SUPPLEMENTAL MITIGATION MONITORING AND REPORTING PROGRAM

FOR GREEN VALLEY SPECIFIC PLAN

PHASE 1A PROJECT AREA

In accordance with the California Environmental Quality Act (CEQA) Public Resources Code Section 21000 et seq.), in 1990 the City of Perris (City) prepared and certified an Environmental Impact Report (EIR) (State Clearinghouse No. 1989032707) that identified significant impacts of the Green Valley Specific Plan (GVSP). The City also adopted mitigation measures that would reduce the identified impacts to a less-than-significant level, or that would eliminate these impacts altogether. When the City certified the GVSP EIR in 1990 it adopted a Mitigation Monitoring and Reporting Program (MMRP) that would apply to future implementation of the GVSP.

CEQA and the State CEQA Guidelines (PRC Section 21081.6 and State CEQA Guidelines Sections 15091[d] and 15097) require public agencies "to adopt a reporting and monitoring program for changes to the project which it has adopted or made a condition of project approval to mitigate or avoid significant effects on the environment." A Supplemental Mitigation Monitoring and Reporting Program (MMRP) is required for the proposed Phase 1A project area because the Addendum identifies the need for updated mitigation measures that reflect current conditions, regulations and technologies related to the project implementation, and mitigation measure have been identified to ensure that the impacts of the minor changes to the GVSP that are analyzed in the Addendum remain less than significant. Adoption of the Supplemental MMRP would occur along with approval of the project. The measures contained in the original MMRP will continue to apply to the project except as superseded or updated by the measures contained in this Supplemental MMRP.

4.1 PURPOSE OF MITIGATION MONITORING AND REPORTING PROGRAM

This MMRP has been prepared to ensure that all required mitigation measures are implemented and completed in a satisfactory manner before and during project construction and operation. The MMRP may be modified by the City during project implementation, as necessary, in response to changing conditions or other refinements; however modifications to a mitigation measure that could reduce its effectiveness in reducing impacts may not occur without CEQA compliance.

The attached tables have been prepared to assist the responsible parties in implementing the supplemental mitigation measures. The tables identify the impact, individual mitigation measures, monitoring responsibility, mitigation timing, and provides space to confirm implementation of the mitigation measures. The numbering of mitigation measures follows the numbering sequence found in the Addendum.

4.2 ROLES AND RESPONSIBILITIES

Unless otherwise specified herein, the City is responsible for taking all actions necessary to implement the mitigation measures under its jurisdiction according to the specifications provided for each measure and for demonstrating that the action has been successfully completed. The City, at its discretion, may delegate implementation responsibility or portions thereof to a licensed contractor or other designated agent. Section 21081.6 of the Public Resources Code, requires the lead agency to identify the "custodian of documents and other material" which constitutes the "record of proceedings"

ATTACHMENT 1

upon which the action on the project was based. The Perris City Manager, or designee, is the custodian of such documents for Nishi.

Inquiries should be directed to:

Kenneth Phung, Project Planner
(951) 943-5003

The location of this information is:

City of Perris
101 N.D. Street
Perris, CA 92570

The City is responsible for overall administration of the MRRP and for verifying that City staff members and/or the construction contractor has completed the necessary actions for each measure. The City may designate a project manager to oversee implementation of the MMRP. Duties of the project manager include the following:

- ensure routine inspections of the construction site are conducted by appropriate City staff; check plans, reports, and other documents required by the MMRP; and conduct report activities;
- serve as a liaison between the City and the contractor or project applicant regarding mitigation monitoring issues;
- complete forms and maintain reports and other records and documents generated for the MMRP; and
- coordinate and ensure that corrective actions or enforcement measures are taken, if necessary.

The responsible party for implementation of each item will identify the staff members responsible for coordinating with the City on the MMRP.

4.3 REPORTING

The City shall, or may require the developer to, prepare a monitoring report upon completion of the project describing the compliance of the activity with the required mitigation measures. Information regarding inspections and other requirements shall be compiled and explained in the report. The report shall be designed to simply and clearly identify whether mitigation measures have been adequately implemented. At a minimum, each report shall identify the mitigation measures or conditions to be monitored for implementation, whether compliance with the mitigation measures or conditions has occurred, the procedures used to assess compliance, and whether further action is required. The report shall be presented to the City Council.

4.4 MITIGATION MONITORING AND REPORTING PROGRAM

The MMRP is organized according to the categories described below.

- Mitigation Measure – This section provides the verbatim text of the adopted mitigation measure.
- Monitoring Responsibility – This section identifies the party responsible for enforcing compliance with the requirements of the mitigation measure.

- Timing – This section identifies the time frame in which the mitigation will be implemented.
- Verification – This section is to be dated and signed by the person (either project manager or his/her designee) responsible for verifying compliance with the requirements of the mitigation measure.

AIR QUALITY

The following mitigation measures are required in addition to the measures set forth in the 1990 MMRP for the project to satisfy current SCAQMD guidance for mitigating new or modified projects analyzed under CEQA to the maximum extent feasible.

Mitigation Measure AIR-1

Construction

- Use alternative diesel fuels where feasible.
- During construction, only architectural coatings with an average VOC content of 50 grams per liter or less shall be used.
- Estimate and disclose to the City projected PM_{10} emission concentrations at nearby sensitive receptors resulting from construction of on-site elements.
- The project applicant shall include the following construction dust emission control requirements in its contract agreements with all construction contractors:
  - Trackout Prevention: Install gravel bed trackout apron (3 inches deep, 25 feet long, 12 feet wide per lane and edged by rock berm or row of stakes) to reduce mud/dirt trackout from unpaved truck exit routes.
  - Trackout Prevention: Require paved interior roads to be at least 100 feet long, 12 feet wide per lane and edged by rock berm or row of stakes, or add 4-foot shoulders to paved roads.
  - Construction Activities: Apply water every 3 hours to disturbed areas within a construction site.
  - Scraper loading and unloading: Require minimum soil moisture of 12% for earthmoving by use of a moveable sprinkler system or a water truck. Moisture content can be verified by lab sample or moisture probe.
  - Grading: Replace ground cover in disturbed areas as quickly as possible.
  - Grading: All trucks hauling dirt, sand, soil, or other loose materials shall be tarped with a fabric cover and maintain a freeboard height of 12 inches.
  - Storage piles: Water the storage pile by hand at a rate of 1.4 gallons per hour per square yard, or apply cover when wind events are declared.
  - Local, collector and arterial streets: Implement street sweeping program with Rule 1186 compliant PM_{10} efficient vacuum units (14-day frequency)
  - Local, collector and arterial streets: Sweep streets using SCAQMD Rule 1186-compliant PM_{10}-efficient vacuum units (once per month frequency)
  - Windblown dust from disturbed areas: Plant vegetative ground cover in disturbed areas as soon as possible.

- The project applicant shall implement the following exhaust control measures:
  - Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [as 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 specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.
  - Applicant shall be responsible for ensuring (e.g., require construction contractor(s), hire a California Air Resource Board certified visual emission evaluator) that emissions from all off-road diesel powered equipment used on the project site 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, and the SCAQMD shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary will 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. SCAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this section shall supersede other SCAQMD or state rules or regulations.
  - 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 shall be equipped with Tier 3 engines or better.
- Improve pedestrian network.
  - The internal pedestrian access network shall be designed to minimize barriers to pedestrian access and improve interconnectivity between various land uses and amenities. Design features may include, but are not limited to the following:
    - Designated pedestrian routes that interconnect site entrances, primary building entrances, public facilities, and adjacent uses to existing external pedestrian facilities. Routes shall have minimal conflict with parking and automobile circulation facilities, where appropriate.
    - Internal project streets that have sidewalks a minimum of five feet wide. Sidewalks shall feature vertical curbs or planting strips separating sidewalks from parking or travel lane, where appropriate.
- Provide traffic calming measures.
  - Roadways and intersections shall be designed to reduce motor vehicle speeds and encourage pedestrian and bicycle trips with the use of traffic calming features, in all appropriate areas. Measures may include, but are not limited to, the following:
    - Roadways may include on street parking, planter strips with street trees, horizontal shifts, bollards, rumble strips (where it is determined that they are appropriate for the surrounding environments), woonerfs, and any other similar feature

- Intersection calming features may include marked crosswalks, count-down signal timers, curb extensions, channelization islands, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, traffic circles or mini-circles, and any other similar feature

- Exceed 2013 Title 24 with respect to natural gas consumption
  - Development proposals within the Phase 1A project area shall be required to comply with all current California building codes, including Title 24. To reduce NO_X emissions associated with the consumption of natural gas, the applicant of any development application within the Phase 1A project area shall commit to achieve a level of energy efficiency 25% above the requirements in the most current Title 24. This may be achieved by, but is not limited to, the following measures:
    - Installing high efficiency appliances such as stoves, clothes dryers, water heaters, and heating ventilation and air condition units.
    - Installing electric appliances in lieu of natural gas, where feasible
    - Limiting the inclusion of natural gas hearths in residential land uses

Monitoring Responsibility – City of Perris

Timing – Prior to issuance of grading permits and during construction.

Verification – By: _____

Title: _____

Date: _____

Mitigation Measure AIR-2

- During construction, the rate in area of disturbance shall not exceed five acres per day.

Monitoring Responsibility – City of Perris

Timing – During construction.

Verification – By: _____

Title: _____

Date: _____

BIOLOGICAL RESOURCES

The following mitigation measures replace what was approved in the GVSP EIR (see Mitigation Measure 4.4.3 on pp. 4-28 and 4-29 of the GVSP Final EIR [Appendix A] and pp. 5- 9 through 5-11 of the GVSP MMRP [Appendix B]) and were revised to include the more specific requirements where applicable for the project.

Mitigation Measure BIO-1: Preconstruction nesting raptor survey.

- The removal of potential nesting vegetation shall be conducted outside of the nesting season (January 1st to August 31st) to the extent that this is feasible.

- If vegetation must be removed during the nesting season, a qualified biologist shall conduct a nesting bird survey of potentially suitable nesting vegetation prior to removal. Surveys shall be conducted no more than three days prior to scheduled removals.

- If active nests are identified, the biologist shall establish appropriate buffers around the vegetation containing the active nest. The vegetation containing the active nest shall not be removed, and no grading will occur within the established buffer, until a qualified biologist has determined that the nest is no longer active (i.e., the juveniles are surviving independent from the nest).

- If clearing is not conducted within three days of a negative survey, the nesting survey must be repeated to confirm the absence of nesting birds.

Monitoring Responsibility – City of Perris

Timing –Prior to initiation of construction and during construction.

Verification – By: _____

Title: _____

Date: _____

Mitigation Measure BIO-2: Preconstruction burrowing owl survey.

- The applicant shall retain a qualified biologist to conduct focused surveys for burrowing owls in areas of suitable habitat in the staging areas. Surveys shall be conducted no more than 30 days prior to site disturbance and in accordance with *Breeding and Non-breeding Season Survey and Reports*, located in Appendix D of CDFW's *Staff Report on Burrowing Owl Mitigation* (CDFG 2012) (2012 Staff Report) and the MSCHP.

- If no occupied burrows are found, a letter report documenting the survey methods and results shall be submitted to CDFW, the Riverside County Environmental Programs Department, and the RCA Monitoring Program Administrator, and no further mitigation will be required.

- If a burrow occupied by burrowing owl is found, the District shall consult with CDFW regarding protection buffers to be established around the occupied burrow and maintained throughout construction. Recommended buffers range from 150 to 1,500 feet depending on the site conditions and burrowing owl use of the burrow. Exclusion of burrowing owls from any occupied burrows is not expected to be necessary because the staging areas may be adjusted to minimize

disturbance. Exclusion of burrowing owls during the breeding season (February 1 through August 31) will be prohibited.

Monitoring Responsibility – City of Perris

Timing – No less than 30 days prior to initiation of construction and during construction.

Verification – By: _____

Title: _____

Date: _____

Mitigation Measure BIO-3: Comply with City's Urban Forestry Establishment and Care Ordinance

- To prevent the potential for loss of protected trees on-site, the applicant shall comply with all conditions of the City of Perris Urban Forestry Establishment and Care Ordinance and guidelines.

Monitoring Responsibility – City of Perris

Timing – Prior to and during construction as applicable in City's ordinance and guidelines.

Verification – By: _____

Title: _____

Date: _____

CULTURAL RESOURCES

The following mitigation measures replace 1990 GVSP Mitigation Measure 4.5-3 and represent current City practice:

Mitigation Measure ARCHAEO-1

The project developer shall retain a professional archaeologist prior to the issuance of grading permits. The task of the archaeologist shall be to monitor the initial ground-altering activities at the subject site and off-site project improvement areas for the unearthing of previously unknown archaeological and/or cultural resources. Selection of the archaeologist shall be subject to the approval of the City of Perris Director of Development Services and no grading activities shall occur at the site or within the off- site project improvement areas until the archaeologist has been approved by the City.

The archaeological monitor shall be responsible for maintaining daily field notes and a photographic record, and for reporting all finds to the developer and the City of Perris in a timely manner. The archaeologist shall be equipped to record and salvage cultural resources that may be unearthed during grading activities. The archaeologist shall be empowered to temporarily halt or divert grading equipment to allow recording and removal of the unearthed resources.

In the event that archaeological resources are discovered at the project site or within the off-site project improvement areas, the handling of the discovered resources will differ. However, it is understood that all artifacts with the exception of human remains and related grave goods or sacred/ceremonial objects belong to the property owner. All artifacts discovered at the development site shall be inventoried and analyzed by the professional archaeologist. If any artifacts of Native American origin are discovered, all activities in the immediate vicinity of the find (within a 50-foot radius) shall stop and the project proponent and project archaeologist shall notify the City of Perris Planning Division, the Pechanga Band of Luiseño Indians and the Soboba Band of Luiseño Indians. A designated Native American observer from either the Pechanga Band of Luiseño Indians, the Soboba Band of Luiseño Indians, or another tribe identified by the California Native American Heritage Commission as having connections to the area shall be retained to help analyze the Native American artifacts for identification as everyday life and/or religious or sacred items, cultural affiliation, temporal placement, and function, as deemed possible. The significance of Native American resources shall be evaluated in accordance with the provisions of CEQA and shall consider the religious beliefs, customs, and practices of the Luiseño tribes. All items found in association with Native American human remains shall be considered grave goods or sacred in origin and subject to special handling.

Native American artifacts that are relocated/reburied at the project site would be subject to a fully executed relocation/reburial agreement with the assisting Native American tribes or bands. This shall include measures and provisions to protect the reburial area from any future impacts. Relocation/reburial shall not occur until all cataloging and basic recordation have been completed. Native American artifacts that cannot be avoided or relocated at the project site shall be prepared in a manner for curation at an accredited curation facility in Riverside County that meets federal standards per 36 CFR Part 79 and makes the artifacts available to other archaeologists/researchers for further study such as University of California, Riverside Archaeological Research Unit (UCR-ARU) or the Western Center for Archaeology and Paleontology. If more than one Native American group is involved with the project and they cannot come to an agreement as to the disposition of Native American artifacts, they shall be curated at the Western Center by default. The archaeological consultant shall deliver the Native American artifacts, including title, to the accredited curation facility within a reasonable amount of time along with the fees necessary for permanent curation.

Non-Native American artifacts shall be inventoried, assessed, and analyzed for cultural affiliation, personal affiliation (prior ownership), function, and temporal placement. Subsequent to analysis and reporting, these artifacts will be subjected to curation or returned to the property owner, as deemed appropriate.

Once grading activities have ceased or the archaeologist, in consultation with the designated Native American observer, determines that monitoring is no longer necessary, monitoring activities can be discontinued following notification to the City of Perris Planning Division.

A report of findings, including an itemized inventory of recovered artifacts, shall be prepared upon completion of the steps outlined above. The report shall include a discussion of the significance of all recovered artifacts. The report shall provide evidence that any Native American and Non-Native American archaeological resources recovered during project development have been avoided, reburied, or curated at an accredited curation facility. A copy of the report shall also be filed with the Eastern Information Center (EIC) and submitted to the Pechanga Band of Luiseño Indians, the Soboba Band of Luiseño Indians, and any other tribe that participated in the evaluation of the Native American artifacts.

For the purpose of this measure, the City of Perris considers professional archaeologists to be those who meet the United States Secretary of the Interior's standards for recognition as a professional, including an advanced degree in anthropology, archaeology, or a related field, and the local experience necessary to evaluate the specific project. The professional archaeologist must also meet the minimum criteria for recognition by the Register for Professional Archaeologists (RPA), although membership is not required.

For the purpose of this measure, ground-altering activities include, but are not limited to, debris removal, vegetation removal, tree removal, grading, trenching, or other site-preparation activities. Initial ground-altering activities refer to the first time that the existing materials are altered by construction-related activities. Materials that have already been disturbed by construction-related activities do not require subsequent monitoring.

Monitoring Responsibility – City of Perris

Timing – Prior to the issuance of grading permits and during grading activities.

Verification – By: _____

Title: _____

Date: _____

Mitigation Measure PALEO-1

Prior to the issuance of grading permits, the project applicant shall submit to and receive approval from the City, a Paleontological Resource Impact Mitigation Monitoring Program (PRIMMP). The PRIMMP shall include the provision of a qualified professional paleontologist (or his or her trained paleontological monitor representative) during on-site and off-site subsurface excavation that exceeds three (3) feet in depth. Selection of the paleontologist shall be subject to approval of the City of Perris Director of Development Services and no grading activities shall occur at the site until the paleontologist has been approved by the City.

Monitoring shall be restricted to undisturbed subsurface areas of older alluvium, which might be present below the surface. The approved paleontologist shall be prepared to quickly salvage fossils as they are unearthed to avoid construction delays. The paleontologist shall also remove samples of sediments which are likely to contain the remains of small fossil invertebrates and vertebrates. The paleontologist shall have the power to temporarily halt or divert grading equipment to allow for removal of abundant or large specimens.

Monitoring shall be restricted to undisturbed subsurface areas of older alluvium, which might be present below the surface. The approved paleontologist shall be prepared to quickly salvage fossils as they are unearthed to avoid construction delays. The paleontologist shall also remove samples of sediments which are likely to contain the remains of small fossil invertebrates and vertebrates. The paleontologist shall have the power to temporarily halt or divert grading equipment to allow for removal of abundant or large specimens.

Collected samples of sediments shall be washed to recover small invertebrate and vertebrate fossils. Recovered specimens shall be prepared so that they can be identified and permanently preserved. Specimens shall be identified and curated and placed into an accredited repository (such as the Western Science Center or the Riverside Metropolitan Museum) with permanent curation and retrievable storage.

A report of findings, including an itemized inventory of recovered specimens, shall be prepared upon completion of the steps outlined above. The report shall include a discussion of the significance of all recovered specimens. The report and inventory, when submitted to the City of Perris Planning Division, would signify completion of the program to mitigate impacts to paleontological resources.

Monitoring Responsibility – City of Perris

Timing – Prior to the issuance of grading permits and during grading activities.

Verification – By: _____

Title: _____

Date: _____

Mitigation Measure CUL-1

In the event that human remains (or remains that may be human) are discovered at the project site during grading or earthmoving, the construction contractors, project archaeologist, and/or designated Native American observer shall immediately stop all activities within 100 feet of the find. The project proponent shall then inform the Riverside County Coroner and the City of Perris Planning Division immediately, and the coroner shall be permitted to examine the remains as required by California Health and Safety Code Section 7050.5(b).

If the coroner determines that the remains are of Native American origin, the coroner would notify the Native American Heritage Commission (NAHC), which will identify the "Most Likely Descendent" (MLD). Despite the affiliation with any Native American representatives at the site, the NAHC's identification of the MLD will stand. The MLD shall be granted access to inspect the site of the discovery of Native American human remains and may recommend to the project proponent means for treatment or disposition, with appropriate dignity of the human remains and any associated grave goods. The MLD shall complete his or her inspection and make recommendations or preferences for

treatment within 48 hours of being granted access to the site. The disposition of the remains will be determined in consultation between the project proponent and the MLD. In the event that the project proponent and the MLD are in disagreement regarding the disposition of the remains, State law will apply and the median and decision process will occur with the NAHC (see Public Resources Code Section 5097.98(e) and 5097.94(k)).

The specific locations of Native American burials and reburials will be proprietary and not disclosed to the general public. The locations will be documented by the consulting archaeologist in conjunction with the various stakeholders and a report of findings will be filed with the Eastern Information Center (EIC).

If the human remains are determined to be other than Native American in origin, but still of archaeological value, the remains will be recovered for analysis and subject to curation or reburial at the expense of the project proponent. If deemed appropriate, the remains will be recovered by the Coroner and handled through the Coroner's Office.

Coordination with the Coroner's Office would be through the City of Perris and in consultation with the various stakeholders.

The "Most Likely Descendent" (MLD) is a reference used by the California Native American Heritage Commission to identify the individual or population most likely associated with any human remains that may be identified within a given project area. Under California Public Resources Code, Section 5097.98, the Native American Heritage Commission has the authority to name the MLD for any specific project and this identification is based on a report of Native American remains through the County Coroner's office. The City of Perris will recognize any MLD identified by the Native American Heritage Commission without giving preference to any particular population. In cases where the Native American Heritage Commission is not tasked with the identification of a Native American representative, the City of Perris reserves the right to make an independent decision based upon the nature of the project.]

Monitoring Responsibility – City of Perris

Timing – During grading or earthmoving activities.

Verification – By: _____

Title: _____

Date: _____

GEOLOGY AND SOILS

In addition to the mitigation measures in the GVSP MMRP, the following mitigation measure was recommended by the Earth Systems geotechnical engineering report prepared for the Addendum:

Mitigation Measure GEO-1:

The applicant shall adhere to all recommendations contained in the Preliminary Geotechnical Engineering Report by Earth Systems Southwest dated July 15, 2015 (included as Appendix G of the Addendum).

Monitoring Responsibility – City of Perris

Timing – As specified in Preliminary Geotechnical Engineering Report.

Verification – By: _____

Title: _____

Date: _____

GREENHOUSE GAS EMISSIONS

Mitigation Measure GHG-1

Transportation:

- All single-family homes shall include adequate electric wiring and infrastructure to support a 240-Volt electric vehicle charger in the garage or off-street parking area to allow for the installation of electric vehicle chargers. This connection should be separate from the connection provided to power an electric clothes dryer.

- See Mitigation Measure AIR-1 (above in Section 4.3, Air Quality) which provide GHG emissions reductions through mitigation associated with the transportation sector.

Energy:

- Pre-wire residential units to support solar photovoltaic panels. This will also involve building design and tree placement that maximizes solar exposure at the photovoltaic panels to the extent feasible.

- All houses shall be designed to exceed the 2013 Title 24 standards by a minimum of 25 percent. Title 24 regulates energy uses including space heating and cooling, hot water heating, and ventilation. Therefore, potential options to meet the 25 percent improvement goal could include, but not be limited to, high-efficiency HVAC systems, efficient hot water heaters (e.g., tankless or solar), and insulation requirements that exceed Title 24 standards.

- Reduce building energy use percentage by installing Energy Star appliances (including clothes washers, dish washers, fans, and refrigerators) in all homes and businesses. The Project Applicant (or contracted builder) shall ensure that energy efficient appliances are installed and submit documentation of this to the City.

- Install programmable thermostat timers in all residential dwelling units allow users to easily control when the HVAC system will heat or cool a certain space, thereby saving energy.

- Newly installed outdoor lighting power shall be no greater than 90 percent of the Title 24, Part 6 calculated value of allowed outdoor lighting power.

- Electrical outlets shall be provided on the exterior of project buildings to allow sufficient powering of electric landscaping equipment.

Water Conservation:

- Reduce indoor water demand relative to the baseline scenario by 25 percent below Title 24 requirements. A schedule of plumbing fixtures and fixture fittings that will achieve this reduction in the overall use of potable water within all buildings shall be provided.

- Provide water-efficient landscape irrigation design that reduces the use of potable water beyond the initial requirements for plant installation and establishment. Reduce the use of potable water to a quantity that does not exceed 55 percent of the reference evapotranspiration (ET) times the

landscape area. A calculation demonstrating the applicable potable water use reduction required by this measure shall be provided to the City of Perris.

- Design water-efficient landscapes that include plants with relatively low watering needs; minimize areas of water-intensive turf; and install smart irrigation systems to avoid excessive water use.

- Install a "Smart" irrigation control system that uses weather, climate, and/or soil moisture data to automatically adjust watering schedules in response to environmental and climate changes, such as changes in temperature or precipitation levels. Appropriate systems that could be installed to comply with this measure include Calsense, ET Water, and EPA-certified WaterSense Irrigation Partners.

Waste Diversion/Recycling:

- The project shall comply with the following performance measure related to reducing solid waste disposal:

- Achieve a 20 percent reduction in the generation of solid waste, relative to baseline waste disposal rates. This performance standard may be achieved through a combination of actions. Strategies to reduce landfill waste include increasing recycling, reuse, and composting. The project can achieve this reduction by providing a recycling collection service and providing separate recycling and waste containers to future residents. The project may also include provisions to divert all green waste from the park and landscape lots and recycle it as mulch. It should be noted that this list of measures is not intended to be all-inclusive. If it can be demonstrated that other measures or technologies achieve an equivalent reduction, these may be implemented with City authorization.

Monitoring Responsibility – City of Perris

Timing – At the time of or before building permits are issued.

Verification – By: _____

Title: _____

Date: _____

HYDROLOGY AND WATER QUALITY

In addition to the 1990 GVSP MMRP, the following mitigation shall be implemented:

Mitigation Measure HYDRO-1: Complete final drainage plan and provide adequate onsite storm drainage facilities.

With submittal of Improvement Plans to the City for each construction phase of the project site, the applicant shall prepare and submit a Final Drainage Analysis for the project site that conforms to the City's Storm Water Management Plan (SWMP) [see Appendix H1 of this Addendum for the Preliminary Drainage Study prepared for the project site in 2015].

The Final Drainage Analysis shall identify project drainage facilities and design features that ensure runoff from the project site will not exceed pre-development levels. The identified drainage facilities and design features shall be included in the Improvement Plans for each construction phase of the project site. At a minimum, the necessary drainage facilities and design features constructed with each phase of development shall be sufficient to mitigate post-development runoff to pre-development levels for each phase. Drainage facilities and design features for later phases of the project may be constructed with earlier phases of the project.

The Final Drainage Analysis for each phase shall include evaluation of the final design for the 85th percentile storm (water quality storm), the tenth percentile storm (10-year storm) and the one percentile storm (100-year) storm. The Final Drainage Analysis for each phase shall include a discussion of that phase set in the context of the overall project, considering prior and future phase drainage facilities and design features.

Maintenance of the project drainage facilities and design features shall be the responsibility of the Home Owner's Association (HOA). A provision for maintenance and management of the drainage facilities and design features shall be included in the Codes, Covenants and Restrictions for the project. A separate Maintenance Program shall be developed in accordance with the County's SWMP to guide the long-term maintenance and management of the systems by the HOA. The Maintenance Program shall be submitted to the County for review and approval prior to recordation of the first final map.

To meet state water quality standards, the project's approved Water Quality Management Plan (WQMP) [see Appendix H2 of this Addendum for the project's 2015 Draft WQMP] shall incorporate on-lot, Low Impact Development (LID) depressions to minimize runoff from the project site. In a storm event, all street runoff will go to off-lot basins, which would discharge flow directly into Line A (i.e., the existing main drainage channel) which flows into the San Jacinto River. Prior to construction of the project, the Applicant shall lower Line A to ensure adequate capacity and positive flow to San Jacinto River. For all nuisance water created from individual homeowners, the on-lot LID depressions (i.e., natural drainage systems designed with no concrete) will allow for the water to infiltrate directly into the soil and minimize the potential for standing water, which could attract mosquitoes. Riverside County Health, which actively contracts with Riverside County Flood Control, address vector issues associated within flood control facilities in its jurisdiction, which includes Line A and the San Jacinto River.

Monitoring Responsibility – City of Perris

Timing – Prior to approval of Improvement Plans by the City for each construction phase of the project site.

Verification – By: _____

Title: _____

Date: _____

NOISE

In addition to the mitigation measures in the 1990 GVSP MMRP, the following mitigation measures shall be implemented to address traffic noise at existing off-site noise-sensitive residential land uses and construction-generated noise at nearby noise-sensitive receptors:

Mitigation Measure NOISE-1

Traffic Noise at Proposed On-Site Noise-Sensitive Receptors

- Implement noise reduction measures to ensure that exterior noise levels at on-site residential land uses developed near the north side of Ethanac Road east of Goetz Road do not exceed the City's current noise standard of 60 dB CNEL under cumulative-plus-project conditions. This measure is consistent with General Plan Implementation Measure II.A.2, which recommends the use of quieter roadway surface materials and solid noise barriers between noise-sensitive land uses and noise-generating roadways (City of Perris 2016:57). This performance standard can be achieved using any combination of the following measures:

  - Pave the roadway segment with rubberized hot-mix asphalt or equivalent surface treatment with known noise-reducing properties on top of the roadway surface. The rubberized hot-mix asphalt overlay shall be designed with appropriate thickness and rubber component quantity (typically 15 percent by weight of the total blend), such that traffic noise levels are reduced by an average of 4 to 6 dB (noise levels vary depending on travel speeds, meteorological conditions, and pavement quality) as compared to noise levels generated by vehicle traffic traveling on standard asphalt. Rubberized hot-mix asphalt has been found to achieve this level of noise reduction in other parts of California (Sacramento County 1999). Pavement will require more frequent than normal maintenance and repair to maintain its noise attenuation effectiveness. The applicant shall fund the incremental cost for maintaining the roadway segment with the surface treatment.

  - Construct a sound barrier along the northern side of the segment of Ethanac Road east of Goetz Road. The sound barrier shall extend along the south boundary of the project site. 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 CNEL standards at other 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. Scenic quality factors shall be taken into account during design, such as using more natural materials (e.g., berms and boulders) to reduce the visible mass of a wall. All barriers shall be designed to blend into the landscape along the roadway, to the extent feasible. Ensuring a character consistent with the surrounding area may involve the use of strategically placed native trees or other vegetation; the addition of special materials (e.g., wood or stonework) on the façade of the sound wall; and/or a sound wall that is covered in vegetation. If necessary, the sound barrier shall be divided into overlapping segments with a gap in the overlapped portion to provide access to the driveways. If the sound barriers ensure that exterior traffic noise levels on the residential properties would not exceed 60 dB CNEL, then the applicant shall not be required to pave the roadway with a special low-noise surface treatment.

  - Set back residential land uses from the edge of Ethanac Road.

Monitoring Responsibility – City of Perris

Timing – Prior to issuance of building permits.

Verification – By: _____

Title: _____

Date: _____

Mitigation Measure NOISE-2

Noise reduction measures shall be implemented to ensure that maximum construction-generated noise levels do not exceed the City's exterior noise standard of 80 dB on nearby operational residential properties, including the existing single family homes located along the south side of Ethanac Road. This performance standard shall be achieved through implementation of some or all of the noise reduction measures listed below.

- All construction equipment and equipment staging areas shall be located as far as possible 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 recommendations. Equipment engine shrouds shall be closed during equipment operation;

- Replace individual construction operations and techniques 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.

- Equip all construction equipment with audible self-adjusting backup alarms or alarms that only sound when an object is detected. The self-adjusting backup alarms shall automatically adjust to 5 dB over the surrounding background levels. All non-self-adjusting backup alarms shall be set to the lowest setting required to be audible above the surrounding noise levels. In addition to the use of backup alarms, the construction contractor shall consider other techniques such as observers and the scheduling of construction activities so that alarm noise is minimized.

- Avoid using more than on piece of construction equipment in areas located within 200 feet of the nearest residential land use; and/or

- Install a temporary sound barrier near construction activity along the southern portion of the project area. The temporary sound barriers shall provide a minimum reduction of 4 dB. Temporary sound barriers may consist of noise curtains, straw bales, or solid walls. The temporary noise barriers shall be installed as close as possible to the boundary of the construction site within the direct line-of-sight path of the nearby sensitive receptor(s).

- Prior to construction activity a construction noise mitigation plan shall be prepared by a qualified acoustical engineer demonstrating that the selected measures will be sufficient to ensure that maximum construction noise levels will not exceed 80 dB at the boundary of off-site residential land uses. The acoustical engineer shall be selected by City of Perris staff. Implementation of all construction noise reduction measures and the construction noise mitigation plan shall be fully funded by the project applicant.

- In addition, the applicant or construction contractors shall post visible signs along the perimeter of the construction site that provide a contact number for a City of Perris enforcement officer to whom noise complaints can be filed and recorded. The applicant will be informed of any noise complaints and responsible for investigating complaints and implementing feasible and appropriate measures to reduce maximum construction-generated noise levels to less than 80 dB at receiving land uses.

Monitoring Responsibility – City of Perris

Timing – During construction.

Verification – By: _____

Title: _____

Date: _____

TRANSPORTATION

In addition to the mitigation measures in the 1990 GVSP MMRP, implementation of the following set of mitigation measures would result in all roadway segments and intersections achieving LOS D or better, thus resulting in less-than-significant impacts.

Mitigation Measure TRANS-1

The project applicant shall fully fund and implement the following on-site improvements:

Project On-site Roadway Segment Improvements:

- Construct full- width improvements on all internal roadways according to Section 2.6.3, *Development Standards,* of the adopted GVSP.

- Construct full- width improvements on Fieldstone Drive at its ultimate cross-section as a collector from Goetz Road to Green Valley Parkway, according to Section 2.6.3, *Development Standards*, of the adopted GVSP.

- Construct full- width improvements on Green Valley Parkway at its ultimate cross-section as a collector adjacent to project boundary line, according to Section 2.6.3, *Development Standards*, of the adopted GVSP.

- Construct partial- width improvements on the westerly side of Murrieta Road at its ultimate cross section as a secondary arterial adjacent to project boundary line, according to Section 2.6.3, *Development Standards*, of the adopted GVSP.

- Fund city project to construct partial- width improvements on the northerly side of Ethanac Road at its ultimate cross section as an expressway adjacent to Phase 1 A, according to Section 2.6.3, Development Standards, of the adopted GVSP.

Project On-site Intersection Improvements:

- Construct the intersection of Goetz Road and Fieldstone Road to include the following geometrics:
  - Northbound: One left turn lane. One shared through and right turn lane.
  - Southbound: One left turn lane. Two through lanes. One shared through and right turn lane.
  - Eastbound: One shared left turn, through and right turn lane.
  - Westbound: One shared left turn, through and right turn lane.

- Construct the intersection of Green Valley Parkway and Fieldstone Drive to include the following geometrics:
  - Northbound: One left turn lane.
  - Eastbound: One right turn lane.

- Construct the intersection of Murrieta Road and Green Valley Parkway to include the following geometrics:
  - Northbound: One left turn lane. One through lane.
  - Southbound: One shared through and right turn lane.

- Eastbound: One shared left turn and right turn lane. Stop controlled.
- Westbound: Not applicable.

Project On-site Safety and Operational Improvements:

- Sight distance at the project entrance roadway shall be reviewed and approved by City staff at the time of final grading, landscape, and street improvement plans are submitted to the City.

- The project applicant shall pay the City's Transportation Mitigation Impact Fee to fund its fair share of the construction of off-site traffic signals.

- Signing/striping of all planned roadways shall be implemented in conjunction with detailed construction plans for the project site.

Project On-site Bike and Pedestrian Improvements:

- As part of the construction of partial width improvements on the northerly side of Ethanac Road, the project applicant shall construct Class II bike lanes, according to City Standards, along the portion of the road abutting the project site.

Project On-site Construction:

- A Traffic control or management plan shall be prepared and address all means to minimize temporary impacts from roadway and travel lane disruptions. The Plan shall be submitted to, and approved by the City of Perris prior to construction to minimize project impacts on local streets, highways, freeways, or other forms of transportation (Class I and Class II bicycle routes). 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.

Regional Funding Mechanisms:

- The project applicants shall participate in the fair-share funding of off-site improvements through payment of the following "fair share" mitigation fees that shall be collected and utilized as needed by City of Perris to construct the improvements necessary to maintain the required level of service:

  - Transportation Uniform Mitigation Fee (TUMF), current at time of construction.
  - City of Perris Development Impact Fee (DIF), current at time of construction.

Monitoring Responsibility – City of Perris

Timing – Prior to initiation of construction unless otherwise specified in mitigation measure.

Verification – By: _____

Title: _____

Date: _____