shall be designated.</p> <p>(7) If a live giant garter snake is found during construction activities, immediately notify the USFWS and the project's biological monitor. The biological monitor, or his/her assignee, shall do the following: Stop construction in the vicinity of the snake. Monitor the snake and allow the snake to leave on its own. The monitor shall remain in the area for the remainder of the work day to make sure the snake is not harmed or if it leaves the site, does not return. Escape routes for giant garter snake should be determined in advance of construction and snakes should always be allowed to leave on their own. If a giant garter snake does not leave on its own within 1 working day, further consultation with USFWS is required.</p> | | | | |

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| <p>(8) Upon locating dead, injured or sick threatened or endangered wildlife species, the Permittees or their designated agents must notify within 1 working day USFWS Division of Law Enforcement (2800 Cottage Way, Sacramento CA 95825) or the Sacramento Fish and Wildlife Office (2800 Cottage Way, Room W2605, Sacramento, CA 95825, telephone 916 414-6600). Written notification to both offices must be made within 3 calendar days and must include the date, time, and location of the finding of a specimen and any other pertinent information.</p> <p>(9) Fill or construction debris may be used by giant garter snake as an over-wintering site. Therefore, upon completion of construction activities remove any temporary fill and/or construction debris from the site. If this material is situated near undisturbed giant garter snake habitat and it is to be removed between October 1 and April 30, it shall be inspected by a qualified biologist to assure that giant garter snake are not using it as hibernaculae.</p> <p>(10) No plastic, monofilament, jute, or similar erosion control matting that could entangle snakes will be placed on a project site when working within 200 feet of snake aquatic or rice habitat. Possible substitutions include coconut coir matting, tactified hydroseeding compounds, or other material approved by the Wildlife Agencies.</p> <p>(11) Fences shall be constructed along the shared boundary of urban development and the North Drainage Canal and the East Drainage Canal within Sutter's Permit Area, subject to the following guidelines: (a) A minimum of 100 feet shall be provided from fence-to-fence and access to the canals shall be limited by gates. (b) A snake deterrent shall be placed along the fences on the North Drainage Canal and the East Drainage Canal (i.e., fence construction that restricts snake movement or an appropriate vegetative barrier either inside or outside of the boundary fence). The design of the deterrent shall be subject to approval by the Wildlife Agencies. (c) The specific fence/snake barrier design adjacent to a given development shall be determined within Sutter County's review of the proposed development and the fence/barrier shall be installed immediately after site grading is completed.</p> <p>(12) At the time of urban development along the North and East Drainage Canals, project developer shall consult with the Wildlife Agencies to determine design strategies that would enhance conditions for giant garter snake movement through the North and East Drainage Canals. Possible strategies may include expanded buffer areas and modified canal cross sections if such measures are, in the determination of Sutter and the Water Agencies, found to be feasible.</p> <p>C. Measures to Reduce Take on Northwestern Pond Turtle (Measure V.A.5.j from</p> | | | | |

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| <p>NBHCP)</p> <p>(1) Take of the northwestern pond turtle as a result of habitat destruction during construction activities, including the removal of irrigation ditches and drains, and during ditch and drain maintenance, shall be minimized by the dewatering requirement described for giant garter snake.</p> <p>D. Measures to Reduce Take of Swainson’s Hawk (Measure V.A.5.b from NBHCP)</p> <p><i>Measures to Reduce Cumulative Impacts to Foraging Habitat</i></p> <p>(1) To maintain and promote Swainson’s hawk habitat values, Sutter County shall not obtain coverage under the NBHCP and incidental take permits, nor shall Sutter County grant Urban Development Permit approvals, for development on land within the one-mile wide Swainson’s Hawk Zone adjacent to the Sacramento River. The City of Sacramento has limited its Permit Area within the Swainson’s Hawk Zone to the approximately 252 acres located within the North Natomas Community Plan that was designated for urban development in 1994 and, likewise, shall not grant development approvals within the Swainson’s Hawk Zone beyond this designated 252 acres. It should be noted that of these 252 acres of land in the Swainson’s Hawk Zone, about 80 acres shall be a 250-foot-wide agricultural buffer along the City’s side of Fisherman’s Lake. Should either the City or the County seek to expand NBHCP coverage for development within the Swainson’s Hawk Zone beyond that described above, granting of such coverage would require an amendment to the NBHCP and permits and would be subject to review and approval by the USFWS and the CDFW in accordance with all applicable statutory and regulatory requirements. Because the effectiveness of the NBHCP’s Operating Conservation Program (OCP) adequately minimizes and mitigates the effects of take of the Swainson’s hawk depends substantially on the exclusion of future urban development from the City’s and Sutter County’s portion of the Swainson’s Hawk Zone, approval by the City of future urban development (i.e., uses not consistent with Agricultural Zoning) in the zone beyond the 170 (252 acres minus 80) acres identified above or approval by Sutter of any future urban development in the Swainson’s Hawk Zone would constitute a significant departure from the Plan’s OCP and would trigger a reevaluation of the City’s and/or Sutter’s Permits and possible suspension or revocation of the City’s and/or County’s permits.</p> <p><i>Measures to Reduce Nest Disturbance</i></p> <p>(1) Prior to the commencement of development activities at any development site within the NBHCP area, a pre-construction survey shall be completed by the</p> | | | | |

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| <p>respective developer to determine whether any Swainson's hawk nest trees shall be removed on-site, or active Swainson's hawk nest sites occur on or within ½ mile of the development site. These surveys shall be conducted according to the Swainson's Hawk Technical Advisory Committee's (May 31, 2000) methodology or updated methodologies, as approved by USFWS and CDFW, using experienced Swainson's hawk surveyors.</p> <p>(2) If breeding Swainson's hawks (i.e., exhibiting nest building or nesting behavior) are identified, no new disturbances (e.g., heavy equipment operation associated with construction) shall occur within ½ mile of an active nest between March 15 and September 15, or until a qualified biologist, with concurrence by CDFW, has determined that young have fledged or that the nest is no longer occupied. If the active nest site is located within one-fourth mile of existing urban development, the no new disturbance zone can be limited to the one forth mile versus one-half mile. Routine disturbances such as agricultural activities, commuter traffic, and routine facility maintenance activities within one-half mile of an active nest are not restricted.</p> <p>(3) Where disturbance of a Swainson's hawk nest cannot be avoided, such disturbance shall be temporarily avoided (i.e., defer construction activities until after the nesting season) and then, if unavoidable, the nest tree may be destroyed during the non-nesting season. For purposes of this provision the Swainson's hawk nesting season is defined as March 15 to September 15. If a nest tree (any tree that has an active nest in the year the impact is to occur) must be removed, tree removal shall only occur between September 15 and February 1.</p> <p>(4) If a Swainson's hawk nest tree is to be removed and fledglings are present, the tree may not be removed until September 15 or until CDFW has determined that the young have fledged and are no longer dependent upon the nest tree.</p> <p>(5) If construction or other project related activities which may cause nest abandonment or forced fledgling are proposed within the one-fourth mile buffer zone, intensive monitoring (funded by the project sponsor) by a CDFW-approved raptor biologist shall be required. Exact implementation of this measure shall be based on specific information at the project site.</p> <p><i>Measures to Prevent the Loss of Nest Trees</i></p> <p>(1) Valley oaks, tree groves, riparian habitat and other large trees shall be preserved wherever possible. The City and Sutter County shall preserve and restore stands of riparian trees used by Swainson's hawks and other animals, particularly near Fisherman's Lake and elsewhere in the Plan Area where large oak groves, tree</p> | | | | |

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| <p>groves and riparian habitat have been identified in the Plan Area.</p> <p>(2) The raptor nesting season shall be avoided when scheduling construction near nests in accordance with applicable guidelines published by the Wildlife Agencies or through consultation with the Wildlife Agencies.</p> <p>(3) Annually, prior to the Swainson’s hawk nesting season (March 15 to September 15) and until buildout of their Authorized Development has occurred, the City of Sacramento and Sutter County shall notify each landowner of any property within the permit area(s) on which a Swainson’s hawk nest tree is present, and shall identify the nest tree, and alert the owner to the specific mitigation measures prohibiting the owner from removing the nest tree.</p> <p><i>Measures to Mitigate the Loss of Swainson’s Hawk Nest Trees</i></p> <p>(1) The NBHCP shall require 15 trees (5-gallon container size) to be planted within the habitat reserves for every Swainson’s hawk nesting tree anticipated to be impacted by Authorized Development. It shall be the responsibility of each Land Use Agency approving development that shall impact Swainson’s hawk nest trees to provide funding from the applicable developer for purchase, planting, maintenance and monitoring of trees at the time of approval of each Authorized Development project. TNBC shall determine the appropriate cost for planting, maintenance and monitoring of trees.</p> <p>(2) The Land Use Agency Permittee approving a project that impacts an existing Swainson’s hawk nest tree shall provide funding sufficient for monitoring survival success of trees for a period of 5 years. For every tree lost during this time period, a replacement tree must be planted immediately upon the detection of failure. Trees planted to replace trees lost shall be monitored for an additional 5-year period to ensure survival until the end of the monitoring period. A 100 percent success rate shall be achieved. All necessary planting requirements and maintenance (i.e., fertilizing, irrigation) to ensure success shall be provided. Trees must be irrigated for a minimum of the first 5 years after planting, and then gradually weaned off the irrigation in an approximate 2-year period. If larger stock is planted, the number of years of irrigation must be increased accordingly. In addition, 10 years after planting, a survey of the trees shall be completed to assure 100 percent establishment success. Remediation of any dead trees shall include completion of the survival and establishment process described.</p> <p>(3) Of the replacement trees planted, a variety of native tree species shall be planted to provide trees with differing growth rates, maturation, and life span. This shall ensure that nesting habitat shall be available quickly (5-10 years in the case of cottonwoods and willows), and in the long term (i.e., valley oaks, black walnut and</p> | | | | |

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| <p>sycamores), and minimize the temporal losses from impacts to trees within areas scheduled for development within the 50-year permit life. Trees shall be sited on reserves in proximity to hawk foraging areas. Trees planted shall be planted in clumps of three trees each. Planting stock shall be a minimum of 5-gallon container stock for oak and walnut species.</p> <p>(4) To reduce temporal impacts resulting from the loss of mature nest trees, mitigation planting shall occur within 14 months of approval of the NBHCP and ITP's. It is estimated at this time that 4 nesting trees within the City of Sacramento are most likely to be impacted by Authorized Development in the near term. Therefore, to reduce temporal impacts, the City of Sacramento will advance funding for 60 sapling trees of diverse, suitable species (different growing rates) to TNBC within the above referenced 14 months. It is anticipated that the City will recover costs of replacement nest trees as an additional cost to be paid by private developers at the time of approval of their development projects that impact mature nest trees.</p> <p>(5) For each additional nesting tree removed by Land Use Agencies' Covered Activities, the Land Use Agency shall fund and provide for the planting of 15 native sapling trees of suitable species with differing growth rates at suitable locations on TNBC preserves. Funding for such plantings shall be provided by the applicable Permittee within 30 days of approving a Covered Activity that will impact a Swainson's hawk nesting tree.</p> <p>E. Measures to Reduce Loss of White-tailed Kite and Other Nesting Raptors (Not Covered by NBHCP)</p> <p>(1) If removal of a known nest tree is required, it shall be removed when no active nests are present, generally between September and February.</p> <p>(2) If project activity would commence between February 1 and August 31, a qualified biologist shall be retained to conduct preconstruction surveys for active nests in suitable habitat on and within 500 feet of the project site no more than 14 days and no less than seven days before commencement of project-related ground disturbance or vegetation removal activities. If this survey does not identify any nesting raptors in the area within the project site that would be disturbed, no further mitigation would be required.</p> <p>(3) If an occupied nest is present, a 500-foot no-disturbance buffer shall be established around the nest. The size of the buffer may be adjusted based upon observed behavior of the nesting birds. If construction activities cause the nesting bird to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then the protective buffer shall be increased such that</p> | | | | |

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| <p>activities are far enough from the nest that the birds no longer demonstrate agitated behavior. The exclusionary buffer shall remain in place until the chicks have fledged or as otherwise determined by a qualified biologist. No project activity shall commence within the buffer area until a qualified biologist confirms that the nest is no longer active or that the young have fully fledged. Monitoring of the nest by a qualified biologist shall be required if the activity has potential to adversely affect the nest.</p> <p>F. Measures to Reduce Take of Burrowing Owl (Measure V.A.5.h from NBHCP)</p> <ol style="list-style-type: none"> (1) Prior to the initiation of grading or earth disturbing activities, the applicant/developer shall hire a CDFW-approved qualified biologist to perform a pre-construction survey of the site to determine if any burrowing owls are using the site for foraging or nesting. The pre-construction survey shall be submitted to the Land Use Agency with jurisdiction over the site prior to the developer's commencement of construction activities and a mitigation program shall be developed and agreed to by the Land Use Agency and developer prior to initiation of any physical disturbance on the site. (2) Occupied burrows shall not be disturbed during nesting season (February 1 through August 31) unless a qualified biologist approved by the CDFW verifies through non-invasive measures that either: 1) the birds have not begun egg-laying and incubation; or 2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival. (3) If nest sites are found, the USFWS and CDFW shall be contacted regarding suitable mitigation measures, which may include a 300-foot buffer from the nest site during the breeding season (February 1 - August 31), or a relocation effort for the burrowing owls if the birds have not begun egg-laying and incubation or the juveniles from the occupied burrows are foraging independently and are capable of independent survival. If on-site avoidance is required, the location of the buffer zone shall be determined by a qualified biologist. The developer shall mark the limit of the buffer zone with yellow caution tape, stakes, or temporary fencing. The buffer shall be maintained throughout the construction period. (4) If relocation of the owls is approved for the site by USFWS and CDFW, the developer shall hire a qualified biologist to prepare a plan for relocating the owls to a suitable site. The relocation plan must include: (a) the location of the nest and owls proposed for relocation; (b) the location of the proposed relocation site; (c) the number of owls involved and the time of year when the relocation is proposed to take place; (d) the name and credentials of the biologist who will be retained to supervise the relocation; (e) the proposed method of capture and transport for the | | | | |

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| <p>owls to the new site; (f) a description of the site preparations at the relocation site (e.g., enhancement of existing burrows, creation of artificial burrows, one-time or long-term vegetation control, etc.); and (g) a description of efforts and funding support proposed to monitor the relocation. Relocation options may include passive relocation to another area of the site not subject to disturbance through one-way doors on burrow openings, or construction of artificial burrows in accordance with CDFG's March 7, 2012 Staff Report on Burrowing Owl Mitigation.</p> <p>(5) Where on-site avoidance is not possible, disturbance and/or destruction of burrows shall be offset through development of suitable habitat on TNBC upland reserves. Such habitat shall include creation of new burrows with adequate foraging area (a minimum of 6.5 acres) or 300 feet radii around the newly created burrows. Additional habitat design and mitigation measures are described in CDFG's March 7, 2012 Staff Report on Burrowing Owl Mitigation.</p> <p>G. Measures to Reduce Take on Loggerhead Shrike (Measure V.A.5.g from NBHCP)</p> <p>(1) Prior to approval of Urban Development Permit, the involved Land Use Agency shall require a pre-construction survey.</p> <p>(2) If surveys identify an active loggerhead shrike nest that will be impacted by Authorized Development, the developer shall install brightly colored construction fencing that establishes boundary 100 feet from the active nest. No disturbance associated with Authorized Development shall occur within the 100-foot fenced area during the nesting season of March 1 through July 31. A qualified biologist, with concurrence of USFWS must determine young have fledged or that the nest is no longer occupied prior to disturbance of the nest site.</p> | | | | |
| <p>Mitigation Measure 5.3-3 No Net Loss of Wetlands</p> <p>Prior to ground-disturbing activity, the project developer shall submit a wetland delineation report to USACE for verification. For portions of the project area that have been delineated previously, the previous delineations shall be updated and re-verified by USACE. Based on the jurisdictional determination, the project developer shall determine the exact acreage of waters of the United States, if any, and waters of the state to be filled as a result of project implementation.</p> <p>If any of the waters to be filled are determined by the USACE to be waters of the United States, the project developer shall obtain a USACE Section 404 permit and RWQCB Section 401 certification before any groundbreaking activity. The project developer shall implement all permit conditions.</p> <p>If all waters in the project area are disclaimed by USACE, the project developer shall file a</p> | <p>Prior to and during construction. Wetland delineation and 404 permits shall be provided to the City prior to the commencement of construction.</p> <p>Mitigation measures shall be included in all construction documents for</p> | <p>City of Sacramento Community Development Department</p> <p>and</p> <p>Contractor/Project applicant</p> | | |

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| <p>report of waste discharge with RWQCB prior to any groundbreaking activity within 50 feet of, or filling of, any wetland or other water, and comply with all waste discharge requirements prescribed by RWQCB.</p> <p>The project developer shall commit to replace or restore on a “no net loss” basis (in accordance with USACE and/or RWQCB) the acreage and function of all wetlands and other waters that would be removed, lost, or degraded as a result of project implementation. Wetland habitat shall be restored or replaced at an acreage and location and by methods agreeable to USACE and the Central Valley RWQCB, as appropriate, depending on agency jurisdiction, and as determined during the Section 401 and Section 404 permitting processes or the waste discharge requirements. If available, compensatory mitigation shall be provided through the purchase of credits at a mitigation bank approved by USACE and RWQCB, as appropriate depending on agency jurisdiction.</p> <p>If mitigation bank credits are not available and it is required by USACE, the project developer shall prepare a mitigation plan detailing how the loss of aquatic functions will be replaced. The mitigation plan shall describe compensation ratios for acres filled, mitigation sites, a monitoring protocol, annual performance standards and final success criteria for created or restored habitats, corrective measures to be applied if performance standards are not met.</p> | implementation during construction. | | | |
| <p>Mitigation Measure 5.3-4: Protection and replacement of trees.</p> <p>The following measures shall be implemented to avoid impacts to trees to be retained. These measures shall be included in the project’s tree projection plans, tree replacement plans, and project improvement plans.</p> <ul style="list-style-type: none"> ▲ No grade cuts greater than 1 foot shall occur within the driplines of protected trees, and no grade cuts whatsoever shall occur within 5 feet of their trunks; ▲ No fill greater than 1 foot shall be placed within the driplines of protected trees and no fill whatsoever shall be placed within 5 feet of their trunks; ▲ No trenching whatsoever shall be allowed within the driplines of protected trees. If it is absolutely necessary to install underground utilities within the driplines of a protected tree, the trench shall be either bored or drilled; ▲ No irrigation system shall be installed within the driplines of preserved native oak tree(s), which may be detrimental to the preservation of the native oak tree(s) unless specifically authorized by the approving body. ▲ Landscaping beneath native oak trees may include non-plant materials such as boulders, cobbles, wood chips, etc. The only plant species which shall be planted within the driplines of oak trees are those which are tolerant of the natural semi-arid environs of the trees. Limited drip irrigation approximately twice per summer is recommended for the understory plants. | <p>Prior to and during construction. Protected trees to be removed, trees to be preserved, and replacement trees shall be identified in each project phase and compliance verification will be tied to small lot subdivision map submittals and improvement plans.</p> <p>Mitigation measures shall be included in all construction documents for implementation</p> | City of Sacramento Community Development Department and Contractor/Project applicant | | |

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| Where it is not possible to avoid impacts to protected trees, tree replacement shall be provided consistent with the City Tree Preservation Ordinance to the satisfaction of the City. Replacement of trees shall occur at a ratio of one inch of tree replaced for each inch of tree removed (1:1 ratio). | during construction. | | | |
| ARCHEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES | | | | |
| <p>Mitigation Measure 5.4-3a. Develop and implement a Worker Environmental Awareness Program</p> <p>Prior to improvement plan approval, the project developer shall design and implement a Worker Environmental Awareness Program (WEAP) that shall be provided to all construction personnel and supervisors who will have the potential to encounter and alter heritage and cultural resources. The WEAP shall be submitted to the City approval and shall describe, at a minimum:</p> <ul style="list-style-type: none"> ▲ types of cultural resources expected in the project area; ▲ types of evidence that indicate cultural resources might be present (e.g., ceramic shards, trash scatters, lithic scatters); ▲ what to do if a worker encounters a possible resource; ▲ what to do if a worker encounters bones or possible bones; and ▲ penalties for removing or intentionally disturbing heritage and cultural resources, such as those identified in the Archeological Resources Protection Act. | Prior to and during construction for each phase of site development. Mitigation measures shall be included in all construction documents for implementation during construction. | City of Sacramento Community Development Department and Contractor | | |
| <p>Mitigation Measure 5.4-3b: Stop work in the event of an archaeological discovery or Tribal Cultural Resource discovery: non-sensitive areas of the project site</p> <p>In the event that evidence of any prehistoric or historic-era subsurface archaeological features or deposits are discovered during construction-related earth-moving activities (e.g., ceramic shard, trash scatters, lithic scatters), all ground-disturbing activity in the area of the discovery shall be halted until a qualified archaeologist can assess the significance of the find. The City and the California Museum shall be notified of the potential find and a qualified archeologist shall be retained to investigate. If the find is an archeological site, the appropriate Native American group shall be notified and consultation shall proceed as outlined in Mitigation Measure 5.4-3c. If the archaeologist determines that the find does not meet the CRHR standards of significance for cultural resources, construction may proceed. If the archaeologist determines that further information is needed to evaluate significance, the City shall be notified and a discovery plan and treatment plan shall be prepared. If the find is determined to be significant by the qualified archaeologist (i.e., because the find is determined to constitute either an historical resource or a unique archaeological resource), the archaeologist shall work with the City and project developer to avoid disturbance to the resources, and if complete avoidance is not feasible in light of project design, economics, logistics, and other factors,</p> | Prior to and during construction for each phase of development. Documentation of discoveries and the discovery plan and treatment plan shall be provided to the City as specified in this mitigation measure. Mitigation measures shall be included in all construction documents for implementation | City of Sacramento Community Development Department/ Tribal monitors and Contractor/Project applicant | | |

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| follow accepted professional standards in recording any find including submittal of the standard DPR Primary Record forms (Form DPR 523) and location information to the appropriate California Historical Resources Information System office for the project area (the NCIC). If a Native American tribe has been identified as interested in the discovery, the City shall confer with the tribe in implementing this mitigation measure. | during construction. | | | |
| <p>Mitigation Measure 5.4-3c – Stop work in the event of an archaeological or Tribal Cultural Resource discovery: Environmentally sensitive areas of the project site</p> <p>Mitigation Measure 5.4-3c shall apply only to those areas of the project site that have been identified as “environmentally sensitive areas” (ESAs). Nothing in Mitigation Measure 5.4-3c shall eliminate or limit the responsibilities of the parties as set forth in Mitigation Measures 5.4-3a or 5.4-3b.</p> <p>A minimum of seven days prior to beginning ground-disturbing activities on the project site, Native American representatives from culturally affiliated Native American Tribes shall be notified that construction will commence so that monitors can be arranged for construction. The City may identify portions of the project site that are not subject to current development proposals, and those areas shall be excluded from requirements relating to current investigation. Any ESA in excluded areas shall remain subject to this mitigation measure at such time that ground disturbance in that area is initiated.</p> <p>Prior to any ground disturbance on the project site, and in coordination with the Native American representatives, the City and a qualified archaeologist meeting the U.S. Secretary of the Interior’s Standards (SOIS) for Archeology and a Tribal Monitor shall prepare an Area of Direct Impact or Area of Potential Effect map identifying recorded archaeological resources and potential locations of Tribal Cultural Resources (ESAs) on the project site proposed for development. Potential resources may remain on the project site as documented in the NCIC records search. The map shall be subject to California law regarding confidentiality of such materials. Protective fencing shall be installed 100 feet around the specific resource, and demarcated as an ESA. The archaeologist shall ensure that fencing around the ESA remains in place.</p> <p>The archaeologist and tribal monitor shall be retained at the applicant’s expense to monitor all construction activities that involve ground disturbance (e.g., vegetation removal, grading, excavation, disking) within the ESA. The conduct and work of any Tribal Monitor shall be consistent with the Native American Heritage Commission Guidelines for Tribal Monitors/Consultants (NAHC 2005). The Tribal Monitor has the authority to identify sites or objects of significance to Native Americans and to request that work be stopped, diverted, or slowed if such objects are identified.</p> <p>The Tribal Monitor shall prepare daily logs recording the results of monitoring. At the end of construction Tribal Monitor’s daily logs shall be submitted to the City and the developer.</p> | <p>Prior to and during construction for each phase of development. Documentation of discoveries and the discovery plan and treatment plan shall be provided to the City as specified in this mitigation measure.</p> <p>Mitigation measures shall be included in all construction documents for implementation during construction.</p> | <p>City of Sacramento Community Development Department/ Tribal monitors and Contractor/Project applicant</p> | | |

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| <p>If prehistoric, historic-period archaeological, or tribal cultural resources are encountered during project implementation, either within the ESA or the remainder of the project site, the contractor shall immediately cease all work activities within approximately 100 feet of the discovery and install fencing, if not already in place. The contractor shall immediately contact the City. The City shall consult with the archaeologist and the Tribal Monitor. The contractor shall not resume work until authorization is received from the City.</p> <p>The archaeologist and the Tribal Monitor shall inspect the findings within 24 hours of discovery. If it is determined that the resource qualifies as a historical resource or a unique archaeological resource or a Tribal Cultural Resource (as defined pursuant CEQA Guidelines 15064.5, PRC Section 21083.2 (g) and 21074) and that the project has potential to damage or destroy the resource, a Discovery Plan and Treatment Plan, prepared in accordance with the direction below, shall be implemented.</p> <p>Discovery Plan and Treatment Plan A Discovery Plan and Treatment Plan shall be created prior to ground disturbance in anticipation of a potential discovery of prehistoric or Tribal Cultural Resources. The Discovery Plan and Treatment Plan shall be consistent with CEQA Guidelines Section 15126.4(b)(3), through either preservation in place or, if preservation in place is not feasible, data recovery through excavation. If preservation in place is feasible, this may be accomplished through one of the following means: (1) modifying the construction plan to avoid the resource; (2) incorporating the resource within open space; (3) capping and covering the resource before building appropriate facilities on the resource site; or (4) deeding resource site into a permanent conservation easement. If avoidance or preservation in place is not feasible, a detailed treatment plan to recover the scientifically consequential information from and about the resource, prepared by the archaeologist in coordination with the Native American Representatives, shall be prepared, reviewed, and approved by the City prior to any excavation at the resource site. Treatment of unique archaeological resources shall follow the applicable requirements of PRC Section 21083.2. Treatment for most resources would consist of (but would not be not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be affected by the project. The Treatment Plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals, if requested by culturally affiliated Tribes.</p> | | | | |
| GEOLOGY, SOILS, MINERAL RESOURCES, AND PALEONTOLOGY | | | | |
| Mitigation Measure 5.5-2 Implement Recommendations of Geotechnical Engineering Reports | Prior to and during construction for each | City of Sacramento Public Works | | |

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| <p>The project developer shall retain a qualified engineering firm on site during site preparation and grading operations to observe and test the fill to ensure compliance with recommendations from the geotechnical investigation report. These recommendations at a minimum include:</p> <ul style="list-style-type: none"> ▲ During project design and construction, all measures outlined in the geotechnical engineering reports for the project (Wallace Kuhl 2016a, 2016b, 2016c, 2016d, and 2016e) as well as specific design measures shall be implemented, at the direction of the City engineer, to prevent significant impacts associated with expansive soils. A geotechnical engineer shall be present on-site during earthmoving activities to ensure that requirements outlined in the geotechnical reports are adhered to for proposed fill and compaction of soils identified below. <p>If the construction schedule requires continued work during the wet weather months (i.e., October through April), the project developer shall consult with a qualified civil engineer and implement any additional recommendations provided, as conditions warrant. These recommendations may include, but would not be limited to: 1) allowing a prolonged drying period before attempting grading operations at any time after the onset of winter rains; and 2) implementing aeration or lime treatment, to allow any low-permeability surface clay soils intended for use as engineered fill to reach a moisture content that would permit a specified degree of compaction to be achieved.</p> | <p>phase of development. Mitigation measures shall be included in all construction documents for implementation during construction.</p> | <p>Department and Contractor</p> | | |
| <p>Mitigation Measure 5.5-4 Protection of discovered paleontological resources If discovery is made of items of paleontological interest, the contractor shall immediately cease all work activities in the vicinity (within approximately 100 feet) of the discovery. After cessation of excavation the contractor shall immediately contact the City. Project construction workers will be trained to identify potential paleontological resources.</p> <p>The project developer shall retain a qualified paleontologist to observe all grading and excavation activities throughout all phases of project construction and shall salvage fossils as necessary. The paleontologist shall establish procedures for paleontological resource surveillance and shall establish, in cooperation with the project developer, procedures for temporarily halting or redirecting work to permit sampling, identification, and evaluation of fossils. If major paleontological resources are discovered that require temporarily halting or redirecting of grading, the paleontologist shall report such findings to the project developer and to the City. The paleontologist shall determine appropriate actions, in cooperation with the project developer and the City, that ensure proper exploration and/or salvage. Excavated finds shall first be offered to a State-designated repository such as the Museum of Paleontology, University of California, Berkeley, or the California Academy of Sciences. Otherwise, the finds shall be offered to the City for purposes of public education and interpretive displays. These actions, as well as final mitigation and disposition of the</p> | <p>Prior to and during construction for each phase of development. Documentation of discoveries shall be provided to the City as specified in this mitigation measure. Mitigation measures shall be included in all construction documents for implementation during construction.</p> | <p>City of Sacramento Community Development Department and Contractor/Project applicant</p> | | |

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| resources, shall be subject to approval by the City. The paleontologist shall submit a follow-up report to the City that shall include the period of inspection, an analysis of the fossils found, and the present repository of fossils. | | | | |
| GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE | | | | |
| <p>Mitigation Measure 5.6-1a The project developer shall incorporate the following mitigation measures into the project to reduce operational emissions of GHGs to the extent feasible.</p> <p><u>Transportation</u></p> <ul style="list-style-type: none"> ▲ Include adequate electric wiring and infrastructure in all single-family residential units (shown in building plans) to support a 240-volt electric vehicle charger in the garage or off-street parking area to allow for the future installation of electric vehicle chargers. This connection shall be separate from the connection provided to power an electric clothes dryer. ▲ Include electric vehicle charging stations, similar or better than Level 2, in parking areas as part of site design submittals for development of the elementary school. <p><u>Building Energy</u></p> <ul style="list-style-type: none"> ▲ Achieve as many residential and non-residential zero net energy buildings as feasible, which shall be implemented in the following way: <ul style="list-style-type: none"> ▲ Prior to the issuance of building permits for residential and private recreation centers, the project developer or its designee shall submit a Zero Net Energy Confirmation Report (ZNE Report) prepared by a qualified building energy efficiency and design consultant to the City of Sacramento for review and approval. The ZNE Report shall demonstrate that development within the Panhandle PUD project area subject to application of Title 24, Part 6, of the California Code of Regulations has been designed and shall be constructed to achieve ZNE, as defined by CEC in its 2015 Integrated Energy Policy Report, or otherwise achieve an equivalent level of energy efficiency, renewable energy generation or greenhouse gas emissions savings. ▲ Where ZNE is deemed infeasible, building energy may also be reduced in the following ways: <ul style="list-style-type: none"> ▲ Reduce building energy-related GHG emissions through the use of on-site renewable energy (e.g., solar photovoltaic panels) where technologically feasible and at a minimum of 15 percent of the project's total energy demand. Building design, landscape plans, and solar installation shall take into account solar orientation, and building roof size to maximize solar exposure. ▲ Provide incentives to future residents to purchase Energy Star™ appliances | <p>As part of small lot subdivision map submittals, improvement plans, and building permits for each phase of development.</p> <p>Mitigation measures shall be included in all construction documents for implementation during construction.</p> | <p>City of Sacramento Community Development Department and Project applicant</p> | | |

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| <p>(including clothes washers, dish washers, fans, and refrigerators).</p> <ul style="list-style-type: none"> ▲ Install high efficiency lighting (i.e., light emitting diodes) in all streetlights, security lighting, and all other exterior lighting applications. ▲ Provide electrical outlets on the exterior of project buildings to allow sufficient powering of electric landscaping equipment. ▲ Install low-flow kitchen faucets that comply with CALGreen residential voluntary measures (maximum flow rate not to exceed 1.5 gallons per minute at 60 psi). ▲ Install low-flow bathroom faucets that exceed the CALGreen residential mandatory requirements (maximum flow rate not to exceed 1.5 gallons per minute at 60 psi) ▲ Install low-flow toilets that exceed the CALGreen residential mandatory requirements (maximum flush volume less not to exceed 1.28 gallons per flush) ▲ Install low-flow showerheads that exceed the CALGreen residential mandatory requirements (maximum flow rate not to exceed 2 gallons per minute at 80 psi) ▲ Reduce turf area and use water-efficient irrigation systems (i.e., smart sprinkler meters) and landscaping techniques/design. | | | | |
| <p>Mitigation Measure 5.6-1b In addition to Mitigation Measures 5.6-1a and 5.2-2 (Air Quality Mitigation Plan), the project developer shall offset GHG emissions to zero by funding activities that directly reduce or sequester GHG emissions or, if necessary, obtaining carbon credits.</p> <p>To the degree a project relies on GHG mitigation measures, the City of Sacramento, SMAQMD, and ARB recommend that lead agencies prioritize on-site design features (Mitigation Measures 5.6-1a and 5.2-2) and direct investments in GHG reductions in the vicinity of the project, to help provide potential air quality and economic co-benefits locally. For example, direct investment in a local building retrofit program can pay for cool roofs, solar panels, solar water heaters, smart meters, energy efficient lighting, energy efficient appliances, energy efficient windows, insulation, and water conservation measures for homes within the geographic area of the project. Other examples of local direct investments include financing installation of regional electric vehicle charging stations, paying for electrification of public school buses, and investing in local urban forests. However, it is critical that any such investments in actions to reduce GHG emissions are real and quantifiable. Where further project design or regional investments are infeasible or not proven to be effective, it may be appropriate and feasible to mitigate project emissions through purchasing and retiring carbon credits issued by a recognized and reputable accredited carbon registry.</p> <p>The CEQA Guidelines recommend several options for mitigating GHG emissions. State CEQA Guidelines Section 15126.4(C)(3) states that measures to mitigate the significant effects of GHG emissions may include “off-site measures, including offsets that are not otherwise</p> | Written verification of greenhouse gas (GHG) offsets in compliance with this mitigation measure shall be provided with each small lot subdivision map submittal. | City of Sacramento Community Development Department/Sacramento Metropolitan Air Quality Management District and Project applicant | | |

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| <p>required...” Through the purchase of GHG credits through voluntary participation in an approved registry, GHG emissions may be reduced at the project level. GHG reductions must meet the following criteria:</p> <ul style="list-style-type: none"> ▲ Real—represent reductions actually achieved (not based on maximum permit levels), ▲ Additional/Surplus—not already planned or required by regulation or policy (i.e., not double counted), ▲ Quantifiable—readily accounted for through process information and other reliable data, ▲ Enforceable—acquired through legally-binding commitments/agreements, ▲ Validated—verified through accurate means by a reliable third party, and ▲ Permanent—will remain as GHG reductions in perpetuity. <p>In partnership with offset providers, the project developer shall purchase carbon offsets (from available programs that meet the above criteria) of at least 20,800 MTCO₂e/year. It should be noted, however, that these numbers represent an estimate based on reductions achieved through the measures included in Mitigation Measures 5.6-1a and 5.2-2, and are subject to change depending on alterations in the level of mitigation applied to the project depending on the feasibility of individual measures. Offset protocols and validation applied to the project could be developed based on existing standards (e.g., Climate Registry Programs) or could be developed independently, provided such protocols satisfy the basic criterion of “additionality” (i.e., the reductions would not happen without the financial support of purchasing carbon offsets).</p> <p>Purchases of offsets would occur once and remain effective throughout the lifetime of the project (i.e., 25 years per SMAQMD guidance). For an offset to be considered viable, it must exhibit “permanence.” To adequately reduce emissions of GHGs, carbon offsets must be able to demonstrate the ability to counterbalance GHG emissions over the lifespan of a project or “in perpetuity.” For example, the purchase of a carbon offset generated by a reforestation project would entail the replanting or maintenance of carbon-sequestering trees, which would continue to sequester carbon over several years, decades, or centuries (Forest Trends 2015). The offsets purchased must offer an equivalent GHG reduction benefit annually i.e., 20,800 MTCO₂e or more GHGs reduced annually as opposed to a one-time reduction.</p> <p>Prior to issuing building permits for development within the project area, the City of Sacramento shall confirm that the project developer or its designee has fully offset the project’s remaining (i.e., post implementation of Mitigation Measures 5.6-1a and 5.2-2) operational GHG emissions over the 25-year project life associated with such building permits by relying upon one of the following compliance options, or a combination thereof:</p> | | | | |

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| <ul style="list-style-type: none"> ▲ Demonstrate that the project developer has directly undertaken or funded activities that reduce or sequester GHG emissions that are estimated to result in GHG reduction credits (if such programs are available), and retire such GHG reduction credits in a quantity equal to the remaining operational GHG emissions; ▲ Provide a guarantee that it shall retire carbon credits issued in connection with direct investments (if such programs exist at the time of building permit issuance) in a quantity equal to the remaining operational GHG emissions; ▲ Undertake or fund direct investments (if such programs exist at the time of building permit issuance) and retire the associated carbon credits in a quantity equal to the remaining operational GHG emissions; or <p>If it is impracticable to fully offset operational emissions through direct investments or quantifiable and verifiable programs do not exist, the project developer or its designee may purchase and retire carbon credits that have been issued by a recognized and reputable, accredited carbon registry in a quantity equal to the remaining operational GHG Emissions.</p> | | | | |
| HAZARDS AND HAZARDOUS MATERIALS | | | | |
| <p>Mitigation Measure 5.7-3 Develop and implement a Vector Control Plan As part of site-specific design of the Panhandle PUD detention basin and other water/drainage features, a Vector Control Plan shall be developed to the satisfaction of the Sacramento-Yolo Mosquito and Vector Control District. The Vector Control Plan shall specify mosquito control measures to be used (e.g., biological agents, pesticides, larvicides, circulating water), as well as identification of maintenance program to ensure control measures are maintained. Evidence of Sacramento-Yolo Mosquito and Vector Control District's design approval shall be provided to the City of Sacramento prior to improvement plan approval for detention basin and water/drainage features.</p> | Details of compliance with this mitigation measure shall be provided in the detention basin improvement plans. | City of Sacramento Public Works Department/ Sacramento – Yolo Mosquito and Vector Control District and Contractor | | |

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| HYDROLOGY AND WATER QUALITY | | | | |
| <p>Mitigation Measure 5.8-1: Demonstrate compliance with Drainage Report As part of approval of each small lot final map and/or each subsequent project, the project developer shall demonstrate to the City that drainage facilities are consistent with the Drainage System Modeling Report for the Natomas Panhandle (Panhandle Owner's Group 2016), and adequately attenuate increased drainage flows consistent with City standards. The analysis will also demonstrate that existing flooding issues at the intersection of Del Paso Road/Sorento Road will not be worsen by site development. Sacramento County shall be provided the analysis regarding flooding issues at the Del Paso/Sorento Road intersection and be allowed to provide input to the City on the proper solution for any additional flooding impacts at this intersection. This demonstration may take the form of plans and/or reports.</p> | <p>As part of each small lot subdivision map submittals and improvement plans. Verification of adequate drainage facilities for existing flooding at the Del Paso Road/Sorento Road intersection will be required for any proposed development activity on the southeast corner of the project.</p> | <p>City of Sacramento Public Works Department/ Sacramento County and Project applicant</p> | | |
| <p>Mitigation Measure 5.8-2: Design drainage facilities to include water quality control features Drainage facilities shall be designated to meet or exceed storm water quality requirements set forth in City Standards pertaining to regional storm water quality control in association with NPDES Stormwater Permit No. CA502597. Water quality control may consist of pollutant source control, water quality treatment through Best Management Practices or a combination of both measures. Water quality control features as part of drainage facilities shall be reviewed and approved by the City before approval of improvement plans for the site.</p> | <p>During construction and identified in improvement plans for each phase of development. Mitigation measures shall be included in all construction documents for implementation during construction.</p> | <p>City of Sacramento Public Works Department and Contractor/Project applicant</p> | | |
| <p>Mitigation Measure 5.8-4: Evaluate depth to groundwater and incorporate appropriate features into detention basin design As part of the final design of the project detention basin, soil borings shall be taken at representative locations within the detention basin to analyze the subsurface soils that are present and the elevation of the subsurface water table. If these soil borings identify shallow groundwater within 2 feet of the proposed bottom elevation of the detention basin, or within the detention basin, a liner and/or additional water quality control features such as vegetation shall be incorporated into the design of the detention basin to prohibit the migration of surface water contamination into the groundwater table, subject to City review and approval.</p> | <p>Details of compliance with this mitigation measure shall be provided in the detention basin improvement plans.</p> | <p>City of Sacramento Public Works Department and Project applicant</p> | | |

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| NOISE AND VIBRATION | | | | |
| <p>Mitigation Measure 5.9-1a: Implement construction-noise reduction measures. To minimize noise levels during construction activities, the City shall require the project developer and their construction contractors to comply with the following measures during all construction work:</p> <ul style="list-style-type: none"> ▲ All construction equipment and equipment staging areas shall be located as far as feasible from nearby noise-sensitive land uses. ▲ All construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturer’s recommendations. Equipment engine shrouds shall be closed during equipment operation. ▲ Individual operations and techniques shall be replaced with quieter procedures (e.g., using welding instead of riveting, mixing concrete off-site instead of on-site) where feasible and consistent with building codes and other applicable laws and regulations. ▲ Construction activities shall comply with the requirements of the City of Sacramento Municipal Code. ▲ To the maximum extent feasible, construction activity shall take place within the City of Sacramento construction noise exemption timeframes (i.e., 7:00 a.m. and 6:00 p.m., Monday through Saturday, and between 9:00 a.m. and 6:00 p.m. Sunday). | <p>Prior to and during construction for each phase of development. Mitigation measures shall be included in all construction documents for implementation during construction.</p> | <p>City of Sacramento Community Development Department and Contractor</p> | | |
| <p>Mitigation Measure 5.9-1b: Implement construction-noise reduction measures during noise-sensitive time periods. For all construction activity that would take place outside of the City of Sacramento construction noise exemption timeframes (i.e., 7:00 a.m. and 6:00 p.m., Monday through Saturday, and between 9:00 a.m. and 6:00 p.m. Sunday), and that is anticipated to generate more than 50 L_{eq} or 70 L_{max} at 50 feet, the City shall require the project developer and their construction contractors to comply with the following measures:</p> <ul style="list-style-type: none"> ▲ Consistent with Section 8.68.080, Exemptions, of the City of Sacramento Code, obtain an exemption to Article II Noise Standards for nighttime construction. Exemption applications for work to be performed during the hours not exempt by Section 8.68.080 shall be approved by the City’s director of building inspections and shall not exceed three days. Application for this exemption may be made in conjunction with the application for work permit or during the construction process. ▲ Implement noticing to adjacent landowners and implement conditions included in the exemption, if approved by the City’s director of building inspections. ▲ Install temporary noise curtains as close as feasible to the boundary of the construction site blocking the direct line of sight between the source of noise and the | <p>Prior to and during construction for each phase of development Mitigation measures shall be included in all construction documents for implementation during construction.</p> | <p>City of Sacramento Community Development Department and Contractor</p> | | |

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| <p>nearest noise-sensitive receptor(s). Temporary noise curtains shall consist of durable, flexible composite material featuring a noise barrier layer bounded to sound-absorptive material on one side. The noise barrier layer shall consist of rugged, impervious, material with a surface weight of at least one pound per square foot.</p> <ul style="list-style-type: none"> ▲ Noise-reducing enclosures and techniques shall be used around stationary noise-generating equipment (e.g., concrete mixers, generators, compressors). ▲ Operate heavy-duty construction equipment at the lowest operating power possible. | | | | |
| <p>Mitigation Measure 5.9-2: Reduce noise exposure to existing sensitive receptors from project-generated traffic.</p> <p>The project developer shall in coordination with the City implement the following measures to reduce the effect of noise levels generated by on-site stationary noise sources:</p> <ul style="list-style-type: none"> ▲ Construct outdoor sound barriers at the following locations: <ul style="list-style-type: none"> ▲ Between the segment of Del Paso Road from Sorento Road to Carey Road, and the ground level receptors directly north of this segment of roadway. ▲ Between the segment of Sorento Road from Del Paso Road to East Levee Road, and the ground level receptors directly east of this segment of roadway. <p>The applicant in coordination with the City shall offer the owners of all the residences with addresses along this roadway segment the installation of a sound barrier along the property line of their affected residential properties. At a minimum, the sound barriers shall be just tall enough to break the line of sight between vehicles traveling along this segment of roadway and the existing sensitive receptors to the east of the roadway. The sound barriers shall be constructed of solid material (e.g., wood, brick, adobe, an earthen berm, boulders, or combination thereof). The reflectivity of each sound barrier shall be minimized to ensure that traffic noise reflected off the barrier does not contribute to an exceedance of applicable noise standards at other off-site receptors. The level of sound reflection from a barrier can be minimized with a textured or absorptive surface or with vegetation on or next to the barrier. All barriers shall blend into the overall landscape and have an aesthetically pleasing appearance that agrees with the character of the surrounding area, and not become the dominant visual element of the area. The owners of the affected properties may choose to refuse this offer; however, the offer shall be made available to subsequent owners of the property if change of ownership occurs before project construction is complete. If an existing owner refuses these measures, a deed notice must be included with any future sale of the property to comply with California state real estate law, which requires that sellers of real property disclose “any fact materially affecting the value and desirability of the property” (California Civil Code, Section 1102.1[a]) and shall indicate that the applicant</p> | Noise barriers required under this mitigation measure shall be identified in small lot subdivision map submittals and improvement plans for development along Del Paso Road and Sorento Road. | City of Sacramento Community Development Department and Project applicant | | |

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| <p>agrees to install a sound barrier, as described above.</p> <ul style="list-style-type: none"> ▲ The majority of residences along the east side of the segment of Sorento Road from Del Paso Road to East Levee Road have ingress and egress points (driveways) along the roadway of concern, thus, preventing continuous sound barriers from being constructed. Therefore, in addition to the sound barriers described above, the applicant in coordination with the City shall offer the owners of all the residences with driveways along this roadway segment the installation of solid driveway gates to provide additional noise attenuation where sound barriers are not able to be constructed. The driveway gates must be constructed of solid material (e.g., wood, metal, or combination thereof) and designed to ensure maximum noise attenuation. The owners of the affected properties may choose to refuse this offer; however, the offer shall be made available to subsequent owners of the property if change of ownership occurs before project construction is complete. If an existing owner refuses these measures, a deed notice must be included with any future sale of the property to comply with California state real estate law, which requires that sellers of real property disclose “any fact materially affecting the value and desirability of the property” (California Civil Code, Section 1102.1[a]) and shall indicate that the applicant agrees to install a driveway gate, as described above. <p>Because a sound wall already exists along Del Paso Road on the roadway segments that would experience an exceedance of the City exterior noise compatibility standards, no feasible mitigation measures have been identified.</p> | | | | |
| <p>Mitigation Measure 5.9-4: Reduce transportation noise exposure to sensitive receptors</p> <p>For new sensitive receptors developed as part of the project and that would be located within 282 feet of the centerline of Del Paso Road, within 278 feet of the centerline of Del Paso Road, within 80 feet of the centerline of Club Center Drive, or within 90 feet of the centerline of Street “G” (i.e., the distance from the centerline that is estimated, based on the noise modelling, to result in exceedance of the City of Sacramento exterior noise compatibility standard of 60 CNEL for low density residential), any or all of the following design criteria shall be adhered to:</p> <ul style="list-style-type: none"> ▲ Where feasible, locate new sensitive receptors such that the outdoor activity area (e.g., balcony or porch) is on the opposite side of the structure from major roadways such that the structure itself would provide a barrier between transportation noise and the outdoor activity areas. ▲ Locate new sensitive receptors with other buildings/structures between the sensitive land use and nearby major roadways. ▲ If new sensitive receptors cannot be oriented or shielded by other structures, then | Noise attenuation measures required under this mitigation measure shall be identified in small lot subdivision map submittals and improvement plans. | City of Sacramento Community Development Department and Project applicant | | |

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| <p>design and building materials shall be chosen such that, at a minimum, 25 dBA of exterior-to-interior noise attenuation would be achieved, so that interior noise levels comply with the City of Sacramento interior noise standard of 45 L_{dn}.</p> <ul style="list-style-type: none"> Setback sensitive receptors from major roadways at a distance that will not result in the exceedance of the City of Sacramento exterior noise compatibility standard of 60 CNEL for low-density residential land uses. <p>If, and only if, implementation of the above measures do not reduce transportation-related noise levels to comply with the City of Sacramento exterior noise compatibility standard of 60 CNEL for low density residential, then as part of improvement plans for land uses along Del Paso Road, Elkhorn Boulevard, National Drive and Club Center Drive, landscaped noise barriers that demonstrate compliance with City noise standards (interior and exterior) shall be implemented. The project developer will be required to demonstrate compliance with this mitigation measure and whether noise barriers are ultimately required.</p> | | | | |
| PUBLIC SERVICES AND RECREATION | | | | |
| <p>Mitigation Measure 5.10-1a Payment of fees The project applicant shall pay the necessary project-specific fire service impact fees associated with fire protection services which will be established in the Panhandle PUD Public Facilities Finance Plan.</p> | As part of small lot subdivision map submittals for each phase of development. | City of Sacramento Community Development Department and Project applicant | | |
| <p>Mitigation Measure 5.10-1b Panhandle PUD Public Facilities Finance Plan The Panhandle PUD Public Facilities Finance Plan shall include all necessary public facility improvements (e.g., fire, law enforcement, water, wastewater, parks, roadways, and libraries) intended to solely serve the PUD as well as its fair-share contribution to public facilities that serve the North Natomas Community Plan area as identified in the North Natomas Nexus Study and Finance Plan 2008 Update. The Panhandle PUD Public Facilities Finance Plan shall ensure that public facilities and equipment required to service the project are in place concurrent with site development.</p> | Prior to the approval of the first small lot subdivision map submittals. | City of Sacramento Community Development Department and Project applicant | | |
| TRANSPORTATION AND CIRCULATION | | | | |
| <p>Mitigation Measure 5.11-1: Implement construction traffic management plan. Before the commencement of construction, the applicant shall prepare a construction traffic management plan to the satisfaction of the City's Traffic Engineer and subject to review by all affected agencies. The plan shall ensure that acceptable operating conditions on roadways are maintained. At a minimum, the plan shall include:</p> <ul style="list-style-type: none"> Description of trucks including: number and size of trucks per day, expected arrival / departure times, truck circulation patterns. Truck routes will be limited to using Del | The construction traffic management plan will be required for each phase of development and will be shown on improvement plans. | City of Sacramento Public Works Department and Contractor | | |

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| <p>Paso Road and Elkhorn Boulevard to access and depart the project.</p> <ul style="list-style-type: none"> ▲ Description of staging area including: location, maximum number of trucks simultaneously permitted in staging area, use of traffic control personnel, specific signage. ▲ Description of street closures and/or bicycle and pedestrian facility closures including: duration, warning and posted signage, safe and efficient access routes for emergency vehicles, and use of manual traffic control. ▲ Description of access plan including: provisions for safe vehicular, pedestrian, and bicycle travel, minimum distance from any open trench, special signage, and private vehicle accesses. ▲ Provisions for parking for construction workers. <p>The traffic management plan shall address all means to minimize temporary impacts from roadway and travel lane disruptions. Adequate emergency response access shall be maintained throughout development of the project. Where the project work area encroaches on a public ROW and reduces the existing pedestrian path of travel to less than 48 inches wide, alternate pedestrian routing shall be provided during construction activities. Additionally, access to all nearby parcels shall be maintained during construction activities.</p> | <p>Mitigation measures shall be included in all construction documents for implementation during construction.</p> | | | |
| <p>Mitigation Measure 5.11-2: Intersection improvements. The project developer shall implement the following intersection improvement:</p> <ul style="list-style-type: none"> ▲ Install a traffic signal at the intersection of Sorento Road/Del Paso Road. This intersection meets the peak hour traffic warrant during the a.m. peak hour. This improvement shall be incorporated in the project’s public facilities financing plan and installed before deficient operations of the intersection. | <p>The City will verify that this improvement is in the project’s public facilities financing plan prior to the approval of the first small lot subdivision map submittals. The improvement shall be installed prior to deficient operation of the intersection.</p> | <p>City of Sacramento Public Works Department and Project applicant</p> | | |
| <p>Mitigation Measure 5.11-3a: Roadway segment improvement. The project developer shall implement the following improvements:</p> <ul style="list-style-type: none"> ▲ Elkhorn Boulevard – SR 99 to Marysville Boulevard – Widen to four lanes. This improvement will be incorporated in the project’s public facilities financing plan for fair- | <p>The City will verify that this improvement is in the project’s public</p> | <p>City of Sacramento Public Works Department and</p> | | |

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| share contribution and in place before deficient operation. | facilities financing plan prior to the approval of the first small lot subdivision map submittals. The improvement shall be installed prior to deficient operation of the roadway. | Project applicant | | |
| <p>Mitigation Measure 5.11-3b: Development of a neighborhood traffic management plan. The project developer shall prepare neighborhood traffic management plans for the following roadway segments for review and approval by the City:</p> <ul style="list-style-type: none"> ▲ Regency Park Circle – North of Club Center Drive ▲ Danbrook Drive – South of Club Center Drive ▲ Sorento Road – North of Del Paso Road <p>The neighborhood traffic management plans shall be implemented to address the impacts of increased traffic volumes on this street. The plans shall be developed in accordance with City practices, including the involvement of the neighborhood. The plans will focus on travel speed and safe pedestrian crossings, and may include elements such as chokers, pedestrian islands, curb extensions, and speed humps.</p> | Prior to project roadway connections to each of the impacted roadways identified in the mitigation measure. | City of Sacramento Public Works Department and Project applicant | | |
| <p>Mitigation Measure 5.11-7: Transit service improvements The project developer shall join the North Natomas Transportation Management Association and will coordinate on feasible measures to provide transit information and services to project residents that is phased with development and transit demand. The project developer will provide proof of compliance with this mitigation measure with each small lot subdivision map submittal.</p> | As part of small lot subdivision map submittals for each phase of development. | City of Sacramento Public Works Department and Project applicant | | |
| <p>Mitigation Measure 5.11-11: Cumulative roadway segment improvements to Elkhorn Boulevard. The project developer shall implement the following measures within the within the study area:</p> <ul style="list-style-type: none"> ▲ Elkhorn Boulevard – Sageview Drive to East Levee Road – Widen to six lanes. This improvement will be incorporated in the project’s public facilities financing plan for fair-share contribution and in place before deficient operation. | The City will verify that this improvement is in the project’s public facilities financing plan prior to the approval of the first small lot subdivision map submittals. | City of Sacramento Public Works Department and Project applicant | | |

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| | The improvement shall be installed prior to deficient operation of the roadway. | | | |
| URBAN DESIGN AND VISUAL RESOURCES | | | | |
| <p>Mitigation Measure 5.12-2: Light fixture design Outdoor lighting for community parks/sports facilities shall be designed to be turned off when not in use where security and safety is not a concern. This requirement shall be included in lighting plans submitted to the City as part of the improvement plans. Light fixtures for sports fields that are planned to be lighted shall be directed away from residential areas and roadways to reduce light spillover and glare. Light fixtures shall be designed to limit illumination to the sports fields and shall demonstrate that the illumination of adjacent residential properties will not exceed 1.0 foot-candles. These lighting requirements will be included in the Panhandle PUD Guidelines.</p> | As part of small lot subdivision map submittals and improvement plans for each phase of development. | City of Sacramento Community Development Department and Project applicant | | |