
MITIGATION MONITORING AND REPORTING PROGRAM4.0

This document is the Final Mitigation Monitoring and Reporting Program (FMMRP) for the Union Ranch North (Project). This FMMRP has been prepared pursuant to Section 21081.6 of the California Public Resources Code, which requires public agencies to “adopt a reporting and monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment.” A FMMRP is required for the proposed Project because the EIR has identified significant adverse impacts, and measures have been identified to mitigate those impacts.

The numbering of the individual mitigation measures follows the numbering sequence as found in the Draft EIR.

4.1 MITIGATION MONITORING AND REPORTING PROGRAM

The FMMRP, as outlined in the following table, describes mitigation timing, monitoring responsibilities, and compliance verification responsibility for all mitigation measures identified in this Final EIR.

The City of Manteca will be the primary agency responsible for implementing the mitigation measures and will continue to monitor mitigation measures that are required to be implemented during the operation of the proposed Project.

The FMMRP is presented in tabular form on the following pages. The components of the FMMRP are described briefly below:

- **Mitigation Measures:** The mitigation measures are taken from the Draft EIR in the same order that they appear in that document.
- **Mitigation Timing:** Identifies at which stage of the project mitigation must be completed.
- **Monitoring Responsibility:** Identifies the agency that is responsible for mitigation monitoring.
- **Compliance Verification:** This is a space that is available for the monitor to date and initial when the monitoring or mitigation implementation took place.

4.0

MITIGATION MONITORING AND REPORTING PROGRAM

TABLE 4.0-1: MITIGATION MONITORING AND REPORTING PROGRAM

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
AESTHETICS AND VISUAL RESOURCES				
Impact 3.1-3: Project implementation may result in light and glare impacts.	<i>Conditions of Approval will require compliance with the Development Standards for lighting, landscaping, and building design, which would collectively minimize the visual impacts to the greatest extent feasible as the site transitions from agricultural to urban/suburban uses.</i>	City of Manteca Community Development Department	Prior to the approval of the improvement plans.	
AGRICULTURAL RESOURCES				
Impact 3.2-1: The proposed Project has the potential to result in the conversion of Farmlands, including Prime Farmland and Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural uses.	Mitigation Measure 3.2-1: <i>Prior to the issuance of a Grading Permit, the Project applicant shall participate in the City's agricultural mitigation fee program and the SJMSCP by paying the established fees on a per-acre basis for the loss of important farmland. Fees paid toward the City's program shall be used to fund conservation easements on comparable or better agricultural lands to provide compensatory mitigation.</i>	City of Manteca Community Development Department San Joaquin Council of Governments	Prior to site disturbance	
Impact 3.2-3: The proposed Project has the potential to result in conflicts with adjacent agricultural lands or indirectly cause conversion of agricultural lands.	Mitigation Measure 3.2-2: <i>Prior to approval of the Tentative Subdivision Map the Project applicant shall demonstrate that the Project site plans include adequate measures to buffer adjacent agricultural uses from urban uses on the Project site and to reduce adverse impacts to neighboring agricultural uses; such measures shall include, but not be limited to:</i> <ul style="list-style-type: none"> - <i>The Project shall provide adequate and secure fencing at the interface of the Project site, or any individual phase of the Project, and adjacent agricultural uses.</i> - <i>The Project shall provide buffers, which may include parking areas, roadways and streets, drainage channels, and landscaped corridors, to buffer adjacent agricultural uses from the Project, including any individual phase of the Project, from proposed urban uses.</i> 	City of Manteca Community Development Department	Prior to approval of improvement plans for each phase of the Project	

MITIGATION MONITORING AND REPORTING PROGRAM

4.0

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
	<ul style="list-style-type: none"> - The Project shall provide notifications to all operators of uses on the Project site that are adjacent or in the vicinity of existing agricultural land of the City's Right-to-Farm Ordinance. 			
AIR QUALITY				
Impact 3.3-2: Proposed Project construction activities would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment, or conflict or obstruct implementation of the District's air quality plan.	<p>Mitigation Measure 3.3-1: Prior to the issuance of a Grading Permit for each phase of the Project, the Project Proponent shall prepare and submit a Dust Control Plan that meets all the applicable requirements of APCD Rule 8021, Section 6.3, for the review and approval of the APCD Air Pollution Control Officer.</p> <p>Mitigation Measure 3.3-2: During all construction activities, the Project Proponent shall implement dust control measures, as required by APCD Rules 8011-8081, to limit Visible Dust Emissions to 20% opacity or less. Dust control measures shall include application of water or chemical dust suppressants to unpaved roads and graded areas, covering or stabilization of transported bulk materials, prevention of carryout or trackout of soil materials to public roads, limiting the area subject to soil disturbance, construction of wind barriers, access restrictions to inactive sites as required by the applicable rules.</p> <p>Mitigation Measure 3.3-3: During all construction activities, the Project proponent shall implement the following dust control practices identified in Tables 6-2 and 6-3 of the GAMAQI (2002).</p> <ul style="list-style-type: none"> a. All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, or vegetative ground cover. b. All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant. c. All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall control fugitive dust emissions by application of water or by presoaking. d. When materials are transported off-site, all material shall be 	SJVAPCD Air Pollution Control Officer, and City of Manteca Community Development Department	Prior to the commencement of construction activities	

4.0

MITIGATION MONITORING AND REPORTING PROGRAM

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
	<p>covered, effectively wetted to limit visible dust emissions, or at least six inches of freeboard space from the top of the container shall be maintained.</p> <p>e. All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at least once every 24 hours when operations are occurring. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.</p> <p>f. Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.</p> <p>g. Limit traffic speeds on unpaved roads to 5 mph.</p> <p>h. Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.</p> <p>Mitigation Measure 3.3-4: Asphalt paving shall be applied in accordance with APCD Rule 4641, the purpose of which is to limit VOC emissions by restricting the application and manufacturing of certain types of asphalt for paving and maintenance operations. This rule applies to the manufacture and use of cutback asphalt, slow cure asphalt and emulsified asphalt for paving and maintenance operations. The Project Applicant shall coordinate with the APCD, prior to Project asphalt paving activities, to ensure all Project asphalt paving would comply with this rule. The Project Applicant shall provide the City of Manteca with evidence of consultation with the APCD, including confirmation of compliance with APCD Rule 4641.</p>			
BIOLOGICAL RESOURCES				
Impact 3.4-3: The proposed Project has the potential to have direct or indirect effects on special-status bird species.	Mitigation Measure 3.4-1: Prior to commencement of any grading activities, the Project proponent shall obtain coverage under the SJMSCP to mitigate for habitat impacts to covered special status species. Coverage involves compensation for habitat impacts on covered species through	City of Manteca Community Development Department	Prior to any ground disturbance	

MITIGATION MONITORING AND REPORTING PROGRAM

4.0

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
	implementation of incidental take and minimization Measures (ITMMs) and payment of fees for conversion of lands that may provide habitat for covered special status species. These fees are used to preserve and/or create habitat in preserves to be managed in perpetuity. Obtaining coverage for a Project includes incidental take authorization (permits) under the Endangered Species Act Section 10(a), California Fish and Game Code Section 2081, and the MBTA. Coverage under the SJMSCP would fully mitigate all habitat impacts on covered special-status species.	San Joaquin Council of Governments		
CULTURAL AND TRIBAL RESOURCES				
Impact 3.5-1: Project implementation has the potential to cause a substantial adverse change to a significant historical or archaeological resource, as defined in CEQA Guidelines §15064.5	<p>Mitigation Measure 3.5-1: Prior to the initiation of any site disturbing activities, a training session for all workers shall be conducted at the site by a qualified archeologist. The training session will provide information on recognition of artifacts, human remains, and cultural deposits to help in the recognition of potential issues.</p> <p>Mitigation Measure 3.5-2: In concurrence with initial grading, contractors shall stop work in case of accidental discovery of buried archeological resources if buried cultural resources, such as chipped or ground stone, historic debris, building foundations, or human bone, are inadvertently discovered during ground-disturbing activities. In such instances, work shall stop within 100 feet of the discovery, until a qualified archaeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with the city and other appropriate agencies. See implementation measure RC-1-46 of the city of Manteca General Plan 2023 policy document for further detail.</p> <p>Mitigation Measure 3.5-3: If any historical resources, cultural resources, including prehistoric or historic artifacts, or other indications of archaeological or paleontological resources, are found during grading and construction activities during any phase of the Project, all work shall be halted immediately within a 200-foot radius of the discovery until an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, has evaluated the find(s).</p> <p>Work shall not continue at the discovery site until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially significant or</p>	City of Manteca Community Development Department Qualified archaeologist	If any cultural resources, including prehistoric or historic artifacts, or other indications of archaeological resources are found during grading and construction activities	

4.0

MITIGATION MONITORING AND REPORTING PROGRAM

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
	<p>eligible for listing on the NRHP or CRHR; or 3) not a significant Public Trust Resource.</p> <p>If Native American resources are identified, a Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the Native American Heritage Commission, may also be required and, if required, shall be retained at the Project applicant's expense.</p>			
<p>Impact 3.5-2: Project implementation has the potential to disturb human remains, including those interred outside of formal cemeteries.</p>	<p>Mitigation Measure 3.5-4: If human remains are discovered during the course of construction during any phase of the Project, work shall be halted at the site and at any nearby area reasonably suspected to overlie adjacent human remains until the San Joaquin County Coroner has been informed and has determined that no investigation of the cause of death is required. If the remains are of Native American origin, either of the following steps will be taken:</p> <ul style="list-style-type: none"> The coroner shall contact the Native American Heritage Commission in order to ascertain the proper descendants from the deceased individual. The coroner shall make a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, which may include obtaining a qualified archaeologist or team of archaeologists to properly excavate the human remains. The landowner shall retain a Native American monitor, and an archaeologist, if recommended by the Native American monitor, and rebury the Native American human remains and any associated grave goods, with appropriate dignity, on the property and in a location that is not subject to further subsurface disturbance when any of the following conditions occurs: <ul style="list-style-type: none"> The Native American Heritage Commission is unable to identify a descendent. The descendant identified fails to make a recommendation. The City of Manteca or its authorized representative rejects the recommendation of the descendant, and the mediation by the 	<p>City of Manteca Community Development Department</p> <p>Qualified archaeologist</p>	<p>If any cultural resources, including prehistoric or historic artifacts, or other indications of archaeological resources are found during grading and construction activities</p>	

MITIGATION MONITORING AND REPORTING PROGRAM

4.0

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
	<i>Native American Heritage Commission fails to provide measures acceptable to the landowner.</i>			
GEOLOGY, SOILS, AND MINERAL RESOURCES				
Impact 3.6-1: The proposed Project may directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: rupture of a known earthquake fault, strong seismic ground shaking, seismic related ground failure, or landslides.	Mitigation Measure 3.6-1: <i>Prior to issuance of a Grading Permit, a certified geotechnical engineer, or equivalent, shall be retained to perform a final geotechnical evaluation of the soils at a design-level as required by the requirements of the California Building Code Title 24, Part 2, Chapter 18, Section 1803.1.1.2 related to expansive soils and other soil conditions. The evaluation shall be prepared in accordance with the standards and requirements outlined in California Building Code, Title 24, Part 2, Chapter 16, Chapter 17, and Chapter 18, which addresses structural design, tests and inspections, and soils and foundation standards. The final geotechnical evaluation shall include design recommendations to ensure that soil conditions do not pose a threat to the health and safety of people or structures, including threats from liquefaction or lateral spreading. The grading and improvement plans, as well as the storm drainage and building plans for each phase of the Project shall be designed in accordance with the recommendations provided in the final geotechnical evaluation.</i>	City of Manteca Community Development Department Regional Water Quality Control Board	Prior to clearing, grading, and disturbances to the ground such as stockpiling, or excavation	
Impact 3.6-6: The proposed Project has the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature	Mitigation Measure 3.6-2: <i>If any paleontological resources are found during grading and construction activities of the Project, all work shall be halted immediately within a 200-foot radius of the discovery until a qualified paleontologist has evaluated the find. Work shall not continue at the discovery site until the paleontologist evaluates the find and makes a determination regarding the significance of the resource and identifies recommendations for conservation of the resource, including preserving in place or relocating on the Project site, if feasible, or collecting the resource to the extent feasible and documenting the find with the University of California Museum of Paleontology.</i>	City of Manteca Community Development Department Certified geotechnical engineer	Prior to earthmoving activities	
GREENHOUSE GASES, CLIMATE CHANGE, AND ENERGY				
Impact 3.7-1: Project implementation could generate greenhouse gas emissions, either	Mitigation Measure 3.7-1: <i>Project applicants are prohibited from having natural gas water heaters, area heating, or clothing dryers, but are otherwise permitted to have natural gas in residential units for cooking and in community</i>			

4.0

MITIGATION MONITORING AND REPORTING PROGRAM

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
<p>directly or indirectly, that may have a significant impact on the environment to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.</p>	<p><i>spaces. Any Project applicant whose application includes the installation of natural gas appliances or features shall provide a GHG offset analysis with its building permit application confirming that the GHG emissions related to the natural gas use would be offset by the installation of solar panels onsite.</i></p> <p>Mitigation Measure 3.7-2: <i>The Project applicants shall meet the CalGreen Tier 2 standards as identified in the SMAQMD's Greenhouse Gas Thresholds for Sacramento County (June 2020), except that all "EV Capable" spaces shall be "EV Ready," as defined by CalGreen, consistent with the requirements of BMP 2 of Tier 1 of the SMAQMD's greenhouse gas thresholds.</i></p> <p>Mitigation Measure 3.7-3:</p> <p>a) Project-Specific Requirements. <i>The Project applicants shall be required to reduce Project GHG emissions to the maximum extent feasible by incorporating the following onsite measures in addition to implementing Mitigation Measures 3.7-1 and 3.7-2:</i></p> <p>a) Construction Emissions. <i>Prior to the issuance of grading permits, the Project sponsor or its designee shall provide evidence to the City of Manteca that the following strategies are implemented:</i></p> <ul style="list-style-type: none"> i. <i>Use electric or hybrid powered equipment for generators and other small pieces of equipment (e.g., forklifts and saws), as commercially available.</i> ii. <i>Use cleaner-fuel equipment such as replacing diesel fuel with compressed natural gas (CNG) or renewable diesel, as commercially available.</i> iii. <i>Reduce idling time of heavy-duty trucks either by shutting them off when not in use or reducing the time of idling to no more than 3 minutes (5-minute limit is required by the state airborne toxics control measure 13 CCR 2485).</i> <p><i>Commercially available equipment is herein defined as equipment sourced within 50 vehicle miles of the Project site and within 10% of the cost of the diesel-fueled-equivalent equipment. The Project Applicant must contact at least 3 contractors or vendors within San</i></p>			

MITIGATION MONITORING AND REPORTING PROGRAM

4.0

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
	<p><i>Joaquin County and submit to the City justification if the specified equipment is not commercially available.</i></p> <p><i>b) Operational Emissions.</i></p> <p><i>i. Require Energy Efficient Appliances. Prior to the issuance of building permits, the Project sponsor or its designee shall provide evidence to the City that exclusively ENERGY STAR-certified appliances shall be installed, which exceed the energy efficiency of conventional appliances.</i></p> <p><i>ii. Outdoor Electrical Outlets. Prior to the issuance of building permits, the Project sponsor or its designee shall provide evidence to the City of Manteca that the design plans include electrical outlets in the front and rear of the structure to facilitate use of electrical lawn and garden equipment.</i></p> <p><i>iii. Tree Planting. Prior to the applicable certificates of occupancy, the Project sponsor or its designee shall plant, at a minimum, one tree per every new residential dwelling unit proposed. Tree species should be black or valley oak, or another broad leaf species with at least an equivalent carbon sequestration rate. The Project sponsor shall demonstrate that at least 75% of species planted are native to California or drought tolerant and appropriate for the climate zone region. These trees can be planted roadside, in medians, or in other commonly landscaped areas.</i></p> <p><i>iv. Water Use Efficiency and Water Conservation. Prior to the issuance of building permits, the Project sponsor or its designee shall provide evidence to the City that the residential building design plans include the following water use efficiency and conservation measures, including:</i></p> <ul style="list-style-type: none"> <i>•High-efficiency appliances/fixtures to reduce water use, and/or include water-efficient landscape design</i> <i>•Low-flow or high-efficiency water fixtures</i> <i>•Water-efficient landscapes with lower water demands than required by the California Department of Water</i> 			

4.0

MITIGATION MONITORING AND REPORTING PROGRAM

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
	<p><i>Resources (DWR) 2015 Model Water Efficient Landscape Ordinance (MWELO)</i></p> <ul style="list-style-type: none"> •Planting of drought-tolerant plant species only •Provide a copy of the educational materials that will be provided to future homeowners and tenants about water saving behaviors and water-conserving landscaping with sales material for City review. •Installation of piping to allow future use of reclaimed water for landscaping purposes in all park areas. <p>v. <i>Circulation. The Project sponsor or its designee shall include the following features to reduce VMT:</i></p> <ul style="list-style-type: none"> •Install sidewalks and crosswalks where appropriate and consistent with City requirements. •Install new or improved bicycle paths and bicycle racks at community destination locations such as parks and community recreation areas. •Sales and rental packets shall include information about local public transit, including links to the ACE and Manteca Transit websites and a list of services that match riders and drivers for ridesharing and carpooling. <p><i>In addition to the above, on-site measures, if additional to reductions accounted for in the CAP and/or CAP Update, the Project would provide the City with up to four EV charging stations at one or more City facilities based on the City's need and to the extent resulting in quantifiable reductions, which would further reduce GHG emissions.</i></p> <p>Compliance with CAP Update. While the CAP Update is currently being prepared, it is anticipated that the CAP Update will ultimately establish policies, programs, standards, and requirements for government, private industry, and the public to achieve the goals laid out in state law and the 2022 Scoping Plan. Once the CAP Update is adopted, the portions of the Project that would be subject to the requirements of the CAP Update would comply with</p>			

MITIGATION MONITORING AND REPORTING PROGRAM

4.0

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
	<i>applicable CAP Update measures.</i>			
HAZARDS AND HAZARDOUS MATERIALS				
Impact 3.8-1: Potential to create a significant hazard through the routine transport, use, or disposal of hazardous materials or through the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	<p>Mitigation Measure 3.8-1: Prior to the issuance of a Grading Permit, a Soils Management Plan (SMP) shall be submitted and approved by the San Joaquin County Department of Environmental Health. The SMP shall establish management practices for handling hazardous materials, including fuels, paints, cleaners, solvents, etc., during construction. The approved SMP shall be posted and maintained onsite during construction activities and all construction personnel shall acknowledge that they have reviewed and understand the plan.</p> <p>Mitigation Measure 3.8-2: Prior to the acceptance of improvements, the applicant shall hire a licensed well contractor to obtain a well abandonment permit from San Joaquin County Environmental Health Department, and properly abandon the on-site wells, pursuant to review and approval of the City Engineer and the San Joaquin County Environmental Health Department.</p> <p>Mitigation Measure 3.8-3: The applicant shall hire a qualified consultant to perform additional testing prior to the issuance of grading permits or demolition permits for construction activities in the following areas that have been deemed to have potentially hazardous conditions present:</p> <ul style="list-style-type: none"> • The residential units and adjoining structures. • The soils in the area where farming equipment and above ground tanks have been used. <p>The intent of the additional testing is to investigate whether any of the buildings, facilities, or soils contain hazardous materials. If asbestos-containing materials and/or lead are found in the buildings, a Cal-OSHA certified ACBM and lead based paint contractor shall be retained to remove the asbestos-containing materials and lead in accordance with EPA and California Occupational Safety and Health Administration (Cal/OSHA) standards. In addition, all activities (construction or demolition) in the vicinity of these materials shall comply with Cal/OSHA asbestos and lead worker construction standards. The ACBM and lead shall be disposed of properly at an appropriate</p>	<p>San Joaquin County Department of Environmental Health</p> <p>City of Manteca Community Development Department</p>	Prior to the issuance of a grading permit	

4.0

MITIGATION MONITORING AND REPORTING PROGRAM

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
	offsite disposal facility. If surface staining is found on the Project site, a hazardous waste specialist shall be engaged to further assess the stained area.			
HYDROLOGY AND WATER QUALITY				
Impact 3.9-1: The proposed Project has the potential to violate water quality standards or waste discharge requirements during construction.	Mitigation Measure 3.9-1: Prior to clearing, grading, and disturbances to the ground such as stockpiling, or excavation for each phase of the Project, the Project proponent shall submit a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) to the RWQCB to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ amended by 2010-0014-DWQ & 2012-0006-DWQ). The SWPPP shall be designed with Best Management Practices (BMPs) that the RWQCB has deemed as effective at reducing erosion, controlling sediment, and managing runoff. These include: covering disturbed areas with mulch, temporary seeding, soil stabilizers, binders, fiber rolls or blankets, temporary vegetation, and permanent seeding. Sediment control BMPs, installing silt fences or placing straw wattles below slopes, installing berms and other temporary run-on and runoff diversions. These BMPs are only examples of what should be considered and should not preclude new or innovative approaches currently available or being developed. Final selection of BMPs will be subject to approval by City of Manteca and the RWQCB. The SWPPP will be kept on site during construction activity and will be made available upon request to representatives of the RWQCB.	City of Manteca Community Development Department	Prior to the issuance of a grading permit	
Impact 3.9-2: The proposed Project has the potential to violate water quality standards or waste discharge requirements during operation.	Mitigation Measure 3.9-2: The Project applicant shall implement the following nonstructural BMPs that focus on preventing pollutants from entering stormwater: <ul style="list-style-type: none"> • Pollution Prevention/Good Housekeeping <ul style="list-style-type: none"> ○ Prior to clearing, grading, and disturbances to the ground such as stockpiling, or excavation in each phase of the Project, the Project proponent shall develop a spill response and prevention plan as a component of (1) SWPPPs prepared for construction activities, (2) SWPPPs for facilities subject to the NPDES Stormwater Permit, and (3) 	City of Manteca Community Development Department Regional Water Quality Control Board	Prior to approval of improvement plans	

MITIGATION MONITORING AND REPORTING PROGRAM

4.0

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
	<p>spill prevention control and countermeasure plans for qualifying facilities. The spill response and prevention plan shall be implemented during all construction activities.</p> <ul style="list-style-type: none"> ○ Streets and parking lots in all non-residential portions, including the right-of-way, of the Project site shall be swept at least once every two weeks. • Operation and Maintenance (O&M) of Treatment Controls <ul style="list-style-type: none"> ○ Prior to clearing, grading, and disturbances to the ground such as stockpiling, or excavation in each phase of the Project, the Project proponent shall develop an Operation and Maintenance (O&M) Plan for the storm drainage facilities to ensure long-term performance. The O&M plan shall incorporate the manufacturers' recommended maintenance procedures and include (1) provisions for debris removal, (2) guidance for addressing public health or safety issues, and (3) methods and criteria for assessing the efficacy of the storm drainage system. An annual report shall be submitted to the City certifying that maintenance of the facilities was conducted according to the O&M plan. <p>Mitigation Measure 3.9-3: The Project applicant shall implement the following structural BMPs that focus on preventing pollutants from entering stormwater, or alternative BMPs approved by the City of Manteca. Implementation of BMPs apply to all non-residential parcels, including the right-of-way, as appropriate.</p> <ul style="list-style-type: none"> • Extended Detention Facilities: Extended detention refers to the facilities proposed for the Project site that would detain and temporarily store stormwater runoff to reduce the peak rates of discharge to the storm drainage system. Detention of stormwater allows particles and other pollutants to settle and thereby potentially reduce concentrations and mass loading of contaminants in the discharge. • Grassed Swales: A swale is a vegetated, open channel management practice designed to treat and attenuate stormwater runoff for a specified water quality volume. Stormwater runoff flowing through 			

4.0

MITIGATION MONITORING AND REPORTING PROGRAM

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
	<p>these channels is treated by being filtered through vegetation in the channel, through a subsoil matrix, and/or through infiltration into the underlying soils. Swales can be used throughout the proposed Project area where feasible in the landscape design to treat parking lot runoff.</p> <p><i>Proprietary Devices:</i> There are a variety of commercially available stormwater treatment devices designed to remove contaminants from drainage once flows enter the conveyance systems. StormFilter™ units, or equivalent filtration-type systems, and Bioswales are recommended for streets and parking areas. Drop inlet filters should also be used to control drainage runoff water quality.</p>			
NOISE				
Impact 3.11-1: The proposed Project may generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	<p>Mitigation Measure 3.11-1: Construction activities shall adhere to the requirements of the City of Manteca Municipal Code with respect to hours of operation. This requirement shall be noted in the improvements plans prior to approval by the City's Public Works Department.</p> <p>Mitigation Measure 3.11-2: All equipment shall be fitted with factory equipped mufflers, and in good working order. This requirement shall be noted in the improvements plans prior to approval by the City's Public Works Department.</p> <p>Mitigation Measure 3.11-3: An 8-foot tall barrier shall be constructed along the Union Road Frontage, adjacent to proposed Project residential uses, in order to achieve the City's exterior noise standards. Noise barrier walls shall be constructed of concrete panels, concrete masonry units, earthen berms, or any combination of these materials that achieve the required total height. Wood is not recommended due to eventual warping and degradation of acoustical performance. These requirements shall be included in the improvements plans prior to their approval by the City's Public Works Department. Figure 3.11-2 shows the recommended sound wall locations. It should be noted that this noise control measure could be phased, under the condition that a supplemental analysis were to be conducted that demonstrates that interim phases would meet the City's noise standards without full Project buildout.</p> <p>Mitigation Measure 3.11-4: For the first rows of lots on the Union Ranch North subdivision adjacent to the Union Road right of way, second floor exterior</p>	City of Manteca Public Works Department	Prior to approval of improvements plans	

MITIGATION MONITORING AND REPORTING PROGRAM

4.0

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
	<p>facades with a view of Union Road would need the following noise control measures:</p> <ul style="list-style-type: none"> • Windows shall have a sound transmission class (STC) rating of 34, • Interior gypsum at exterior walls shall be 5/8”; • Ceiling gypsum shall be 5/8”; • Exterior finish shall be stucco, fiber cement lap siding, or system with equivalent weight per square foot; • Mechanical ventilation shall be installed in all residential uses to allow residents to keep doors and windows closed, as desired for acoustical isolation. <p>As an alternative to the above-listed interior noise control measures, the applicant may provide a detailed analysis of interior noise control measures once building plans become available. The analysis should be prepared by a qualified noise control engineer and shall outline the specific measures required to meet the City of Manteca 45 dB Ldn interior noise level standard.</p>			
Impact 3.11-2: The proposed Project would not generate excessive groundborne vibration or groundborne noise levels.	Mitigation Measure 3.11-5: Any compaction required less than 26 feet from the adjacent residential structures shall be accomplished by using static drum rollers which use weight instead of vibrations to achieve soil compaction. As an alternative to this requirement, pre-construction crack documentation and construction vibration monitoring could be conducted to ensure that construction vibrations do not cause damage to any adjacent structures.	City of Manteca Public Works Department	Prior to approval of improvements plans	
TRANSPORTATION AND CIRCULATION				
Impact 3.13-2: Project implementation may conflict with a program, plan, policy or ordinance addressing the circulation system, including transit, bicycle, and pedestrian facilities.	<p>Mitigation Measure 3.13-1: As feasible, and where applicable at the improvement plan stage of development, as determined through consultation between the Project applicant and the City of Manteca, the Project applicant shall implement the following measures, which are identified in the CAPCOA Draft Handbook for Analyzing Greenhouse Gas (GHG) Emission Reductions, assessing Climate Vulnerabilities, and Advancing Health and Equity (GHG Handbook):</p> <ul style="list-style-type: none"> • Increase residential density; • Limit residential parking supply; • Unbundle residential parking cost from property cost; 	City of Manteca Public Works Department	Prior to issuance of building permits for each phase of the Project	

4.0

MITIGATION MONITORING AND REPORTING PROGRAM

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	VERIFICATION (DATE/INITIALS)
	<ul style="list-style-type: none"> • Provide access to transit (Transit Oriented Development); • Improve street connectivity; • Provide ride-share program; • Implement subsidized or discounted transit program; • Provide end-of-trip bicycle facilities; • Provide community-based travel planning; • Implement market price public on-street parking; • Provide pedestrian network improvement; • Construct or improve bike facility; • Construct or improve bike boulevard; • Expand bikeway network; • Implement conventional or electric carshare program; • Implement pedal or electric bikeshare program; • Implement scooter-share program; • Extend transit network coverage or hours; • Increase transit service frequency; • Implement transit-supportive roadway treatments; • Reduce Transit Fares 			
UTILITIES				
Impact 3.14-5: The proposed Project has the potential to require or result in the construction of new stormwater drainage facilities, the construction of which could cause significant environmental effects.	Mitigation Measure 3.14-1: Prior to the issuance of a building or grading permit, the Project applicant shall submit a drainage plan to the City of Manteca for review and approval. The plan shall include an engineered storm drainage plan that demonstrates attainment of pre-Project runoff requirements prior to discharge and describes the treatment controls used to reach attainment consistent with the Manteca Storm Drain Master Plan.	City of Manteca Public Works Department	Prior to issuance of building permits for each phase of the Project	
Impact 3.14-6: The proposed Project has the potential to be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs and comply with federal, State, and local statutes and regulations related to	Mitigation Measure 3.14-2: Prior to the issuance of a building or grading permit for each phase of the Project, the Project applicant shall pay the City's waste collection fee which equates to the Project's fair share contribution, consistent with section 13.02.050, Charges for solid waste collection services, of the City's municipal code.	City of Manteca Public Works Department	Prior to issuance of building permits for each phase of the Project	

MITIGATION MONITORING AND REPORTING PROGRAM

4.0

<i>ENVIRONMENTAL IMPACT</i>	<i>MITIGATION MEASURE</i>	<i>MONITORING RESPONSIBILITY</i>	<i>TIMING</i>	<i>VERIFICATION (DATE/INITIALS)</i>
solid waste.				

This page left intentionally blank.