MITIGATION MONITORING AND REPORTING PROGRAM FOR THE UNION RANCH SPECIFIC PLAN PROJECT

AUTHORITY

This Environmental Mitigation Monitoring and Reporting Program (MMRP) has been prepared pursuant to CEQA Section 21081.6 to provide for the monitoring of mitigation measures required of the Union Ranch Specific Plan project as set forth in the Final Environmental Impact Report (Final EIR) prepared for the project. This file will be kept on file at the City of Manteca Community Development/Planning Department, 1001 West Center Street, Manteca, CA 95337.

MONITORING SCHEDULE

Before the issuance of grading permits, City staff will be responsible for ensuring compliance with mitigation monitoring applicable to the project. City staff will prepare reports identifying compliance with mitigation measures. Once construction begins, monitoring of mitigation measures associated with construction will be included in the responsibilities of designated City staff who shall prepare reports of such monitoring no less than once per month until construction completes. Once construction is completed, the City will monitor the project as deemed necessary.

CHANGES TO MITIGATION MEASURES

Any substantive change in the monitoring and reporting plan made by City staff shall be reported in writing to the Environmental Administrator **[City: Do you have this position]**. Reference to such changes shall be made in the monthly or annual Environmental Mitigation Monitoring Report prepared by City staff. Modifications to the mitigation measures may be made by City staff subject to one of the following findings and documented by evidence included in the record:

1. The mitigation measure included in the Final EIR and the Mitigation Monitoring and Reporting Program is no longer required because the significant environmental impact identified in the Final EIR has been found not to exist or to occur at a level which makes the impact less than significant as a result of changes in the project, changes in conditions of the environment, or other factors,

OR

2. The modified or substitute mitigation measure to be included in the Mitigation Monitoring and Reporting Program provides a level of environmental protection equal to or greater than that afforded by the mitigation measure included in the Final EIR and the Mitigation Monitoring and Reporting Program,

AND

3. The modified or substitute mitigation measures do not have significant adverse effects on the environment in addition to or greater than those which were considered by the responsible hearing bodies in their decisions on the Final EIR and the proposed project,

AND

4. The modified or substitute mitigation measures are feasible, and the City, through measures included in the MMRP or other City procedures, can assure their implementation.

SUPPORT DOCUMENTATION

Findings and related documentation supporting the findings involving modifications to mitigation measures shall be maintained in the project file with the MMRP and shall be made available to the public upon request.

FORMAT OF MITIGATION MONITORING MATRIX

The mitigation monitoring matrix identifies the environmental issue areas for which monitoring is required, the required mitigation measures, the time frame for monitoring, the responsible monitoring agencies, the findings, and the level of significance after mitigation.

If any mitigation measures are not being implemented, the City may pursue corrective action. Penalties that may be applied include, but are not limited to, the following: (1) a written notification and request for compliance; (2) withholding of permits; (3) administrative fines; (4) a stop-work order; (5) criminal prosecution and/or administrative fines; (6) forfeiture of security bonds or other guarantees; (7) revocation of permits or other entitlements.

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4.1 Land Use					
4.1-2	The project applicant shall phase the development of agricultural lands in the URSP area in such a way as to avoid the fragmentation of continuing agricultural operations. As development occurs in the URSP area, fencing, walls, or other suitable barriers shall be constructed or established at the interface between development and adjacent agricultural lands. In addition, a buffer zone or barrier, as determined by the City, shall be provided between the edge of residential or commercial development and the adjacent agricultural land. Roads, greenbelts, and similar facilities can function as these buffers. The City shall include the buffer as a condition of development approval, with the buffer being maintained until development of the adjacent agricultural land is initiated. Growers cultivating lands near or adjacent to urban development in the URSP area can be expected to comply with all necessary federal, state, and local restriction regarding buffers between pesticide/herbicide applications and sensitive areas, such as schools, residences, and parks. Required buffer distances may vary depending on the type of chemicals used and the method of application. Residents and other individuals purchasing property near agricultural lands shall be provided information on the types of conflicts that may occur and appropriate means to address these conflicts, consistent with the City's Right-to-Farm Ordinance. With regards to increased potential for the conversion of agricultural lands to the north, the project applicant shall implement Mitigation Measure 4.1-4 (below). The project applicant could also purchase land to the north to establish conservation easements to prevent future development of agricultural areas. However, these lands are designated for future residential lands uses in the City's General Plan and would conflict with intended land uses for the area. Further, it is the policy of the City to implement its General Plan. Therefore, implementation of conservation easements within the City would be infeasible. Although Mitigation Measure 4.1-4 would substantially lessen significant impacts associated with farmland conversion impacts, the fees paid to the SJMSCP would only partially offset conversion of	Before and during construction activities	Project applicant	Verify phasing of development, designated buffer zones, and resident notification requirements on design plans	

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	Important Farmland. Therefore, full compensation for potential losses of Important Farmland would not be achieved, and this impact would remain significant and unavoidable.				
4.1-4	(a) The project applicant shall participate in the SJMSCP. Appropriate fees shall be paid by the project applicant to the SJCOG on a per-acre basis for lost agricultural land during development of proposed URSP and associated offsite utility infrastructure. The SJCOG will use these funds to purchase conservation easements on agricultural and habitat lands in the project vicinity (in the Central Index Zone identified in the SJMSCP). The preservation in perpetuity of agricultural lands through the SJMSCP, a portion of which would consist of Important Farmland, would ensure the continued protection of farmland in the project vicinity, partially offsetting project impacts.	(a) At issuance of building permits	(a) Project applicant	(a) Verify payment of SJCOG fees at issuance of building permits	
	(b) Until the City adopts a Farmland Conservation Fee, the project applicant shall deposit appropriate mitigation funds into an escrow account for the loss of prime and important farmlands. At a minimum, a $2,000 fee for every acre of prime and important farmlands that are developed shall be assessed on the project. A total of $1,060,000 ($2,000 x 530 acres) shall be deposited and held in escrow. Once a farmland conservation fee has been adopted by the City and/or a designated land trust organization is selected, these funds shall be transferred to the designated land trust organization for use in purchasing farmland conservation easements. The final determination of the adopted fee will be made by the City and the project applicants will be required to comply with the fee requirements.	(b) Before issuance of building permits and at the time the Farmland Conservation Fee is adopted	(b) Project applicant	(b) Verify establishment of escrow account; verify payment of fees into escrow account; verify transfer of fees to designated land trust organization	
	Implementation of Mitigation Measure 4.1-4 would substantially lessen significant impacts associated with the conversion of Prime and Important Farmland on the URSP site and associated utility corridors because funding conservation easements would provide assistance to public and private sectors in protecting other farmland from the pressures of development. The farmland conservation fee would be used to specifically purchase farmland easements to offset project impacts; however, because of the high cost of land, these fees can only partially offset the conversion of Prime and Important farmlands The				

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	SJCOG easements are purchased for land exhibiting benefits to wildlife, including a combination of habitat, open space, and agricultural lands, so the compensation provided by the fee contribution for the project would not be applied exclusively to agricultural lands. Therefore, fees contributed to the SJMSCP would only partially offset conversions of Important Farmland associated with project impacts implementation. In addition, no new farmland would be made available, and the productivity of existing farmland would not be improved as a result of either the farmland conservation fee or the SJMSCP mitigation. Therefore, full compensation for losses of Prime and Important Farmland would not be achieved. Impact 4.1-4 would remain significant after mitigation.				
4.3 Air Quality					
4.3-1	The SJVAPCD emphasizes implementation of effective and comprehensive control measures rather than requiring a detailed quantification of construction emissions. The SJVAPCD requires that all feasible control measures (dependent on the size of the construction area and the nature of the construction operations) shall be incorporated and implemented. Based on available information, it appears that the application of standard construction mitigation measures for the control of fugitive dust (i.e., the application of water or soil stabilizers) are effective methods of reducing dust-related impacts on agricultural crops. In accordance with SJVAPCD guidelines (SJVAPCD 1998), the following mitigation measures, which includes SJVAPCD Basic, Enhanced, and Additional Control Measures, shall be incorporated and implemented. It is recognized that SJVAPCD Regulation VIII, upon which the following control measures are based, has recently undergone revision and that these control measures are subject to future periodic revision. Therefore, the project applicant shall annually contact the SJVAPCD to identify the most recent fugitive dust control measures required to be implemented by the proposed project and implement them accordingly during project construction.	During grading and construction activities on a monthly basis	Project applicant	Verify implementation of fugitive dust control measures	

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	▸ 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. ▸ All onsite unpaved construction roads and offsite unpaved construction access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant. ▸ All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking. ▸ During demolition of buildings all exterior surfaces of the building shall be wetted. ▸ When materials are transported offsite, all material shall be covered, effectively wetted to limit visible dust emissions, or at least 6 inches of freeboard space from the top of the container shall be maintained. ▸ 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.) ▸ Following the addition of materials to, or the removal of materials from, the surfaces of outdoor storage piles, piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant. ▸ Onsite vehicle speeds on unpaved roads shall be limited to 15 mph. ▸ Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from adjacent project areas with a slope greater than 1 percent. ▸ Wheel washers shall be installed for all exiting trucks and				

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	equipment, or wheels shall be washed to remove accumulated dirt prior to leaving the site. ▸ Excavation and grading activities shall be suspended when winds exceed 20 mph. ▸ The overall area subject to excavation and grading at any one time shall be limited to the fullest extent possible. ▸ Onsite equipment shall be maintained and properly tuned in accordance with manufacturers' specifications. ▸ When not in use, onsite equipment shall not be left idling. In addition to the measures identified above, the following measures from Table 6-3 of the *Guide for Assessing and Mitigating Air Quality Impacts* shall be implemented: ▸ Install wind breaks at windward sides of construction areas. (This measure will be implemented if the City, in coordination the SJVAPCD, determines that the fugitive dust control measures described above are not sufficiently effective.) ▸ Comply with the NESHAPS during the renovation/demolition of any existing buildings on the project site with the potential to contain asbestos. Consult the SJVAPCD's *Asbestos-Compliance Assistance Bulletin*, dated December 1994, to ascertain whether individual structures on the project site are subject to NESHAPS. The City, after consultation with the applicant, shall require all feasible additional measures to control construction emissions. Such measures may include, but are not limited to the following items from Table 6-4 of the *Guide for Assessing and Mitigating Air Quality Impacts* and other sources: ▸ Use alternative-fueled construction equipment, where reasonably available, such as equipment capable of using biodiesel or emulsified fuel. ▸ Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use at any one time. ▸ Replace fossil-fueled equipment with electrically driven				

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	equivalents (provided they are not run via a portable generator set). ▸ Curtail construction during periods of high ambient pollutant concentration; this may include ceasing of construction activity during the peak hour of vehicular traffic on adjacent roadways (or ceasing/reducing heavy-duty equipment usage on Spare the Air Days). ▸ Before construction contracts are issued, the project applicant would perform a review of new technology, as it relates to heavy-duty equipment, to determine what (if any) advances in emissions reduction are available for use and are economically feasible. Construction contracts/bid specifications shall require contractors to utilize the available and economically feasible technology on an established percentage of the equipment fleet. It is anticipated that in the near future both NOX and PM10 control equipment will be available. The SJVAPCD shall be consulted with on this process. Implementation of Mitigation Measure 4.3-1 would substantially lessen impacts resulting from emissions associated with construction activities. All actions required by the SJVAPCD shall be implemented, which would be considered the extent of available feasible mitigation measures. Under most circumstances this would be sufficient to reduce impacts related to construction emissions to less than significant levels. However, the SJVAB is currently in nonattainment for PM_{10} (serious nonattainment for federal standards) and ozone (severe nonattainment for state and extreme nonattainment for federal standards). Therefore, even with implementation of the mitigation measures described above, construction emissions associated with a project the size of the URSP (approximately 553 acres) could be sufficient to result in violations of applicable air quality standards, or could contribute substantially to an existing or projected air quality violation. Impact 4.3-1 would remain a significant and unavoidable impact.				
~~4.3-2~~	As indicated in the discussion of Impact 4.3-2, implementation of the proposed project would result in potentially significant increases in stationary-source and mobile-source TACs associated with	During construction activities, and	Commercial project applicant	Verify necessary permits to operate have been secured	

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	commercial land uses. The SJVAPCD shall impose various permitting conditions for stationary TAC sources. These conditions reflect the stringent application of air quality laws and substantially lessen the severity of potential impacts. However, as discussed above, even with implementation of permit conditions there is a potential that elements of the public could be exposed to levels of TACs that would exceed SJVAPCD significance thresholds. The only available mitigation to ensure no exposure of sensitive receptors to significant levels of TACs would be to completely separate emission sources from all sensitive receptors. However, many stationary TAC sources (gas stations, dry cleaners, auto repair facilities) are typically integrated with land uses containing sensitive receptors. Restricting the locations of all TAC generating facilities to specific areas would not be practical or economically feasible. Thus, implementing the project would result in a significant and unavoidable adverse impact with respect to stationary-source TACs. Mobile-source TACs are a relatively new concern for the ARB, so specific guidelines and practices regarding assessing impacts and providing mitigation are not available. It is also unclear what effects the ARB's new diesel engine emission standards and diesel particulate matter regulations would have on the level of impact and the necessity for, or type of, mitigation. Therefore, the specific conditions of mobile-source TAC impacts cannot be determined at this time. The only available mitigation—completely separating emission sources (diesel vehicles) from all sensitive receptor—is not feasible. Therefore, no feasible mitigation is available for Impact 4.3-2 to reduce the impact to a less-than-significant level. Thus, implementing the proposed project would result in a significant and unavoidable adverse impact with respect to mobile-source TACs. The project applicant shall coordinate with the SJVAPCD as the project proceeds to assess situations in which toxic risk from diesel PM may occur and to review methodologies that may become available to estimate the risk. No other feasible mitigation is available at this time to reduce this impact to a less-than-significant level. Therefore, the exposure of sensitive receptors to toxic air contaminants would be a significant and	Before issuance of building permits for commercial land uses		from SJVAPD	

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	unavoidable impact.				
4.3-3	As indicated in the discussion of Impact 4.3-3, implementation of the proposed project would result in exposure of onsite receptors to nearby existing odor sources and potential odor sources associated with development within the commercial mixed use districts. Compliance with SJVAPCD permit and nuisance rules related to odors would help to limit exposure of receptors to offensive odors. However, as discussed above, increases in odor complaints could potentially occur, due primarily to increased development downwind of the existing solid waste transfer station and, to a lesser extent, with potential development of minor odor sources within the plan area (e.g., dry cleaning establishments, restaurants, gasoline stations). No other feasible mitigation is available at this time to reduce potential odor impacts to a less-than-significant level. Therefore, potential exposure of sensitive receptors to odorous emissions would be a significant and unavoidable.	Before issuance of building permits for commercial land uses	Commercial project applicant	Verify that necessary SJVAPCD permits have been secured	
4.3-5	The City, after consultation with the applicant, shall require that all feasible emission control measures be incorporated into project design and operation. Such measures may include, but are not limited to, the following items recommended in the SJVAPCD Guide for Assessing and Mitigating Air Quality Impacts (SJVAPCD 1998) and other sources. It should be noted that many of these measures are already included in the proposed project design (as indicated in parenthetical notes below); however, they are repeated here to allow a complete listing of the SJVAPCD guidelines. ▸ Provide transit enhancing infrastructure that includes transit shelters, benches, street lightening, route signs and displays, and/or bus turnouts/bulbs (already incorporated into project design). ▸ Provide park and ride lots. ▸ Provide pedestrian enhancing infrastructure that includes sidewalks and pedestrian paths, direct pedestrian connections, street trees to shade sidewalks, pedestrian safety designs/infrastructure, street furniture and artwork, street	Before issuance of building permits	Project applicant	Verify emission control measures incorporated into project design	

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	lightening, and/or pedestrian signalization and signs (already incorporated into the project design). ▸ Provide bicycle enhancing infrastructure that includes bikeways/paths connecting to a bikeway system, secure bicycle parking, and/or employee lockers and showers (bicycle lanes and trails already incorporated into the project design). ▸ Use solar, low-emissions, central, or tankless water heaters (residential and commercial), increase wall and attic insulation beyond Title 24 requirements (residential and commercial), orient buildings to take advantage of solar heating and natural cooling and use passive solar designs (residential, commercial, and industrial), replace wood-burning stoves and fireplaces with gas-fired fireplaces or inserts. ▸ Deciduous trees should be planted on the south-facing and west-facing sides of buildings. ▸ Natural gas lines and electrical outlets should be installed in patio areas to encourage the use of gas and/or electric barbecues. ▸ Businesses or individuals shall be allowed, through the zoning and building permit process, the option of installing electric/natural gas fuel hookups. ▸ If a gasoline service station is developed as part of the proposed project, it is encouraged that natural gas fueling be incorporated as part of the station. ▸ The project applicant shall develop and implement a program to encourage employers to promote the use of low-emission vehicles, thus providing emission reductions. The program may include financial incentives, preferred parking, or other benefits for employees and businesses that use low-emission vehicles. ▸ The City shall encourage the project applicant to develop/participate in a program to provide, or subsidize the purchase cost of electric lawnmowers and electric edgers for project homeowners. With implementation of Mitigation Measure 3.3-e, significant impacts				

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	relating to long-term regional emissions would be substantially lessened, but not mitigated to less-than-significant levels (i.e., mitigated to levels below the SJVAPCD's recommended significant threshold of 10 Tons/Year for ROG and 10 Tons/Year for NO_X [Table 4.3-5]). No other feasible mitigation is available to reduce this impact to a less-than-significant level. Thus, increases in long-term regional emissions attributable to the project would be considered a significant and unavoidable impact.				
4.4 Noise					
4.4-1	(a) Construction activities shall be limited to the least noise-sensitive daytime hours of 7 a.m. to 7 p.m. Construction activities shall not be allowed on Sundays and legal holidays. These limitations shall be specified in all construction contracts and specifications entered into by the applicant and/or its successors in interest. (b) In addition, all construction vehicles or equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and acoustical shields or shrouds, in accordance with manufacturers' recommendations. Construction equipment and truck routes shall be arranged to minimize travel adjacent to occupied residences. Stationary construction equipment and staging areas shall be located as far as possible from sensitive receptors.	During construction activities	Project applicant	Monitor on a monthly or periodic basis that construction activities occur within specified time periods	
4.4-2	(a) When tentative subdivision maps and commercial uses are proposed, site-specific acoustical analyses shall be conducted to determine predicted noise impacts attributable to the proposed project taking into account site-specific conditions (e.g., site design, location of structures, building characteristics). The acoustical analysis shall evaluate stationary and mobile source noise attributable to the proposed use and impacts to nearby noise-sensitive land uses, in accordance with adopted City of Manteca noise standards. Feasible measures shall be identified to reduce project-related noise impacts. Mitigation measures may include, but are not limited to, the following: ▸ Use of increased noise-attenuation measures in building construction (e.g., dual-pane, sound-rated windows;	(a) Before approval of tentative subdivision maps; and before issuance of building permits for commercial uses	(a) Project applicant and commercial project applicant	(a) Verify site-specific acoustical analysis was conducted for the residential and commercial developments	

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	mechanical air systems; exterior wall insulation, etc.); ▸ Locating mechanical equipment (e.g., air conditioning and ventilation systems, pump stations, etc.) at the farthest distance from and/or be shielded from nearby existing and proposed noise-sensitive land uses; ▸ Limit noise-generating operational activities associated with the proposed commercial land uses, including truck deliveries and the loading and unloading of materials. (b) The following measures shall apply to noise-generating activities associated with proposed recreational land uses, including neighborhood and community parks, trails, and open space areas: ▸ Onsite landscape maintenance equipment shall be equipped with properly operating exhaust mufflers and engine shrouds, in accordance with manufacturers' specifications. ▸ The operation of onsite landscape maintenance equipment shall be limited to the least noise-sensitive daytime hours of 7 a.m. to 7 p.m. ▸ Outdoor use of amplified sound systems shall be limited to the least noise-sensitive daytime hours of 7 a.m. to 7 p.m. ▸ Use of on-site outdoor recreational facilities shall conform to City regulations.	(b) Before approval of tentative subdivision maps; and before issuance of building permits for commercial uses	(b) Project applicant and commercial project applicant	(b) Verify landscape and maintenance plans conform to designated hours	
4.4-3	Implement Mitigation Measure 4.4-2(a).	Before approval of tentative subdivision maps; and before issuance of building permits for commercial uses	Project applicant and commercial project applicant	Verify site-specific acoustical analysis was conducted for the residential and commercial developments	
4.4-4	Implement Mitigation Measure 4.4-2(a-b).	Before approval of tentative subdivision maps; and before	Project applicant and commercial project applicant	Verify site-specific acoustical analysis was conducted for the residential and	

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		issuance of building permits for commercial uses		commercial developments	
4.5 Biological Resources					
4.5-2	(1) The project applicant shall request coverage under the SJMSCP and fees shall be paid in the amount determined by SJCOG during the application and review process for the URSP. (2) Potentially suitable habitat for special-status plant species that would be affected by implementation of the URSP is currently present in the irrigation ditches in the project site. During the SJMSCP application process, SJCOG will determine whether the project site supports suitable habitat for special-status plant species. If SJCOG determines suitable habitat is present on or adjacent to the project site, the following SJMSCP incidental take avoidance and minimization measures for special-status plant species shall be implemented: (a) Before project construction, surveys for the special-status plants listed in Table 4.5-1 shall be conducted by a qualified botanist at the appropriate time of year when the target species would be in flower or otherwise clearly identifiable. Surveys shall be conducted in accordance with specific methodologies described in Section 5.2.2.5 of the SJMSCP. If special-status plants are found, the following measures shall be implemented: ▸ Sanford's arrowhead and slough thistle: The SJMSCP requires complete avoidance for these species; therefore, potential impacts on these species could not be covered through participation in the plan. If these species are present in the project area and cannot be avoided, a mitigation plan shall be developed, with review and input from the regulatory agencies (e.g., DFG). The mitigation plan shall identify mitigation measures for any populations affected by the project, such as creation of off-site populations through seed collection or	Before construction activities	Project applicant	Verify payment of fees to SJCOG and completion of pre-construction surveys	

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	transplanting, preserving and enhancing existing populations, or restoring or creating suitable habitat in sufficient quantities to compensate for the impact. All mitigation measures that the City determines through this consultation to be necessary shall be implemented by the project proponent. These measures shall be designed to ensure that the project does not result in a net reduction in the population size or range of Sanford's arrowhead and slough thistle. ▸ Rose mallow and Delta tule pea: These species are considered widely distributed species by the SJMSCP, and dedication of conservation easements is the preferred option for mitigation. If these species are found in the project area, the possibility of establishing a conservation easement shall be evaluated. If dedication of a conservation easement is not a feasible option, payment of SJMSCP development fees may be used to mitigate impacts on these species. Use of conservation easements or development fees for establishment of habitat preserves, or a combination of the two mechanisms, shall be sufficient to avoid an overall net reduction in the population size or range of rose-mallow and Delta tule-pea. ▸ Wright's trichocoronis: This species is considered narrowly distributed by the SJMSCP, and dedication of conservation easements is the preferred option for mitigation. If this species is found in the project area, the possibility of establishing a conservation easement shall be evaluated. If dedication of a conservation easement is not an option, the SJMSCP requires a consultation with the permitting agency representatives on the Technical Advisory Committee to determine the appropriate mitigation measures. These may include seed collection or other measures and would be determined on a population basis, taking into account the species type, relative health, and abundance. After the appropriate mitigation has been determined, it shall be				

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	implemented by the project proponent.				
4.5-3	(1) The project applicant shall request coverage under the SJMSCP and fees shall be paid in the amount determined by SJCOG during the application and review process for the URSP. (2) Potentially suitable nesting habitat for Swainson's hawk that would be affected by implementation of the URSP is currently present in large suitable nesting trees in the project site. During the SJMSCP application process, SJCOG will determine whether the project site supports suitable nesting habitat for Swainson's hawk. If SJCOG determines suitable habitat is present on or adjacent to the project site, the following SJMSCP incidental take avoidance and minimization measures for Swainson's hawk shall be implemented: (a) If the project proponent elects to remove nest trees, then nest trees shall be removed between September 1 and February 15, when the nests are unoccupied. (b) If the project proponent elects to retain a tree with an active nest or a nest becomes established in a suitable nest tree during the construction period, a setback shall be established that excludes all construction activities within a distance of two times the dripline of the tree, measured from the nest. This setback shall be maintained during the nesting season for the period encompassing nest building and continuing until fledglings leave the nest. Setbacks shall be marked by brightly colored temporary fencing or other obvious markers.	Before construction activities	Project applicant	Verify payment of fees to SJCOG and required setbacks are established before construction activities	
4.5-4	(1) The project applicant shall request coverage under the SJMSCP and fees shall be paid in the amount determined by SJCOG during the application and review process for the URSP. (2) Potentially suitable nesting habitat for burrowing owl that would be affected by implementation of the URSP is currently present along the sandy banks of the irrigation ditches and along the dirt berm at the water storage basin in the project site. During the SJMSCP application process, SJCOG will determine whether the project site supports suitable nesting habitat for burrowing owl.	Before construction activities	Project applicant	Verify payment of fees to SJCOG and completion of pre-construction surveys	

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	If SJCOG determines suitable habitat is present on or adjacent to the project site, the following SJMSCP incidental take avoidance and minimization measures for burrowing owl shall be implemented: (a) Burrowing owls may be discouraged from entering or occupying construction areas by discouraging the presence of ground squirrels. To accomplish this, the project proponent could prevent ground squirrels from occupying the project site by employing one of several methods outlined in Section 5.2.4.15 of the SJMSCP. These include retention of tall vegetation, regular discing of the site, or use of chemicals or traps to kill ground squirrels. (b) Preconstruction surveys for burrowing owls shall be conducted within 75 meters of areas of project activity in locations with potential burrow habitat, including field edges, roadsides, levees, and fallow fields. Actively farmed agricultural fields and regularly disced or graded fields do not provide suitable burrow sites and need not be surveyed. The survey shall be conducted within 1 week before the beginning of construction. If burrowing owls are found, the following measures shall be implemented: ▸ During the nonbreeding season (September 1 through January 31), burrowing owls occupying the project site shall be evicted from the project site by passive relocation as described in the DFG's Staff Report on Burrowing Owls (DFG 1995). ▸ During the breeding season (February 1 through August 31), occupied burrows shall not be disturbed and shall be provided with a 75-meter protective buffer until and unless the Technical Advisory Committee, with the concurrence of the permitting agencies' representatives on the Technical Advisory Committee, or a qualified biologist approved by the permitting agencies, verifies through noninvasive means that either (1) the birds have not begun egg laying or (2) juveniles from the occupied burrows are foraging independently and are capable of				

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	independent survival. After the fledglings are capable of independent survival, the burrow can be destroyed.				
4.5-5	(1) The project applicant shall request coverage under the SJMSCP and fees shall be paid in the amount determined by SJCOG during the application and review process for the URSP. (2) Potentially suitable nesting habitat for common raptors that would be affected by implementation of the URSP is currently present in large suitable nesting trees in the project site. During the SJMSCP application process, SJCOG will determine whether that specific project site supports suitable nesting habitat for common raptors. If SJCOG determines suitable habitat is present on or adjacent to the project site, the following SJMSCP incidental take avoidance and minimization measures for common raptors shall be implemented: (a) If project activity would occur during the raptor nesting season (February 15 through September 15), preconstruction surveys shall be conducted during the nesting season in suitable nesting habitat within 100 feet of areas of project activity. Large trees throughout the project area provide suitable habitat. The survey shall be conducted within 1 week before the beginning of construction or tree removal. (b) A setback of 100 feet from active nesting areas shall be established and maintained during the nesting season for the period encompassing nest building and continuing until fledglings leave nests. This setback applies whenever construction or other ground-disturbing activities must begin during the nesting season in the presence of nests that are known to be occupied. Setbacks shall be marked by brightly colored temporary fencing.	Before construction activities	Project applicant	Verify payment of fees to SJCOG, completion of pre-construction surveys, and establishment of required setbacks	
4.5-6	(1) Before project implementation, a delineation of waters of the United States, including wetlands that would be affected by the project shall be made by qualified biologists through the formal Section 404 wetland delineation process. The delineation shall be submitted to and verified by USACE. (2) If, based on the verified delineation, it is determined that fill of	Before construction activities	Project applicant	Verify completion of site-specific delineation of water of the United States and acquisition of required permits	

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	waters of the United States would result from implementation of the project, authorization for such fill shall be secured from USACE through the Section 404 permitting process. (3) The project proponent shall also consult with DFG to determine whether a Section 1602 Streambed Alteration Agreement may be required for alteration of irrigation ditches and impacts to freshwater marsh habitat. (4) The acreage of waters of the United States and freshwater marsh habitat that would be removed shall be replaced or restored/enhanced on a "no net loss" basis in accordance with USACE and DFG regulations and Development Title 9-1505. Habitat restoration, enhancement, and/or replacement shall be at a location and by methods agreeable to USACE and DFG, as determined during the permitting processes for CWA Section 404 and California Fish and Game Code Section 1602.			from the USACE	
4.5-7	(1) Before project implementation, a tree survey shall be conducted by an arborist certified by the International Society of Arboriculture (ISA) to enumerate and evaluate all trees on the site that meet the standards in the City or County Codes. (2) All trees that meet the following criteria shall be avoided by construction and protected during all construction activity: ▸ Native Oak Trees with a trunk at least 6 inches in diameter at a height of 4.5 feet above the ground. ▸ Heritage trees (all trees with a trunk diameter of 30 inches at a height of 2 feet above the ground. (3) Trees that are subject to protection but must be removed as a result of project implementation shall be replaced with in-kind species in accordance with tree planting specifications established by City and County tree ordinances. Native oak trees shall be replaced at a ratio of 3 to 1 and heritage trees shall be replaced at a ratio of 5 to 1. (4) Replacement tree plantings shall be monitored for 3 years in accordance with monitoring protocols set forth in the City and	Before construction activities	Project applicant	Verify completion of site-specific tree survey and preparation of tree mitigation plan	

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	County tree ordinances. (5) If monitoring indicates that replacement plantings are not meeting performance standards, remedial measures shall be implemented. Appropriate measures shall be determined in coordination with the City and County.				
4.6 Hazards and Hazardous Materials					
4.6-1	(a) To avoid health risks to construction workers, the contractor shall prepare a site Health and Safety Plan. This plan will outline measures that shall be employed to protect construction workers and the public from exposure to hazardous materials during demolition and construction activities. These measures could include, but would not be limited to posting notices, limiting access to the site, air monitoring, watering, and installation of wind fences. Development contractors shall be required to comply with state health and safety standards for all demolition work. If necessary, this shall include compliance with OSHA and Cal-OSHA requirements regarding exposure to asbestos and lead-based paint.	(a) Before construction activities	(a) Project applicant	(a) Verify preparation of site-specific Health and Safety Plan	
	(b) Before demolition of any structures associated with past and current farming operations (e.g., buildings, ASTs, propane tanks, etc.), the project applicant shall investigate the extent to which soil and/or groundwater has been contaminated from these past operations. This investigation shall follow ESA and/or other appropriate testing guidelines and shall include, as necessary, analysis of soil and/or groundwater samples taken at or near the potential contamination sites. If the results indicate that contamination exists at levels above regulatory action standards, then the SJCDEH shall be notified and the site shall be remediated in accordance with recommendations made by SJCDEH, RWQCB, DTSC, or other appropriate federal, state, or local regulatory agencies. The agencies involved would depend on the type and extent of contamination. Remediation activities could include but would not be limited to the excavation of contaminated soil areas and hauling of contaminated soil materials to an appropriate offsite disposal facility, mixing of	(b) Before structure demolition	(b) Project applicant	(b) Verify completion of environmental site assessment and preparation of a site remediation plan, if necessary.	

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	onsite soils, and capping (i.e., paving or sealing)of contaminated areas. The project contractors shall prepare a site plan that identifies any necessary remediation activities appropriate for proposed land uses, including excavation and removal of onsite contaminated soils, and redistribution of clean fill material on the project site. The plan shall include measures that ensure the safe transport, use, and disposal of contaminated soil and building debris removed from the site. In the event that contaminated groundwater is encountered during site excavation activities, the contractor shall report the contamination to the appropriate regulatory agencies, dewater the excavated area, and treat the contaminated groundwater to remove contaminants before discharge in the sanitary sewer system. The development contractors shall be required to comply wit the plan and applicable local, state, and federal laws and the requirements of the City of Manteca for dewatering discharge. The plan shall outline measures for specific handling and reporting procedures for hazardous materials, and disposal of hazardous materials removed from the site at an appropriate offsite disposal facility. In addition, the following measures shall apply to construction activities as appropriate. (1) The SJCDEH shall be notified if evidence of previously undiscovered soil or groundwater contamination (e.g., stained soil, odorous groundwater) is encountered during excavation. Any contaminated areas shall be remediated in accordance with recommendations made by SJCDEH, RWQCB, DTSC, or other appropriate federal, state, or local regulatory agencies as generally described above. (2) Before demolition of any onsite buildings, the project applicant shall hire a qualified consultant to investigate whether any of these buildings contain asbestos-containing materials and lead that could become friable or mobile during demolition activities. If found, the asbestos-containing materials and lead shall be removed by an accredited inspector in accordance with EPA and Cal-OSHA standards.				

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	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 asbestos-containing materials and lead shall be disposed of properly at an appropriate offsite disposal facility.				
4.7 Geology, Soils and Seismicity					
☆ 4.7-2	Project facilities shall be designed for maximum horizontal ground surface accelerations of at least 0.22g. The project site is located with CBC seismic zone 3, indicating that a horizontal ground surface acceleration of 0.3g at the URSP site would have a 10% probability of being exceeded in a 50-year project design life. This estimate incorporates the possibility of a seismic event associated with the Great Valley Fault System. A surface acceleration of 0.22g exceeds the maximum ground surface accelerations previously recorded in the area (estimated at 0.16g), which occurred during the 1906 San Francisco earthquake. If project facilities are designed to meet minimum safety standards during a seismic event with ground surface accelerations of at least 0.22g, the risk of loss, injury, or death from ground shaking would be substantially reduced.	Before issuance of building permits	Project applicant	Verify project facilities designed for maximum horizontal ground surface accelerations of at least 0.22g	
☆ 4.7-4	Develop and Implement an Erosion Control Plan. A grading and erosion control plan shall be prepared by a California Registered Civil Engineer and submitted to the Manteca Department of Public Works for all new development. The plan shall be consistent with the CBC grading requirements and shall include the site-specific grading proposed for the new development. The project applicant shall ensure that the construction contractor is responsible for securing a source of transportation and deposition of excavated materials. Implement Best Management Practices (BMPs). To ensure that soils do not directly or indirectly discharge sediments into surface waters as a result of construction activities, water quality protection measures shall be implemented by the project applicant/construction contractor during construction as discussed in Section 3.9, Hydrology and Water Quality. The mitigation measures shall be in accordance with Central Valley RWQCB regulations involving control of stormwater discharges under the National Pollutant Discharge Elimination System	Before and during construction activities	Residential and commercial project applicant	Verify preparation of grading and erosion control plan; and filing of Notice of Intent to the Central Valley RWQCB; verify preparation of Storm Water Pollution Prevention Plan	

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	(NPDES) program, which requires the applicant to: (c) File a Notice of Intent (NOI) to discharge stormwater with the Central Valley RWQCB (d) Prepare a Storm Water Pollution Prevention Plan (SWPPP) that identifies best management practices (BMPs) that would be employed to prevent or minimize the discharge of sediments and other contaminants with the potential to affect beneficial uses or lead to violation of water-quality objectives (e) Complete a self-implemented annual monitoring program and prepare a report on BMP performance (f) BMPs shall include dust control measures such as wetting the top layer of exposed soils and covering soil stockpiles, as necessary.				
4.8 Paleontological Resources					
4.8-1	For earth-moving activities at the project site, the project applicant shall implement the following measures: (1) Before the start of construction activities, construction personnel involved with earth-moving activities shall be informed of the possibility of encountering fossils, the appearance and types of fossils likely to be seen during construction activities, and proper notification procedures should fossils be encountered. This training shall be prepared and presented by a qualified paleontologist. (2) If paleontological resources are discovered during earth-moving activities, the construction crew shall immediately cease work in the vicinity of the find. The City or the project applicant shall retain a qualified paleontologist to evaluate the resource and prepare a proposed mitigation plan in accordance with Society of Vertebrate Paleontology guidelines (1995). The proposed mitigation plan may include a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. Recommendations determined by the City to be	Before and during construction activities	Residential and commercial project applicant	Verify construction personnel are trained to identify paleontological resources	

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	necessary and feasible shall be implemented by the project applicant before construction activities can resume at the site where the paleontological resources were discovered.				
4.9 Hydrology and Water Quality					
4.9-1	The project applicant shall consult with the Central Valley RWQCB to acquire the appropriate regulatory approvals that may be necessary to obtain Section 401 water quality certification, SWRCB statewide NPDES stormwater permit for general construction activity, Central Valley RWQCB NPDES permit for construction dewatering activity, and any other necessary site-specific WDRs or waivers under the Porter-Cologne Act. As required under the NPDES stormwater permit for general construction activity, the project applicant shall prepare and submit the appropriate NOIs and prepare the SWPPP and any other necessary engineering plans and specifications for pollution prevention and control. The SWPPP and other appropriate plans shall identify and specify the use of erosion and sediment control BMPs, means of waste disposal, implementation of approved local plans, nonstormwater management controls, permanent post-construction BMPs, and inspection and maintenance responsibilities. The SWPPP would also specify the pollutants that are likely to be used during construction that could be present in stormwater drainage and nonstormwater discharges. A sampling and monitoring program would be included in the SWPPP that meets the requirements of SWRCB Order 99-08-DWQ to ensure that the BMPs are effective. Construction techniques shall be identified that would reduce the potential for runoff, and the plan shall identify the erosion and sedimentation control measures to be implemented. The SWPPP shall also specify spill prevention and contingency measures, identify the types of materials used for equipment operation, and identify measures to prevent or clean up spills of hazardous materials used for equipment operation and hazardous waste. Emergency procedures for responding to spills shall also be identified. BMPs identified in the SWPPP shall be used in all subsequent site development activities. The SWPPP would identify personnel training requirements and procedures that would be used to ensure that workers are aware of permit requirements and proper installation and performance	Before construction activities	Project applicant	Verify acquisition of 401 Water Quality Certification, NPDES stormwater permit, and NPDES construction dewatering permit	

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	inspection methods for BMPs specified in the SWPPP. The SWPPP shall also identify the appropriate personnel responsible for supervisory duties related to implementation of the SWPPP. All construction contractors shall retain a copy of the approved SWPPP on the construction site. (g) The project applicant shall also prepare and submit an NOI and acquire authorization for the Central Valley RWQCB NPDES permit for construction dewatering activities that may be necessary for foundation and utility installations within the URSP site. Under SWRCB Order 99-08-DWQ, as amended, the SWRCB has determined that implementation of a SWPPP, the BMPs identified in the SWPPP, and the monitoring and sampling program required in the SWPPP are considered to meet the water quality requirements of the Porter-Cologne Act, barring a violation identified by the monitoring or sampling procedures.				
4.9-4	The project applicant shall conduct groundwater testing in consultation with the City to ensure that groundwater beneath the site is suitable for potable uses and would meet applicable drinking water quality standards with treatment (if necessary). If testing concludes that well groundwater quality does not meet applicable standards, the applicant, in consultation with the City, shall locate a suitable alternate well location within the project site first and at offsite locations if necessary. The siting and location of these wells shall be done in coordination the City Public Works Department. Because it is unknown whether the proposed groundwater wells would result in a substantial drop in local groundwater elevations and no other feasible mitigation is available, for purposes of CEQA, this impact would be considered significant and unavoidable.	Before construction activities	Project applicant	Verify completion of groundwater testing and identification of suitable well site	
4.10 Public Services and Utilities					
4.10-3	An interim solution for conveying wastewater generated by the project to the City's collection system shall be designed and prepared in consultation with the City Public Works Department prior to construction of the project. Exclusive of model homes, no element of	Before construction activities	Project applicant	Approve design of interim wastewater conveyance system	

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	the project shall be occupied until adequate conveyance facilities are in place to serve the development, as deemed by the City. The proposed system shall comply with the City's requirements for wastewater infrastructure facilities. Specific details on the sizing of proposed pipelines shall be determined in consultation with the City and shall provide sufficient capacity to meet project-related wastewater conveyance demands.				
4.11 Transportation and Circulation					
4.11-1	The installation of a traffic signal at the Lathrop Road/I-5 intersection has been identified in the City of Lathrop CFF and would improve the operation of this intersection to acceptable levels, LOS C, with implementation of the project. The project applicant shall pay its fair share of the cost of these identified improvements through payment of traffic impact fees to the City of Lathrop CFF program. Based on Caltrans methodology to determine fair share costs, which divides project-generated traffic by the difference between the cumulative traffic and the existing plus approved projects traffic, the URSP fair share for this intersection would be 2.2% of the total cost for signalization. The total dollar amount shall be determined in consultation with the appropriate agencies when final project approvals are sought. Because implementation of this mitigation measure is dependent on circumstances beyond the applicant's and the City's control and would be subject to the control of the City of Lathrop, it is unknown whether this mitigation would be implemented by the time the URSP builds out. Therefore, for purposes of CEQA, this would be a significant and unavoidable impact.	Before issuance of building permits	Project applicant	Verify payment of fees to City of Lathrop CFF program	
4.11-2a	The project applicant shall pay its fair share of the cost for installation of a traffic signal at the Lathrop Road/Main Street intersection. Implementation of this measure would improve the operations of this intersection to LOS D. Using Caltrans methodology to determine fair share costs, the URSP project would be responsible for approximately 15.8% of the total cost of this improvement. The project applicant shall fully fund the installation of a traffic signal at this intersection and shall coordinate with the City on its installation. Funds for the	Before final occupancy of the first housing unit of the development	Project applicant	Verify payment of fees into City of Manteca's Public Facilities Improvement Program	

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	signal shall be deposited into the City's Public Facilities Improvement Program (PFIP) fund. As the area builds out and PFIP fees are collected, the City shall refund or issue credit for 84.2% of the total cost for the traffic signal improvement. The total dollar amount shall be determined in consultation with the appropriate agencies when final project approvals are sought. Because this intersection currently operates unacceptably, installation of the traffic signal shall be completed before final occupancy of the first housing unit developed as part of Phase 1.				
4.11-2b	The project applicant shall pay its fair share of the cost for installation of a traffic signal at the Airport Way/Louise Avenue intersection. Implementation of this measure would improve operations at this intersection to LOS C. Using Caltrans methodology to determine fair share costs, the URSP project would be responsible for approximately 3.0% of the total cost for this improvement. The total dollar amount shall be determined in consultation with the appropriate agencies when final project approvals are sought. Payment for improvements will occur as part of the collection of Public Facilities Improvement Program (PFIP) fees at the issuance of building permits.	Before issuance of building permits	Project applicant	Verify payment of fees into City of Manteca's Public Facilities Improvement Program	
4.11-2c	The project applicant shall pay its fair share of the cost for installation of a traffic signal at the Lathrop Road/McKinley Avenue intersection. Implementation of this measure would improve operations at this intersection to LOS B. Using Caltrans methodology to determine fair share costs, the URSP project would be responsible for approximately 28.6% of the total cost for this improvement. The total dollar amount shall be determined in consultation with the appropriate agencies when final project approvals are sought. Payment for improvements will occur as part of the collection of Public Facilities Improvement Program (PFIP) fees at the issuance of building permits.	Before issuance of building permits	Project applicant	Verify payment of fees into City of Manteca's Public Facilities Improvement Program	
4.11-2d	The project applicant shall pay its fair share of the cost for construction of southbound left turn and right turn lanes along Union Road at the Lathrop Road/Union Road intersection. The project applicant shall also pay its fair share of the cost for construction of a right turn lane along westbound Lathrop Road at this intersection. These improvements shall be constructed concurrently with Union Ranch development. Implementation of these measures would	Before issuance of building permits	Project applicant	Verify payment of fees into City of Manteca's Public Facilities Improvement Program	

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	improve operations of this intersection to LOS D. Using Caltrans methodology to determine fair share costs, the URSP project would be responsible for approximately 35.6% of the total cost for this improvement. The total dollar amount shall be determined in consultation with the appropriate agencies when final project approvals are sought. Payment for improvements will occur as part of the collection of Public Facilities Improvement Program (PFIP) fees at the issuance of building permits.				
4.11-2e	The project applicant shall construct northbound and southbound left turn lanes along Union Road at the Union Road/CMU North access intersection to provide access to the CMU site. The northbound left turn lane shall provide 225 feet of storage, and the southbound left turn lane shall provide 125 feet of storage. The project applicant shall also install a traffic signal at this intersection. Implementation of these measures would improve operations of this intersection to LOS C.	Before issuance of building permits	Project applicant	Verify construction of northbound and southbound left turn lanes; verify installation of traffic signal	
4.11-2f	The project applicant shall construct an eastbound left turn lane along Lathrop Road at the Union Road/CMU West Access intersection to provide access to the CMU site. The left turn lane shall provide 275 feet of storage. The project applicant shall also install a traffic signal at this intersection. This signal shall be placed no closer than 1,200 feet from the existing traffic signal at the Lathrop Road/Union Road intersection. Implementation of these mitigation measures would improve operations of this intersection to LOS B.	Before issuance of building permits	Project applicant	Verify construction of eastbound left turn lane; verify installation of traffic signal	
4.11-2g	The project applicant shall construct an eastbound left turn lane along Lathrop Road at the Union Road/CMU East Access intersection to provide access to the CMU site. The left turn lane shall provide 175 feet of storage. The project applicant shall also install a traffic signal at this intersection. Implementation of these measures would improve operations of this intersection to LOS A.	Before issuance of building permits	Project applicant	Verify construction of eastbound left turn lane; verify installation of traffic signal	
4.11-3b	The project applicant shall install a traffic signal at this intersection. Implementation of this measure would improve operation of this intersection to LOS A.	Before issuance of building permits	Project applicant	Verify installation of traffic signal	
4.11-4	Before project construction activities begin, the project applicant shall prepare a construction traffic control plan that shall be applied to all construction activities associated with the URSP project. The plan	Before construction activities	Project applicant	Verify preparation of construction traffic plan	

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	shall include, at a minimum, the following conditions: (h) Local roadways will be jointly monitored by the City and project applicant every six months to determine whether project related construction traffic is degrading roadway conditions. Roadways with potential to be damaged by construction traffic and included in the monitoring effort shall be agreed to by the City and the project applicant. All degradation of pavement conditions because of URSP-related construction traffic will be fully repaired by the project applicant to the satisfaction of the City of Manteca.				
4.11-5	The CMU developer shall work with the City to design vehicular, pedestrian, and bicycle access within the Union Ranch CMU areas, and between the Union Ranch development and proposed development to the north and west that meets both City of Manteca General Plan standards and URSP standards.	Before construction activities	Commercial project applicant	Verify the design of vehicular, pedestrian, and bicycle access to the CMU area conforms to city standards	
4.11-6	The project applicant shall prepare a Construction Management Plan and submit the plan to the City of Manteca Public Works Department for review and approval. The Construction Management Plan shall identify the timing of construction and the timing of elements that would result in the full or partial blockage of local roadways. The plan shall specify the measures that would be implemented to minimize traffic-related impacts including construction parking during construction, which shall be limited to onsite areas or facilities designated for parking uses (i.e., parking garage). These measures could include, but are not limited to the following: use of signage notifying travelers that they are entering a construction zone, and use of cones, flaggers, and guide-vehicles to direct traffic through the construction zone. A copy of the plan shall be submitted to local emergency response agencies and these agencies shall be notified at least 14 days before the commencement of construction that would partially or fully obstruct local roadways.	Before construction activities	Project applicant	Verify preparation and submittal of Construction Management Plan Verify Construction Management Plan submitted to local emergency response agencies	
4.11-7	The CMU developer shall coordinate with the City of Manteca to identify the required number of parking spaces for both CMU areas. The developer shall design the CMU areas to provide the appropriate	Before construction	Commercial project applicant	Verify parking design conforms to	

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	number of spaces, and shall design the commercial parking areas in accordance with the City's zoning code as far as stall size, aisle size, and access driveways.	activities		city standards	
4.11-8	The project applicant shall coordinate with the City of Manteca Public Works Department to identify the necessary facilities that would be required to provide the following: 1. Connect the project's proposed bicycle lanes and/or multi-use trail to the existing London Avenue bicycle lanes; 2. Add bicycle lanes along the east side of Airport Way as part of project-related Airport Way road improvements; 3. Add bicycle lanes along both sides of Union Road to the northern edge of proposed development; 4. Provide bicycle and pedestrian connectivity between the two Union Ranch housing developments and the planned commercial centers; and 5. Provide bicycle and pedestrian connectivity between the two Union Ranch housing developments and proposed development to the north and west.	Before construction activities	Project applicant	Verify bicycle plans conform to city requirements	
4.11-9	The City is currently developing a citywide bus transportation system. The project developers shall coordinate with the City to ensure that bus transportation services are provided to the project in accordance with City standards.	Before completion of bus transportation system plans	Project applicant	Verify that bus services are planned for the proposed development	
4.12 Cultural Resources					
4.12-3	At the onset of construction, all construction personnel shall be alerted to the possibility of buried cultural resources. If artifacts or unusual amounts of stone, bone, or shell or significant quantities of historic-era artifacts are uncovered during construction activities, work within 50 feet of the specific construction site at which the suspected resources have been uncovered shall be suspended, and the property owner shall be immediately contacted. At that time, the City or the project proponent shall retain a professional archaeologist, who shall conduct a field investigation of the specific site and recommend mitigation	Before construction activities	Project applicant	Verify construction personnel informed of possible buried cultural resources	

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	deemed necessary for the protection or recovery of any cultural resources concluded by the archaeologist to represent significant or potentially significant resources as defined by CEQA. The City or the project proponent shall implement the mitigation before the resumption of construction activities at the construction site.				
4.12-4	If human remains are discovered at any project construction sites during any phase of construction, work within 50 feet of the remains shall be suspended immediately, and the City of Manteca, the project proponent, and the county coroner shall be notified immediately. If the remains are determined by the county coroner to be Native American, the Native American Heritage Commission (NAHC) shall be notified within 24 hours, and the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. The City or the project proponent shall also retain a professional archaeologist with Native American burial experience who shall conduct a field investigation of the specific site and consult with the Most Likely Descendant (MLD) identified by the NAHC. As necessary, the archaeologist may provide professional assistance to the MLD including the excavation and removal of the human remains. The City or the project proponent shall implement any mitigation before to the resumption of activities at the site where the remains were discovered.	During construction activities	Project applicant	Verify construction activities cease if human remains discovered	