

CHAPTER TWELVE: ENVIRONMENTAL REVIEW

California Environmental Quality Act
Summary of Environmental Issues/Impacts
Summary of Potential Mitigation Measures

Chapter Twelve: Environmental Review

12.1 CALIFORNIA ENVIRONMENTAL QUALITY ACT

An Environmental Impact Report (EIR) will be prepared for the Tidewater Crossing site pursuant to the California Environmental Quality Act (CEQA). CEQA requires every significant project to evaluate the impacts of the proposed development on the community and environment. Specific impacts will be discussed in the EIR and submitted to the City of Stockton under a separate cover.

12.2 SUMMARY OF ENVIRONMENTAL ISSUES/IMPACTS

The Notice of Preparation (NOP) and Initial Study of the Environmental Impact Report have been prepared for the Tidewater Crossing Master Development Plan by LSA Associates, Inc. The following is a preliminary overview of potential impacts and any associated mitigation measures. Only items identified as having potential impacts have been listed here. For a complete discussion of all issues, refer to the Initial Study.

12.2.1 Aesthetics

Would the project:

Substantially degrade the existing visual character or quality of the site and its surroundings?

The project will not substantially degrade the existing visual character or quality of the site and its surroundings. However, the project will change the existing visual character of the site and surroundings, transitioning from a rural/agrarian character to an urban character. The exception occurs to the north where the project abuts the Stockton Metropolitan Airport, also a highly urbanized use. Views of the project area from the west, south and east will change due to the conversion of land from agriculture to urban uses. Potential project visual effects may occur at the rural/urban interface.

Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?

The project will create substantial new sources of light. After project buildout, there will be new sources of light and glare, primarily during nighttime hours, associated with the proposed residential, commercial and industrial uses. Light/glare from the light industrial

land uses could be significant, especially if the uses operate on a 24-hour basis. However, the planned industry will be isolated from the existing and planned residential uses. As a result of the distance/buffers, industrial lighting should not create a light/glare impact. Glare from residential structures is not expected to be significant due to the traditional use of non-glare construction materials.

The planned development will require street lighting, which will introduce a significant, persistent light source where there previously was none. This new light source may negatively impact wildlife species located within, near, or traveling through the project area.

12.2.2 Agricultural Resources

Would the project:

Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

As identified on the Farmland Mapping and Monitoring Program, portions of the project site are considered Prime Farmland and Farmland of Statewide Importance. Additionally, three of the four soils mapped on the project site are Prime Farmland and Farmland of Statewide Importance soils (Hollenbeck silty clay 0 to 2 percent slopes, Stockton clay 0 to 2 percent slopes, and Veritas fine sandy loam 0 to 2 percent slopes). The proposed project will convert 352 acres of Prime Farmland and 520 acres of Farmland of Statewide Importance. The conversion of Farmland to urban uses will create a net loss of agricultural land within San Joaquin County.

Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?

Currently, the project is zoned for agricultural and industrial uses under the San Joaquin County General Plan. Implementation of the proposed project includes a City of Stockton General Plan Amendment that would bring the project site under the jurisdiction of the City of Stockton. Once this entitlement is approved, the project would be consistent with the City's General Plan. Planned uses include residential and industrial uses that would eliminate agricultural uses.

Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use?

Other lands immediately surrounding the project site that remain in agricultural production are outside of the City of Stockton's jurisdiction, and are outside of the urban services boundary/sphere of influence. As a result, conversion of adjacent agricultural lands to urban uses would require the extension of the urban services boundary and a sphere of influence amendment if those lands are ultimately considered for annexation to the City of Stockton. In addition, amendments to the City's General Plan and re-zoning would be required, as well as further environmental review.

12.2.3 Air Quality

Conflict with or obstruct implementation of the applicable air quality plan?

The project plan would be inconsistent with the Air Quality Attainment Plan due to the change in General Plan land use from agricultural to urban.

Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

The project may contribute to an existing air quality violation. The City of Stockton and San Joaquin County lie within the San Joaquin Valley Air Pollution Control District. The Air District is in non-attainment for ozone, PM10 and NOx. It is likely that stationary and mobile sources generated by the proposed project will contribute towards further non-attainment for the region. Construction equipment emissions will also temporarily exceed thresholds for air pollutants. The proposed land use mix will generate a positive jobs-to-housing ratio thus improving the regional air quality conditions accordingly.

Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

The project may result in a net increase of criteria pollutants in a nonattainment area. The proposed project will introduce residential, commercial, and industrial uses creating a balanced mix of land uses and positive jobs-to-housing ratio. This could potentially reduce

commute distances in the region and improve long-range air quality conditions. Nonetheless, the project will introduce a significant number of new vehicles to the area on a permanent basis. This could create conditions which exceed established thresholds for CO, ozone, and other pollutants related to vehicle exhaust emissions. Uses associated with industrial operations may introduce air pollutants to the area.

The use of construction equipment on site would increase localized vehicle exhaust emissions while grading activities would exceed the defined thresholds for dust emissions. The construction related impacts are short-term in nature. However, on a cumulative basis, when combined with other development projects, project construction would generate fugitive dust and pollutant emissions that could be significant. An air quality analysis will be prepared for the project.

Expose sensitive receptors to substantial pollutant concentrations?

The project may expose sensitive receptors to criteria pollutant concentrations generated by traffic sources, or from project-related land uses and/or adjacent and use point sources. Industrial uses will be located near residential uses. Light industrial uses are proposed within the project limits that should not contribute hazardous air pollutants (compared with heavy industry). Additionally, the proximity of the Stockton Metropolitan Airport may introduce air pollutants to the proposed residential uses. However, it is expected that, as a result of the frequency of air traffic, combined with the distance to residential uses, air-traffic related pollutants should not present a health hazard. Increases in criteria vehicular traffic-related pollutants are expected and could result in a health hazard for persons residing within or adjacent to the project in the future. An air quality analysis will be prepared and will identify the potential air quality impacts on sensitive receptors, including a general health risk assessment should pollutant concentrations exceed State or Federal air quality standards.

12.2.4 Biological Resources

Would the project:

Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

The project may create adverse effects on special status species, due to the conversion of potential habitat. The project site possesses suitable habitat for Swainson's hawk, giant garter snake, and burrowing owls. Development of the site may impact suitable habitat present for these special status species.

Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Although the areas along French Camp Slough and a portion of the South Fork of Little John's Creek will be designated as open space, the project may impact this riparian habitat and some oak trees. If riparian vegetation along French Camp Slough and a portion of the South Fork of Little John's Creek is removed as part of the project, a Streambed Alteration Agreement will be required by CDFG.

Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?

A Biological Resources Evaluation will be prepared for the proposed project. Waters of the U.S. and potential impacts will be identified.

Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The project site is within the mapped boundaries for lands covered by the SJMSCP. Once the project site is annexed into the city, the project applicant will be required to adhere to the provisions outlined in the habitat plan.

If oak tree resources are affected, the applicant will be required to conform to the City's Oak Tree preservation policy and ordinance requirements.

Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?

The project site is within the mapped boundaries for lands covered by the San Joaquin Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). The proposed project will comply with conditions set forth in the SJMSCP for Swainson's hawk, giant garter snake, burrowing owl and other special status species. The project applicant will be required to comply with the SJMSCP fee program any other relevant City conditions and fees.

12.2.5 Cultural Resources

Would the project:

Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

The Stockton Metropolitan Airport Master Plan states "that there were two areas where Native American artifacts were encountered at the ground surface." Due to the proximity of the airport north of the project, the potential for cultural sites to exist within the project boundary cannot be ruled out.

Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Historic archaeological resources and activities are known to have occurred in the area. An inventory and analysis of any such resources will need to occur on the project site.

12.2.6 Geology and Soils

Would the project:

Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

The project site is comprised of the following soil types:

Hollenbeck silty clay 0 to 2 percent slope: This moderately well drained, nearly level soil is in interfan basins. It is deep to a hardpan. It is formed in alluvium derived from mixed rock sources. Permeability is slow. Available water capacity is moderate. The shrink-swell potential is high. Depth to the water table is more than 6 feet, but water may be briefly perched above the hardpan. Runoff is slow, and the hazard of water erosion is slight.

Jacktone clay, 0 to 2 percent slopes: This somewhat poorly drained, nearly level soil is in basins. It is moderately deep to a hardpan. It is formed in alluvium derived from mixed rock sources. Drainage has been improved by levees and reclamation projects. Permeability is slow. Water capacity is moderate. The shrink-swell potential is high. Depth to the water table is more than 5 feet, but water may be briefly perched above hardpan. Runoff is slow, and the hazard of water erosion is slight.

Stockton clay 0 to 2 percent slopes: This somewhat poorly drained, nearly level soil is in basins. It is deep to a hardpan. It is formed in alluvium derived from mixed rock sources. Drainage has been improved by levees and reclamation projects. Permeability is slow. Available water capacity is moderate. The shrink-swell potential is high. Depth to the water table is more than 5 feet, but water may be briefly perched above the hardpan. Runoff is slow, and the hazard of water erosion is slight.

Veritas fine sandy loam 0 to 2 percent slopes: This moderately well drained, nearly level soil is on low fan terraces. It is deep to a hardpan. It is formed in alluvium derived from mixed rock sources. Permeability is moderately rapid. Available water capacity is moderate. Depth to the water table is more than 6 feet, but water may

be briefly perched above the hardpan. Runoff is slow, and the hazard of water erosion is slight.

Result in substantial soil erosion or the loss of topsoil?

Construction of the proposed project would require grading for proposed roadways and infrastructure. These activities will create ground disturbance which may lead to erosion on unprotected graded surfaces if exposed to rainfall and surface run-off.

It should be noted that site development will eliminate the effects of wind and water erosion associated with previous agricultural operations. With an increase in paved surfaces associated with development, soil surfaces will be protected in place and should reduce sedimentation of adjacent resources.

12.2.7 Hazards and Hazardous Materials

Would the project:

Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

With proposed light industry, the project should not involve the transport, use, or disposal of hazardous materials within those uses. Therefore, the project is not expected to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Any hazardous substances that may be involved with construction activities will be identified on a Spill Prevention and Counter-Measure Plan (SPCMP) developed for the project. This SPCMP will identify all hazardous substances, methods for cleanup, and measures to protect construction workers.

Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Light industrial uses are planned for the project, which typically do not utilize hazardous materials or substances. Nevertheless, the

planned industrial uses will be located over one-quarter mile from planned school facilities (approximately 2,400 feet). In addition, the planned elementary school will be located approximately one-quarter mile from the Union Pacific Railroad.

Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area?

The proposed project is located directly south of the Stockton Metropolitan Airport. The project will be subject to the San Joaquin Airport Land Use Plan requirements established for the airport to ensure land use compatibility, and safety for adjacent residents. For the proposed project, the land use concept avoids placement of residential land uses within the Airport Land Use Plan crash hazard zones. Residents/employees associated with the proposed project should not be exposed to airport-related hazards.

The San Joaquin County Airport Land Use Plan indicates that the proposed project lies within the airport horizontal zone and that certain land use restrictions apply. Although the project does not fall within the immediate airport zones, it lies within the Airport Areas of Influence and will be subject to restrictions for noise and potential hazards to aircraft as indicated in the plan. The owners, developers, and/or successors-in-interest will be required to sign a "Deed of Avigation and Hazard Easement" regarding aircraft overflights, restrictions, etc.

12.2.8 Hydrology and Water Quality

Would the project:

Violate any water quality standards or waste discharge requirements?

The proposed project will change the existing agricultural land use to commercial, industrial, and residential uses. While this land use change will eliminate a source of agricultural pesticides and fertilizers that may have impacted water quality adjacent to the site, the landscaping associated with the proposed project would also require the use of pesticides, herbicides, and fertilizers. The potential for discharge of hazardous materials relating to industrial uses also exists.

Negative impacts to water quality from these pollution sources could persist.

Construction activities will create ground disturbance that may increase erosion and sedimentation in nearby water courses. The project applicant will be required to implement standard erosion control measures to ensure that storm water runoff does not adversely impact water quality in these waterways.

The nature of the proposed development may also impact water quality in French Camp Slough, the South Fork of Little John's Creek and their tributaries. The project will add significant amounts of impervious areas, potentially increasing the amount of storm water runoff. Vehicular traffic will also increase as a result of project development. These conditions create an increased potential for hydrocarbons, sediments, heavy metals, and other pollutants to reach local waterways via storm water runoff.

Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

The project will not substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level. Upon project implementation, a majority of the project site will be converted to urban uses, thus increasing the site runoff and reducing infiltration into the shallow groundwater table. Nonetheless, the project site is not known as a resource to replenish or recharge deep aquifer groundwater supplies. The project design proposes to retain an open space corridor along French Camp Slough and South Fork of Little John's Creek, with the likely requirements to integrate a flood control/detention basin adjacent to the corridor. It is expected that the basin will be designed to avoid infiltration of the detained runoff into the groundwater basin.

Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite?

The project will not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite. The existing drainage pattern of the site will be altered to accommodate project development, including the construction of a flood control/detention basin to accommodate peak flood flows. Construction and operation of the project may create erosion. It is expected that erosion and siltation will be controlled through standard engineering controls and practices.

Substantially alter the existing drainage pattern of the site or area, including through the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite?

Upstream hydrologic conditions are known to have a substantial effect on site hydrology and drainage conditions. A floodplain hydrology report will be prepared and its findings and recommendations will be included in the EIR. The applicant is proposing to construct a 30-50 acre flood control/detention basin within the western portion of the planned industrial uses. The flood control/detention basin will be sized to accommodate peak flows during storm events, and pumped back into French Camp Slough once the peak has passed. Weir inlets will be constructed in two locations to divert peak flows into the basin. Weirs will be provided on the north and south sides of the basin to intercept flows from Weber Slough and French Camp Slough, respectively. Earth material removed from the basin will be spread throughout the project area, raising the site elevation and assisting in removing the site from the 100-year flood plain. A cut-off drain is also planned along the southern project boundary (Villages H and I) to intercept and convey flows from the east into French Camp Slough. The technical report will evaluate the planned flood control concept and potential flood-related impacts associated with upstream hydrology and removing the project site and surrounding areas from the floodplain.

Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

The project would contribute runoff waters that would exceed the capacity of the stormwater drainage system. The project will be required to mitigate for the additional runoff by incorporating a flood control/detention basin into the project to remove peak flood flows from the local drainages.

The project will not provide substantial additional sources of polluted runoff. By implementing the planned development project and eliminating the widespread use of pesticides, fertilizers, insecticides, etc. associated with agricultural production, water quality conditions in the runoff should improve.

Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard boundary or Flood Insurance Rate Map or other flood hazard delineation map?

Portions of the project are located within Flood Zone A, AO, B, and C. These zones are defined as follows:

- A: Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
- A1-A3: Areas of 100-year flood; base flood elevations and flood hazard factors determined.
- AO: Areas of 100-year shallow flooding where depths are between one and three feet. Average depths of inundation are shown, but no flood hazards are determined.
- B: Areas between limits of the 100-year and 500-year flood; or certain areas subject to 100-year flooding with average depths less than 1 foot or where the contributing drainage area is less than 1 square mile; or areas protected by levees from the base flood.
- C: Areas of minimal flooding.

As part of the development, a 30-50 acre flood control/detention basin will be incorporated into the parcel planned for industrial uses. Earth excavated from the basin will be used to raise pads elevations and remove lands from the 100-year flood zone.

Place within a 100-year flood hazard area structures that would impede or redirect floodflows?

The project proposes to modify existing levee structures with weirs to divert peak flood flows into an adjacent flood control/detention basin. Together with raising pad elevations, the future occupied portions of the project site will be removed from the 100-year flood plain.

12.2.9 Land Use and Planning

Would the project:

Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The project Land Use Plan as currently proposed conflicts with the adopted San Joaquin County General Plan. However, the project planning area was included in the City's Urban Service Area with the adoption of the 1990 General Plan. Implementation of the proposed project will require the approval of a General Plan Amendment to the City of Stockton's General Plan, Sphere of Influence boundary amendment (for a portion), annexation, and pre-zoning application to meet the entitlement requirements proposed by the applicant. Amendments to the City Master Storm Drainage, Sewer and Water Plans will also be required. All amendments will be subject to the approval of the City of Stockton or LAFCO.

Conflict with any applicable habitat conservation plan or natural community conservation plan?

The project site is covered by the San Joaquin Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). Both the County of San Joaquin and City of Stockton has adopted the SJMSCP. After annexation to the City of Stockton, the applicant will also be required to conform to the SJMSCP and any other relevant City conservation measures and fees.

12.2.10 Noise

Would the project:

Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?

It is expected that the proposed land uses will exceed standards set forth in the City's Noise Ordinance for on-site and/or off-site sensitive receptors. An overall noise assessment will be conducted for the project. In addition, temporary increases in noise are expected during construction activities.

Expose persons to or generate excessive groundborne vibration or groundborne noise levels?

Although light industrial uses are proposed, generation of substantial groundborne noise events or vibrations is not expected. Likewise, none of the other proposed project uses (residential, commercial, public) have characteristics that generate noise or vibration concerns. The UPRR and Stockton Metropolitan Airport may generate groundborne noise and vibration and could affect adjacent sensitive receptors within the project limits.

Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Noise levels will increase over the current levels as a result of site development.

Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

It is expected that the proposed land uses will exceed standards set forth in the City's Noise Ordinance. The predominant source of temporary or periodic noise events for the project will be from construction activity. The increase from construction will be similar to the noise generated by agricultural equipment and is not expected to be significant when compared to ambient levels. The noise increases may temporarily impact adjacent residences.

Be located within an airport land use plan area, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?

The proposed project is located adjacent to the Stockton Metropolitan Airport. The applicant will be required to prepare a noise study to identify noise effects from the airport on proposed uses.

A preliminary review of the project site and airport mapping contained in the San Joaquin Airport Land Use Plan indicates that a small portion of the project (Industrial) lies within 60 and 65 dB CNEL noise contours. Detailed permitted uses are applicable and soundproofing to reduce interior levels of exterior noise to less than 45 dBs will be required. The majority of the proposed project (residential) lies within areas that are outside these noise contours.

12.2.11 Population

Will the project:

Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?

The proposed project will add a maximum of approximately 7,576 people to the project site (3.11 persons per household). The 3.11 persons per household figure reflects the City's average household size.

Development to the north of the project site is limited by the airport. State Route 99 provides a barrier to the east. The unincorporated community of French Camp is located to the west. Lands to the south, however, may experience growth inducement due to the proximity of the proposed projects residential component. Development of project infrastructure may create a catalyst for adjacent growth.

Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?

The project will not displace existing housing units that are not under the applicant's ownership or control and will not generate additional demand for housing. The project is intended to supplement a deficient housing market within the City. A variety of housing types are proposed to offer future residents a housing choice, including housing affordability.

12.2.12 Public Services

Would the project:

Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:

Fire protection?

The project site is currently served by local fire protection districts. Upon project approval and annexation, the project area will be served by the City of Stockton Fire Department. The project will impact fire protection services due to the increased density of residential units and industrial and commercial facilities. This may impact response times and coverage provided by the City.

Police protection?

The site is currently served by the County Sheriff's Department and the California Highway Patrol. Upon project approval and annexation, the project area will be served by the City of Stockton Police Department. The project may impact police protection services including response times and coverage. The City of Stockton capital improvements budget includes funding for facility expansion and equipment purchases to accommodate projected service demands. Development impact fees exacted on new development projects for police protection services should assist in financing expanded services to the proposed project.

Schools?

The project site is located within the boundary of the Manteca Unified School District. Due to the size of the residential component, the project will impact schools. For planning purposes, the City estimates school sizes as follows: 800 students for an elementary school; 900 students for a middle school; and 2200-2600 students for a high school. The EIR will identify the projected number of students generated by the project, current capacities of nearby schools and the ability to accommodate new students. An on-site elementary school is proposed to accommodate elementary school-aged students.

Existing schools located in French Camp may have additional capacity to accommodate project-student needs.

Parks?

The project does impact existing parklands, as the area is largely agricultural and park lands are not present in the vicinity. The City's current adopted General Plan requires 3 acres of parkland per 1,000 individuals. However, the current General Plan update recommends park acreage dedication standards of 5 acres per 1,000 persons. This breaks down into 2 acres per 1,000 persons for neighborhood parks (5 to 15 acres in size) and 3 acres per 1,000 for community parks (over 15 acres in size). Based on the size of the residential component, the project would require 39 acres of usable park space to accommodate project-related park demand.

The increase in population generated by the proposed project may impact regional parks; these impacts will be evaluated. City standards require 5 acres per 1,000 people. The EIR will compare the population served by the regional parks to determine whether regional parklands are in excess or deficient of the County standards. City policy also includes consideration of acquiring additional land for regional parks in cooperation with San Joaquin County. The financing of open space areas and park space will occur pursuant to existing city policy, including funding via the Public Facilities Fees program.

Other public facilities?

Other public facilities may be impacted by the project, including available water supplies. The City will prepare a project specific water supply assessment to quantify the City's 20-year supply for this project. The water supply assessment will determine if adequate water supplies are available for the project. Wastewater requirements will be analyzed in a sewer master plan prepared specifically for the proposed project by the applicant's civil engineer.

Developer impact fees will be used to pay the fair share requirements for library services. For other governmental services, typical project exactions and taxes are expected to adequately fund their long-term maintenance.

12.2.13 Recreation

Would the project:

Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The increase in population generated by the project should not increase the burden on existing neighborhood, community, and regional parks, as the area is largely agricultural and park lands are not present in the vicinity. An analysis of the project impacts on City parks will be conducted to determine if the excess park land provides on-site will offset parkland requirements. A number of on-site parks are proposed for use by project residents. These parks will remain public and will be available for use by the general public.

12.2.14 Transportation/Traffic

Would the project:

Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?

The increase in population generated by the project's residential component and business-related traffic due to the project's commercial and industrial component will increase traffic in the project vicinity. This proposal was anticipated by the City's General Plan update as Village L (Specific Plan). A traffic analysis will be prepared for the project that examines local and regional traffic conditions with and without the project.

If determined to be a feasible component of the project, the traffic analysis will analyze the extension of Dixon Road across the active California National Guard taxiway at the airport and the future access to State Route 99 via Dixon Road.

Cause, either individually or cumulatively, exceedance of a level-of-service standard established by the county congestion management agency for designated roads or highways?

A technical traffic study will be prepared for the project that examines the regional traffic conditions with and without the project scenarios for future year horizons for both the current General Plan, as well as for the ongoing General Plan Update program.

Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The project does not include design features that create hazardous conditions. New access points will be created and traffic will increase as a result of the project. A traffic impact study will be prepared to determine the significance. While the project will likely create new access points along French Camp Road and South Airport Way, the circulation system will conform to City standards that will prevent hazardous conditions and ensure traffic safety. It should be noted that a potential conflict could occur with adjacent agricultural operations. Passenger and service vehicles may conflict with farm equipment being transported along adjacent public roads. This impact can be mitigated to a less than significant level through roadway geometrics and signage.

Other considerations that will be included in the EIR analysis are the proposed collector from Airport Way to the school on portions of private land and impacts relating to the air traffic and airport ground circulation.

Result in inadequate emergency access?

Site development is expected to enhance local circulation access due to the implementation of new circulation facilities. Access to both SR-99 and I-5 should improve with project implementation.

Result in inadequate parking capacity?

The project will not require parking beyond the facilities planned to serve the project. Adequate parking will be provided for residential, commercial and industrial uses. The City of Stockton Design Guidelines and City ordinances will be used to determine adequate levels of parking.

Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

Compliance with adopted policies, plans, and programs supporting alternative transportation will be further evaluated in the technical traffic study to determine potential impacts

12.2.15 Utilities and Service Systems

Would the project:

Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

The project will tie into the City's sanitary sewer system. Project wastewater treatment requirements will be consistent with the City's Sewer Master Plan, which includes provisions to expand the City's treatment plant. The City must comply with RWQCB wastewater discharge requirements. The proposed project is not expected to create exceedances of these requirements.

Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Existing and proposed wastewater conveyance facilities should accommodate proposed project demand. Sewage generated by the proposed project is not expected to burden the capabilities of the wastewater treatment plan due to the City's ability to meet increasing demand by expanding the treatment plant in modular components. The applicant will be required to provide a fair share in expanding waste water facilities as needed.

Approval of the Tentative Map for the proposed project will require amendments to the City's Sewer Master Plan. A sewer master plan is being prepared by the applicant's civil engineer for the proposed project that will amend the City's Plan.

The City will prepare a project specific water supply assessment to quantify the City's 20-year supply for this project. The water supply assessment will determine if adequate water supplies are available for the project.

Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The project's storm drainage system will be designed to capture storm water runoff and accommodate peak storm water events. Storm water from the project will be conveyed to the City's storm drainage system.

Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?

The City will prepare a project specific water supply assessment to quantify the City's 20-year supply for this project. The water supply assessment will determine if adequate water supplies are available for the project.

Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

The City's wastewater treatment plant has been designed to accommodate phased increases in capacity treatment. As a result, the project wastewater demand is not expected to significantly impact wastewater treatment capacity.

Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Four solid waste landfills are located within San Joaquin County and could service the proposed project. These facilities include: Austin Road/Forward Landfill, Foothill Sanitary Landfill, Forward, Inc., and North County Sanitary Landfill. These landfills have estimated closure dates of 2053, 2054, 2006, and 2035, respectively. Based on these estimated closure dates and available capacities, it is not expected that the proposed project will exceed capacities of County landfills. Additionally, continued implementation of the City's adopted Source Reduction and Recycling Element (March 1992) will ensure that contribution of solid waste materials to the landfills will not accelerate the depletion of remaining landfill capacity.

Comply with federal, state, and local statutes and regulations related to solid waste?

The project is expected to adhere to the typical management strategies for achieving waste reduction objectives, thus complying with federal, state, and local agency regulations.

12.2.16 Mandatory Findings Of Significance

Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

The site is not considered overly sensitive to biological resources due to the graded condition and long-term agricultural productivity occurring on the site. Nonetheless, impacts to biological special status species and wetlands may occur with project implementation. A biological assessment will be performed to determine the presence of special status species and wetland resources. Similarly, as a result of long term agricultural production and subsequent grading, cultural resource sensitivity is considered low. A cultural resource study will be performed to determine the presence/absence of cultural resources.

Does the project have impacts that are individually limited but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

The proposed project will create cumulative impacts. During construction, temporary air quality impacts are expected. Likewise, project implementation will create exceedances of air pollutants thresholds, thereby creating regional air quality issues. Other potentially significant impacts include the loss of agricultural lands, conversion of open space to urban uses, increases in traffic, and adequacy of surface and ground water supplies to serve the project.

Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

The project is expected to provide enhanced services and facilities for this region of South Stockton. Although the project is not anticipated to have adverse effects on human beings, either directly or indirectly, a more detailed analysis will be prepared in the EIR and impacts will be determined along with appropriate mitigation measures where feasible.

12.3 SUMMARY OF POTENTIAL MITIGATION MEASURES

The following mitigation measures are recommended for Tidewater Crossing:

Aesthetics

- Downcast lighting should be used where feasible.

Agricultural Resources

- If the City of Stockton approves an agricultural impact/land loss policy, the project will be required to participate in the mitigation mechanisms to offset the loss of agricultural lands.
- Potential residents in areas adjacent to agricultural land will be informed of possible conflicts associated with farming operations and the Right to Farm ordinance prior to purchasing homes. The developer will be required to disclose this information prior to opening of escrow.

Air Quality

- The project should be required to support and implement the policies contained in the Air Quality Attainment Plan.
- Standard dust and NO_x reducing measures will be required to minimize construction related emissions. Adhering to the AQAP control strategies should minimize the potential to aggravate the non-attainment status of ozone and PM₁₀. The applicant will also conduct an air quality analysis to determine and quantify project impacts and mitigation.

- The applicant will also conduct an air quality analysis to quantify project impacts and mitigation. Standard dust and NOx reducing measures will be required to minimize construction related emissions. Adhering to the AQAP control strategies should minimize the potential to aggravate the non-attainment status of ozone, PM10, and other air pollutants.
- In conjunction with the EIR air quality analysis will be prepared.

Biological Resources

- The applicant will be required to comply with provisions of the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). A Biological Resources Evaluation will be prepared to determine potential impacts and mitigation measures.
- If necessary, temporary fencing will be erected to exclude construction vehicles from entering riparian areas along French Camp Slough and a portion of the South Fork of Little John's Creek.
- If the project impacts water of the U.S., the project applicant will be required to consult with the Army Corps of Engineers (ACOE) under Section 404 of the Clean Water Act. If a Section 404 permit is required, the ACOE will impose conditions or measures to mitigate impacts.
- Address impacts to biological resources pursuant to the terms, standards and conditions outlined in the SJMSCP. Impacts to Oak trees shall be addressed pursuant to the City's Oak Tree preservation policy and ordinance requirements.

Cultural Resources

- Should any significant cultural sites be encountered provisions will be incorporated into the project design to protect the resource from public contact. During site construction, if deposits of cultural resources are encountered, provisions should be made to halt construction activities until qualified personnel can evaluate the findings and make further recommendations.

- An archaeological resources evaluation will be conducted on the project site to document potentially significant resources. Any significant archaeological sites should be preserved and development should avoid the resource. Provisions will be incorporated into the project design to protect any resources from public contact. During site construction, if deposits of pre-historic resources are encountered, provisions should be made to halt construction activities until qualified personnel can evaluate the findings and make further recommendations.
- A records search will be conducted for paleontological resources to determine potential presence, and the need for site surveys. During site construction, if deposits of paleontological resources are encountered, provisions should be made to halt construction activities until qualified personnel can evaluate the findings and make further recommendations.

Geologic Resources

- Geologic professionals will be required to prepare detailed geotechnical reports to determine specific design requirements for development areas. The geotechnical reports will be conducted as part of the environmental review process and will be used to determine potential impacts in the Draft EIR.
- Standard erosion control measures will be required to prevent erosion and sedimentation during construction. As a condition of the required NPDES permit, the applicant must prepare a Storm Water Pollution Prevention Plan (SWPPP).

Hazards and Hazardous Materials

- The SPCMP will be prepared prior to the commencement of any construction activities. The SPCMP will identify any and all hazardous materials that will be used or stored on site. The SPCMP will also identify any hazardous wastes that might be generated by the proposed project. The SPCMP will detail proper measures to handle and/or transport hazardous materials. The plan will also present procedures to contain or initiate cleanup of any spills. The phone number of the appropriate government agency will be contained on the plan in the event of any release of hazardous substances.
- A government records search and visual site survey will be conducted to determine the presence of hazardous materials/wastes and the potential to impact the project, if any.

Hydrology and Water Quality

- This project comes under the requirements of the City of Stockton's Stormwater Quality Control Criteria Plan (SWQCCP), as outlined in the City's Phase 1 Stormwater NPDES permit issued by the California Water Quality Control Board, Central Valley Region (Order No. R5-2002-0181). The implementation of SWQCCP became effective on November 25, 2003.
- As required by the Stormwater Quality Control Criteria Plan, the owners, developers, and/or successors-in-interest must establish a maintenance entity acceptable to the City to provide funding for the operation, maintenance, and replacement costs of the storm water best management practices.
- The property owners, developers, and/or successors in interest shall comply with any and all requirements, and pay all associated fees, as required by the City's Storm Water Pollution Program as set forth in its NPDES Storm Water Permit.
- The City revised its storm water requirements in November 2003 to comply with new state standards. The project applicant will be required to conform accordingly. All storm water discharges will be subject to NPDES permit requirements as set for by the RWQCB. Compliance with construction-related NPDES permit requirements

will also be required, including adherence to a storm water pollution prevention plan during construction.

- The property owners, developers, and/or successors in interest shall comply with any and all requirements, and pay all associated fees, as required by the City's Storm Water Pollution Program as set forth in its NPDES Storm Water Permit.
- A floodplain hydrology report will be prepared and its findings and recommendation will be included in the EIR. Removal of the project site and any surrounding area will require a Conditional Letter of Map Revision to be approved by FEMA.
- A storm water master plan will address on-site storm water conditions and will recommend appropriate mitigation. Those measures will be discussed in the EIR.
- The property owners, developers, and/or successors in interest shall comply with any and all requirements, and pay all associated fees, as required by the City's Storm Water Pollution Program as set forth in its NPDES Storm Water Permit.
- As required by the Stormwater Quality Control Criteria Plan, the owners, developers, and/or successors-in-interest must establish a maintenance entity acceptable to the City to provide funding for the operation, maintenance, and replacement costs of the storm water best management practices.
- The property owners, developers, and/or successors in interest shall comply with any and all requirements, and pay all associated fees, as required by the City's Storm Water Pollution Program as set forth in its NPDES Storm Water Permit.
- A storm drain master plan will address on-site storm water conditions and will recommend appropriate mitigation. Those measures will be discussed in the EIR.
- The property owners, developers, and/or successors in interest shall comply with any and all requirements, and pay all associated fees, as required by the City's Storm Water Pollution Program as set forth in its NPDES Storm Water Permit.

- A floodplain/hydrology report will be completed and its findings will be included in the analysis contained in the EIR. In addition, removal of portions of the project site from the 100-year flood plain designation will require a Conditional Letter of Map Revision to be approved by FEMA.

Noise

- Construction activities will be mitigated by limiting the hours of operation.
- The applicant will be required to prepare a noise study to identify effects on specific sensitive receptors. Any mitigation measures provided within this study will be implemented by the applicant.
- The applicant will be required to prepare a noise study to identify effects on specific sensitive receptors. Any mitigation measures provided within this study will be implemented by the applicant.
- The applicant will be required to comply with City noise ordinances pertaining to construction activities, including limiting the hours of construction activities.
- The applicant will be required to prepare a noise study to identify effects on specific sensitive receptors. A comparison of the Airport Land Use Plan to project land uses shall be included. Any mitigation measures provided within this study will be implemented by the applicant.

Public Services

- The property owners, developers and/or successors in interest will pay the applicable City of Stockton Public Facilities Fee.
- The applicant will be required to pay development impact fees to the school district to offset the cost for providing new facilities.
- The applicant proposes to dedicate parkland area to the City to offset parkland requirements. Also, the applicant will be required to pay fees to the City in accordance with the project

park dedication requirements to be applied to local (neighborhood and community) park improvements, and in accordance with the City's regional park land policies for providing regional park land area or equivalent fees.

- The City may require the financing of maintenance associated with parks, greenbelts, bike paths and landscaped areas to be addressed via the formation of a Landscape & Lighting District.
- The project applicant will be required to pay development impacts fees (as applicable) to pay for utility expansions and to reduce the burden on community library and other governmental services.
- The financing and construction of a fire station will occur pursuant to existing city policy, procedures and standards, including funding via the Public Facilities Fees program.

Transportation/Traffic

- In conjunction with the technical traffic study, future mitigation requirements (e.g., roadway improvements) will be proposed to reduce the project and cumulative contributions towards traffic impacts in the vicinity.
- The Traffic Study will produce mitigation measures which will be addressed by the applicant when recording a final map. These mitigation measures will be incorporated by reference into the Development Agreement. These mitigation measures may include payment of fair share fees to the City of Stockton towards roadway improvements.

Utilities and Service Systems

- The applicant will be required to pay connection fees, as applicable at the time of approval, and capital improvement fees for water and wastewater service.
- The applicant will prepare a storm water master plan to identify a strategy for managing site runoff.

- The applicant will be required to pay connection fees, as applicable at the time of approval, and capital improvement fees for water and wastewater service.
- The Master Development Plan should identify techniques for reducing solid waste generation, including various waste reduction and recycling measures.

