

LETTER DD

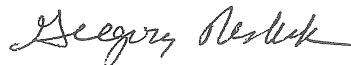
Dear Sirs,

The draft EIR for the proposed Tivoli development on the northeast corner of Modesto contains some shocking changes from the originally approved plan. The developer proposes to increase the dwelling unit density from 5.1 to 8.3 units/acre. He also wishes to increase the commercial and office space from 4.7 to 19.4% by redesignating an incredible 67 acres of residential space to regional commercial space for "big box" stores. The developer justifies this change by suggesting that such stores will "serve the needs of residents within a 30-45 minute drive."

DD.1

In my view, these outrageous requests will only serve to line the pockets of the greedy developer (and by extension the existing property owners, along with local construction, real estate, and mortgage banking interests) with vastly increased commercial sales and rental fees. It is simply unacceptable to allow these few individuals to profit handsomely while forcing the majority to suffer. Future Tivoli residents, as well as all of us who happen to be drivers, taxpayers, or utility rate payers, will be required to foot the bill for the profiteers. The City of Modesto should reject the proposed changes and consider canceling the entire project.

Sincerely,



Gregory C. Tesluk
3424 Wycliffe Dr
Modesto, CA 95355
November 9, 2006

gtesluk@sbcglobal.net

RECEIVED

NOV 13 2006

COMMUNITY & ECON. DEV. DEPT.

**RESPONSES TO LETTER DD:
Gregory C. Tesluk**

Response to Comment DD.1

The comment expresses concern for the changes called for under the proposed Specific Plan. The environmental effects of the proposed Specific Plan land use program were analyzed in the Draft EIR. This comment does not raise environmental issues that require a response under CEQA. As a comment on the Specific Plan, a response to this comment is found in the Response to Comments on Specific Plan on p. C&R.III.2.

IV. STAFF-INITIATED TEXT CHANGES AND ERRATA

The following changes are made to the Draft EIR. New or revised text is shown in **boldface** type and deletions are shown as ~~strikethrough~~.

CHAPTER III, PROJECT DESCRIPTION

Figure III.2: Land Use Diagram, on p. III.8, is replaced with a revised graphic (see p. C&R.IV.2). Revisions are as follows: show Mable Avenue as a cul-de-sac at the west end of the street; delete the icon depicting the east and west gates on Mable Avenue; delete the “NOTES” on the legend that describes Mable Avenue as a future gated and closed street; add a potential access arrow for the RSC-1 land use from Oakdale Road and a short stretch of Mable Avenue; add dashed lines indicating an emergency vehicle access road connecting the Mable Avenue cul-de-sac and Oakdale Road; add “Elementary” to School Site on the legend; replace “Streetscape” with “Paseo” on the legend; add “Water Tank and Well” to Public Infrastructure on the legend; delete the street and the potential access arrows between the MDR-2 and MDR-3 land uses; delete the street between the LDR-5 and LDR-6 land uses; revise the boundaries of the LDR-5 and LDR-6 land uses; delete the bold yellow circle from the intersection of these deleted streets; truncate the west-pointing potential access arrow located at the southeast corner of the MDR-2 land use; and change the RSC-2 land use color to the same color as the RSC-1 land use.

A new sixth bulleted item is added under “Project Approvals – City of Modesto” on p. III.13 as follows:

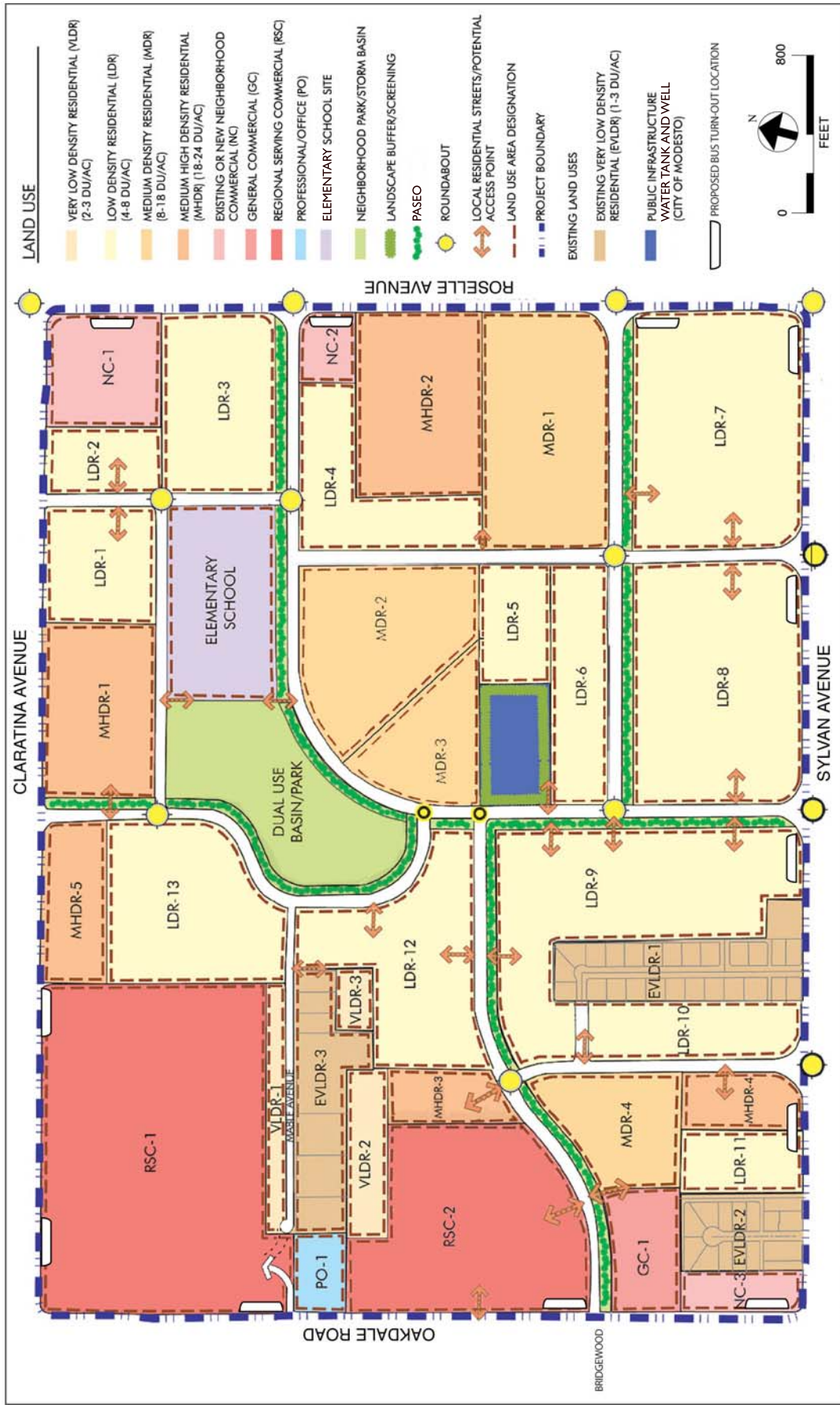
- **Add the project site to the Modesto Municipal Sanitary District No. 1 service area.**

CHAPTER IV, ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION

Section IV.A, Land Use and Planning

The Low Density Residential (LDR) bullet and the Medium Density Residential (MDR) / Medium High Density Residential (MHDR) bullet under “Proposed Tivoli Specific Plan Development Standards” on p. IV.A.6 are revised as follows:

- *Low Density Residential (LDR).* The LDR land use designation would generally apply to most single-family homes within the Tivoli Specific Plan area. Varied residential lot sizes and housing types in the LDR district would be encouraged. Lot sizes would range between 3,000 - **less than** 5,000 sq. ft. for small lot development and 5,000 - 12,000 sq. ft. typically for standard lot development. The small lot development may develop up to three stories and 38 feet in height. Between four to eight dwelling units per acre would be permitted. A minimum of 20 percent of the homes would be one story in height, evenly distributed throughout each neighborhood such that no two one-story units are adjacent or across the street from each other.



SOURCE: Dahlin Group, Turnstone Consulting

TURNSTONE CONSULTING

TIVOLI SPECIFIC PLAN PROJECT

FIGURE III.2: LAND USE DIAGRAM

- *Medium Density Residential (MDR) / Medium High Density Residential (MHDR)*. The MDR land use designation would allow a variety of housing types from 2,000 ~~to~~ - **less than** 3,000 sq. ft. small lot single-family homes to attached units such as townhomes (row house) and duplexes / triplexes / fourplexes. The City of Modesto's affordable housing targets would be provided mainly in the MHDR land use designation. Both two-story (up to 30 feet in height) and three-story (up to ~~40~~ **45** feet in height) buildings would be allowed. In the MDR land use designation, between 8 to 18 dwelling units per acre would be allowed. Allowable residential density in the MHDR would be between 18 and 24 dwelling units per acre.

Section IV.D, Transportation and Circulation

The last sentence in the third paragraph under the Mitigation Measure D.1a discussion on pp. IV.D.30 - IV.D.31 is revised as follows:

As a result, this mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The last sentence in the third paragraph under the Mitigation Measure D.1b discussion on p. IV.D.31 is revised as follows:

As a result, this mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The last sentence in the third paragraph under the Mitigation Measure D.1c discussion on p. IV.D.31 is revised as follows:

As a result, this mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The last sentence in the third paragraph under the Mitigation Measure D.1e discussion on p. IV.D.32 is revised as follows:

As a result, this mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The last sentence in the third paragraph under the Mitigation Measure D.1g discussion on p. IV.D.33 is revised as follows:

As a result, this mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The last sentence in the third paragraph under the Mitigation Measure D.1h discussion on p. IV.D.33 is revised as follows:

As a result, this mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The last sentence in the third paragraph under the Mitigation Measure D.1i discussion on p. IV.D.34 is revised as follows:

As a result, this mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The third paragraph under the Mitigation Measure D.1j discussion on p. IV.D.34 is revised as follows:

This mitigation measure is infeasible. McHenry Avenue is State Route 108 and therefore is under Caltrans jurisdiction; the City does not have the authority to design and construct improvements on this roadway. The City has established a CFF program to cover its share of the cost of some improvements to this intersection, to which the project developers would be required to contribute. The CFF program does not include ~~a the fourth through lane in the north-south direction~~ **northbound and southbound through lanes**. The project's fair share contribution would be relatively small in relation to the total cost. While some improvements are expected to occur as the City builds out, sufficient funds are not programmed and are not expected to be available when the improvements are needed to maintain an acceptable LOS. In addition, implementation of all of the features of this measure would require substantial acquisition of private property, significantly impacting existing development at the intersection including a video store, two banks and a gas station. Therefore, the impact would remain significant and unavoidable.

The last sentence in the third paragraph under the Mitigation Measure D.1k discussion on p. IV.D.35 is revised as follows:

As a result, this mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The last sentence in the third paragraph under the Mitigation Measure D.1m discussion on p. IV.D.35 is revised as follows:

Until funding is identified that would fully mitigate this impact, mitigation measures are treated as **potentially** infeasible, and impacts are identified as significant and unavoidable.

The last sentence in the third paragraph under the Mitigation Measure D.1p discussion on p. IV.D.36 is revised as follows:

As a result, this mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The last sentence in the third paragraph under the Mitigation Measure D.1q discussion on p. IV.D.37 is revised as follows:

As a result, this mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The third paragraph under the Mitigation Measure D.1r discussion on p. IV.D.37 is revised as follows:

This intersection is outside the City’s jurisdiction in Stanislaus County; the City does not have authority to design and construct improvements in the County. The City has established a CFF program to cover the cost of improvements to this intersection, to which the project developers would be required to contribute. The project’s fair share contribution would be relatively small in relation to the total cost. While improvements are expected to occur as the City builds out, sufficient funds may not be available when the improvements are needed to maintain an acceptable LOS. Therefore’ the intersection may operate poorly for a substantial period of time. As a result, this mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The third paragraph under the Mitigation Measure D.3b discussion on p. IV.D.46 is revised as follows:

The intersection is located outside the City of Modesto’s jurisdiction. The project’s fair share contribution would be relatively small in relation to the total cost. Stanislaus County has adopted a Public Facilities Fee (PFF) **program** that includes improving Claus Road from Claribel Road to Terminal Avenue to six lanes, **to which the project sponsors would have to contribute.** Specific improvements at this intersection are not currently known. ~~Project developers would have to contribute to the PFF.~~ A funding mechanism must be developed for project developers to pay a fair share of the intersection improvements not covered. While improvements are expected to occur as the City builds out, sufficient funds may not be available when the improvements are needed to maintain an acceptable LOS. It is also not known whether the City or the developers would be allowed to construct improvements at this location, which is under the jurisdiction of Stanislaus County. Therefore, the intersection may operate poorly for a substantial period of time. As a result, this mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The last sentence in the third paragraph under the Mitigation Measure D.3c discussion on p. IV.D.46 is revised as follows:

As a result, this mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The last sentence in the third paragraph under the Mitigation Measure D.3d discussion on p. IV.D.47 is revised as follows:

As a result, this mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The third paragraph under the Mitigation Measure D.3e discussion on p. IV.D.47 is revised as follows:

The intersection is outside the City’s jurisdiction, in Stanislaus County; the City does not have the authority to design and construct improvements to roadways within the County. It is not known whether the City or the developers would be allowed to construct improvements at

this location. Stanislaus County has adopted a Public Facilities Fee (PFF) **program** that includes improving Claus Road from Claribel Road to Terminal Avenue to six lanes. Specific improvements at this intersection are not currently known. Project developers would have to contribute to the PFF. A funding mechanism must be developed for project developers to pay a fair share of the intersection improvements not covered. The project's fair share contribution to improvements at this intersection would be relatively small in relation to the total cost. While improvements are expected to occur as the City builds out, sufficient funds may not be available when the improvements are needed to maintain an acceptable LOS, and the intersection may operate poorly for a substantial period of time. Therefore, this mitigation measure is being treated as **potentially** infeasible and thus the impact is identified as significant and unavoidable during this period.

The last sentence in the third paragraph under the Mitigation Measure D.3f discussion on p. IV.D.48 is revised as follows:

As a result, this mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The last sentence in the third paragraph under the Mitigation Measure D.3h discussion on pp. IV.D.48-IV.D.49 is revised as follows:

As a result, this mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The third paragraph under the Mitigation Measure D.3i discussion on p. IV.D.49 is revised as follows:

This mitigation measure is infeasible. Implementation is not physically possible to accommodate, and would require acquisition of private property that is presently developed with occupied land uses, requiring demolition and loss of those uses at this location. The City has established a CFF program to cover the cost of **some of these** improvements to this intersection, to which the project developers would be required to contribute. The project's fair share contribution would be relatively small in relation to the total cost. **The CFF does not include the exclusive southbound right turn lane.** While some intersection improvements are expected to occur as the City builds out, not all improvements are **physically possible to accommodate** ~~feasible~~. Therefore, the impact would remain significant and unavoidable.

The third paragraph under the Mitigation Measure D.3j discussion on p. IV.D.49 is revised as follows:

McHenry Avenue is State Route 108 and Kiernan Avenue west of McHenry Avenue is State Route 219; both are under Caltrans jurisdiction. The City does not have the authority to design and construct improvements on these roadways. The City has established a CFF program to cover its share of the cost of some improvements to this intersection, to which the project developers would be required to contribute. The CFF program is for a grade-separated interchange. The Stanislaus County PFF **program** and Caltrans may have funding to improve SR 108 and 219 that may be available for this intersection. The project's fair share contribution to the Modesto CFF would be relatively small in relation to the total cost

of the mitigation measure. While some improvements are expected to occur as the City builds out, sufficient funds are not programmed and may not be available when the improvements are needed to maintain an acceptable LOS. Therefore, the intersection may operate poorly for a substantial period of time. The mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The last sentence in the third paragraph under the Mitigation Measure D.3k discussion on p. IV.D.50 is revised as follows:

Therefore, the mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The last sentence in the third paragraph under the Mitigation Measure D.3n discussion on p. IV.D.50 is revised as follows:

As a result, this mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The third paragraph under the Mitigation Measure D.3o discussion on p. IV.D.51 is revised as follows:

As explained under Measure D.1m, this intersection is outside the City's jurisdiction; mitigation is, therefore, **potentially** infeasible, although the City of Riverbank has obtained funding for a signal at this location.

The last sentence in the third paragraph under the Mitigation Measure D.3q discussion on p. IV.D.52 is revised as follows:

As a result, this mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The last sentence in the third paragraph under the Mitigation Measure D.3r discussion on p. IV.D.52 is revised as follows:

As other funding is not assured and therefore may not be available when the improvements are needed to maintain an acceptable LOS, this mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The last sentence in the third paragraph under the Mitigation Measure D.3t discussion on p. IV.D.53 is revised as follows:

As a result, the mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The last sentence in the third paragraph under the Mitigation Measure D.5a discussion on p. IV.D.61 is revised as follows:

As a result, the mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The third paragraph under the Mitigation Measure D.5b discussion on p. IV.D.61 is revised as follows:

The intersection is located outside the City of Modesto's jurisdiction. The project's fair share contribution would be relatively small in relation to the total cost. Stanislaus County has adopted a Public Facility Fee (PFF) **program** that includes improving Claus Road from Claribel Road to Terminal Avenue to six lanes. Specific improvements at this intersection are not currently known. Project developers would be required to contribute to the PFF. A funding mechanism must be developed by the City for project developers to pay a fair share of the intersection improvements not covered. While improvements are expected to occur as the City builds out, sufficient funds may not be available when the improvements are needed to maintain an acceptable LOS. It is also not known whether the City or the developers would be allowed to construct improvements at this location, which is under the jurisdiction of Stanislaus County. Therefore, the intersection may operate poorly for a substantial period of time. As a result, this mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The last sentence in the third paragraph under the Mitigation Measure D.5d discussion on p. IV.D.62 is revised as follows:

As a result, the mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The third paragraph under the Mitigation Measure D.5e discussion on p. IV.D.63 is revised as follows:

The intersection is outside the City's jurisdiction, in Stanislaus County; the City does not have the authority to design and construct improvements to roadways within the County. It is not known whether the City or the developers would be allowed to construct improvements at this location. Stanislaus County has adopted a Public Facility Fee (PFF) **program** that includes improving Claus Road from Claribel Road to Terminal Avenue to six lanes. Specific improvements at this intersection are not currently known. Project developers would have to contribute to the PFF. A funding mechanism must be developed for project developers to pay a fair share of the intersection improvements not covered. The project's fair share contribution to improvements at this intersection would be relatively small in relation to the total cost. While improvements are expected to occur as the City builds out, sufficient funds may not be available when the improvements are needed to maintain an acceptable LOS. Therefore, the intersection may operate poorly for a substantial period of time. As a result, this mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The third paragraph under the Mitigation Measure D.5f discussion on p. IV.D.63 is revised as follows:

Implementation would require acquisition of property that is presently developed with occupied land uses, requiring demolition and loss of those uses at this location. The City has established a CFF program to cover the cost of **some** improvements to this intersection, to which the project developers would be required to contribute. **The CFF does not include the third southbound through lane, and the acquisition of developed property was not assumed in the City's cost estimates for the improvements.** The project's fair share contribution would be relatively small in relation to the total cost. While improvements are expected to occur as the City builds out, sufficient funds may not be available when the improvements are needed to maintain an acceptable LOS. Therefore the intersection may operate poorly for a substantial period of time. As a result, this mitigation measure is being treated as infeasible, and the impact is identified as significant and unavoidable during this period.

The last sentence in the third paragraph under the Mitigation Measure D.5h discussion on p. IV.D.64 is revised as follows:

As a result, the mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The third paragraph under the Mitigation Measure D.5i discussion on p. IV.D.64 is revised as follows:

This mitigation measure is infeasible. Implementation would require acquisition of property that is presently developed with occupied land uses, requiring demolition and loss of those uses at this location. The City has established a CFF program to cover the cost of **some** improvements to this intersection, to which the project developers would be required to contribute. **The CFF does not include the exclusive southbound right-turn lane, and the acquisition of developed property was not assumed in the City's cost estimates for intersection improvements.** The project's fair share contribution would be relatively small in relation to the total cost. While some improvements are expected to occur as the City builds out, not all improvements are physically feasible. Therefore, the impact would remain significant and unavoidable

The third paragraph under the Mitigation Measure D.5l discussion on p. IV.D.66 is revised as follows:

This mitigation measure is infeasible. McHenry Avenue is State Route 108 and therefore is under Caltrans jurisdiction; the City does not have the authority to design and construct improvements on this roadway. The City has established a CFF program to cover its share of the cost of some improvements to this intersection, to which the project developers would be required to contribute. The CFF program does not include a fourth through lane in the east-west direction. The project's fair share contribution would be relatively small in relation to the total cost. While some improvements are expected to occur as the City builds out, sufficient funds are not programmed and may not be available when the improvements are needed to maintain an acceptable LOS. In addition, implementation of all of the features of

this measure would require substantial acquisition of private property, including a video store, two banks, and a gas station, significantly impacting existing development at the intersection. **The acquisition of developed property was not assumed in the City's cost estimates for intersection improvements.** Therefore, the impact would remain significant and unavoidable.

The third paragraph under the Mitigation Measure D.5n discussion on pp. IV.D.66-IV.D.67 is revised as follows:

This mitigation measure is infeasible. The City has established a CFF program to cover the cost of **some** improvements to this intersection, to which the project developers would be required to contribute. The CFF program does not include ~~addition of the~~ fourth northbound **lane** and **the fourth** southbound lanes. The project's fair share contribution would be relatively small in relation to the total cost. While some improvements are expected to occur as the City builds out, sufficient funds are not programmed and may not be available when the improvements are needed to maintain an acceptable LOS. In addition, implementation of all of the features of this measure would require substantial acquisition of private property, significantly impacting existing development at the intersection including a restaurant, bank and electrical substation. **The acquisition of developed property was not assumed in the City's cost estimates for intersection improvements.** Therefore, the impact would remain significant and unavoidable.

The third paragraph under the Mitigation Measure D.5o discussion on p. IV.D.67 is revised as follows:

This mitigation measure is infeasible. The fourth through lanes and third northbound left turn lane, and second right turn lanes in the southbound and eastbound directions are infeasible at this location, because ~~in it~~ it would require up to ~~48~~ **15** lanes, including up to four through lanes, three left turn lanes, and two right turn lanes in each direction. Intersections with this number of lanes do not operate efficiently and would be wider than major freeways. The number of lanes would exceed the City of Modesto standards for local arterials. Therefore, the impact would remain significant and unavoidable.

The third paragraph under the Mitigation Measure D.5p discussion on p. IV.D.67 is revised as follows:

This mitigation measure is **potentially** infeasible. **The City has established a Capital Facilities Fee (CFF) program to cover the cost of some of these improvements, to which the project developers would be required to contribute. The CFF does not include the** ~~The~~ fourth northbound and southbound through lanes ~~are infeasible~~ at this location, because it is not physically feasible to accommodate them. ~~They~~ **The inclusion of these improvements** would require substantial acquisition of private property and removal of existing commercial buildings and loss of these existing land uses at this intersection. **The acquisition of developed property was not assumed in the City's cost estimates for intersection improvements.** The total number of lanes would exceed the City of Modesto standards for local arterials and would not operate efficiently. Therefore, the impact would remain significant and unavoidable.

The third paragraph under the Mitigation Measure D.5q discussion on p. IV.D.68 is revised as follows:

As explained under Measure D.1m, this intersection is outside the City's jurisdiction; mitigation is, therefore, **potentially** infeasible, although the City of Riverbank has obtained funding for a signal at this location.

The last sentence in the third paragraph under the Mitigation Measure D.5r discussion on p. IV.D.68 is revised as follows:

As a result, the mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The last sentence in the third paragraph under the Mitigation Measure D.5s discussion on p. IV.D.69 is revised as follows:

As a result, the mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

The last sentence in the third paragraph under the Mitigation Measure D.5v discussion on p. IV.D.70 is revised as follows:

As a result, the mitigation measure is being treated as **potentially** infeasible, and the impact is identified as significant and unavoidable during this period.

Section IV.E, Air Quality

A discussion of Global Climate Change is added to the end of the **CUMULATIVE IMPACTS** discussion on p. IV.E.28.

Global Climate Change

Climate change refers to any significant change in measures of climate (such as temperature, precipitation, or wind) lasting for an extended period (decades or longer).¹ Climate change, in the context of this discussion, is the change in global climate that is considered to be a result of human activities (e.g., burning fossil fuels, deforestation, reforestation, urbanization, desertification) that have increased the volume of greenhouse gases (GHGs) present in the atmosphere and have thereby caused the earth's atmosphere to heat up.

¹ **United States Environmental Protection Agency, Glossary of Climate Change Terms. Website accessed on August 2, 2007 at http://www.epa.gov/climatechange/glossary.html#Climate_change.**

Description of the Greenhouse Effect

Heat retention within our atmosphere is an essential process to sustain life on Earth. The natural process through which heat is retained in the troposphere² is called the “greenhouse effect.” Short-wave radiation emitted by the Sun is absorbed by the Earth; the Earth emits a portion of this energy in the form of long-wave radiation; and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and toward the Earth. This “trapping” of the long-wave (thermal) radiation emitted back toward the Earth is the underlying process of the greenhouse effect. Without the greenhouse effect, the Earth’s average temperature would be approximately -18 degrees Celsius (°C) (0° Fahrenheit [°F]) instead of its present 14°C (57°F).³ The most abundant GHGs are water vapor and carbon dioxide. Many other trace gases have greater ability to absorb and re-radiate long-wave radiation; however, these gases are not as plentiful.

Primary Greenhouse Gases

Greenhouse gases include, but are not limited to, the following: (1) carbon dioxide (CO₂), which is generated primarily by fossil fuel combustion in stationary and mobile sources, is the most widely emitted GHG; (2) methane, which is emitted from living organisms or biological processes, incomplete combustion in forest fires, landfills, manure management, and leaks in natural gas pipelines; (3) nitrous oxide (N₂O), which is produced by both natural and human-related sources that include agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic acid production, and nitric acid production; (4) hydrofluorocarbons (HFCs), which are typically used as refrigerants for both stationary refrigeration and mobile air conditioning; (5) perfluorocarbons (PFCs), which are compounds consisting of carbon and fluorine and are primarily created as a byproduct of aluminum production and semiconductor manufacturing; and (6) sulfur hexafluoride, which is most commonly used as an electrical insulator in high voltage equipment that transmits and distributes electricity.⁴

² The troposphere is the bottom layer of the atmosphere, which varies in height from the Earth’s surface to 10 to 12 kilometers.

³ National Climatic Data Center, Global Warming Frequently Asked Questions. Website accessed on August 2, 2007 at <http://www.ncdc.noaa.gov/oa/climate/globalwarming.html>

⁴ Intergovernmental Panel on Climate Change - Working Group I, The Science of Climate Change - Contribution of Working Group I to the Second Assessment Report of the IPCC, Cambridge (UK), Cambridge University Press, 1996.

Effects of Global Climate Change

The primary effect of global climate change has been a rise in average global tropospheric temperature of 0.2° Celsius per decade, determined from meteorological measurements worldwide between 1990 and 2005.⁵ Climate change modeling using 2000 emission rates shows that further warming would occur, which would induce further changes in the global climate system during the current century.⁶ Changes to the global climate system and ecosystems and to California would include, but would not be limited to:

- The loss of sea ice and mountain snow pack, resulting in higher sea levels and higher sea surface evaporation rates with a corresponding increase in tropospheric water vapor due to the atmosphere's ability to hold more water vapor at higher temperatures;
- Rise in global average sea level, primarily due to thermal expansion and melting of glaciers and ice caps and the Greenland and Antarctic ice sheets;
- Changes in weather that include widespread changes in precipitation, ocean salinity, and wind patterns, and more energetic aspects of extreme weather including droughts, heavy precipitation, heat waves, extreme cold, and the intensity of tropical cyclones;
- Decline of the Sierra snowpack, which accounts for approximately half of the surface water storage in California, by 70 percent to as much as 90 percent over the next 100 years;⁷
- Increase in the number of days conducive to ozone formation by 25 to 85 percent (depending on the future temperature scenario) in high ozone areas of Los Angeles and the San Joaquin Valley by the end of the 21st century;⁸ and
- High potential for erosion of California's coastlines and sea water intrusion into the Delta and levee systems due to the rise in sea level.⁹

Project Effects on Global Climate

The primary source of GHGs in California is fossil fuel combustion. The primary GHG associated with fuel combustion is carbon dioxide, with lesser amounts of methane and nitrous oxide. The project would result in emissions of these GHGs due to fuel combustion

⁵ Intergovernmental Panel on Climate Change, 2007. *Climate Change 2007: The Physical Science Basis, Summary for Policymakers*. Cambridge University Press, Cambridge, United Kingdom and New York, NY, available at <http://ipcc-wg1.ucar.edu/wg1/wg1-report.html>, website accessed on August 20, 2007.

⁶ Ibid.

⁷ California Environmental Protection Agency, Climate Action Team, Climate Action Team Report to Governor Schwarzenegger and the Legislature (Executive Summary), March 2006.

⁸ Ibid.

⁹ Ibid.

in motor vehicles and building heating systems associated with the project. Building and motor vehicle air conditioning systems may use HFCs (and hydrochlorofluorocarbons and chlorofluorocarbons to the extent that they have not been completely phased out at later dates), which may result in emissions through leaks. The other GHGs (perfluorocarbons and sulfur hexafluoride) are associated with specific industrial sources and are not expected to be associated with the proposed project.

While the project would result in emissions of GHGs, the significance of the impact of a single project on global climate cannot be determined for the following reasons: no guidance currently exists to indicate what level of GHG emissions would be considered substantial enough to result in a significant project-level impact on global climate; available global climate change models are not sensitive enough to be able to predict the effect of a single project on global temperatures and the resultant effect on climate; and inadequate data is available on the relative contributions of other developing nations generating these source emissions, e.g. China, to accurately evaluate the project's share. Thus, insufficient information and predictive tools exist to assess whether a single project would result in a significant impact on global climate. For these reasons, determining the significance of the project's impact on global climate would involve undue speculation. Therefore, the contribution of the project is discussed below qualitatively and no conclusion as to its significance is drawn in this EIR as that would involve undue speculation.

The proposed project includes specific Land Use and Circulation Objectives (see Chapter III, Project Description, pp. III.2-III.3) that incorporate neotraditional planning principles. These principles promote the development of mixed use concepts that encourage transit, walking, and bicycle trips to schools, recreational facilities, commercial and retail service locations, and work. The proposed development standards, design guidelines, and landscaping programs advance the integration of commercial, retail, and residential uses to create a visually engaging and active community. The neotraditional planning principle centers on the development of a complete and integrated mix of commercial, residential, and professional office land uses around an elementary school and neighborhood park where the typical residents' essential daily needs are available within walking distance. The proposed project seeks to amend the *Modesto Urban Area General Plan* to allow increased residential densities, to reclassify a portion of Village Residential land use to Regional Commercial land use, and to allow the development of local-oriented commercial and office space in excess of the amount currently allowed for the project area, 4 percent. A network of roads and pedestrian paths with integrated bicycling facilities would unite the mix of land uses. Bicycling and walking trips would be enhanced by a 30-foot-wide landscaped linear parkway along the primary community collector streets, and transit service, currently provided along perimeter streets, would likely be expanded or enhanced. The

increased residential densities, the emphasis on walking and bicycling, and implementation of the project's proposed development standards, design guidelines, and landscape programs provide the framework for orderly and efficient urban expansion. Potential reductions in the number of vehicle trips that result from the mixed use development would minimize GHG emissions associated with the project.

The proposed project would also be subject to the rules established by the District, the CARB, and the U.S. EPA. These rules have been adopted to reduce and control criteria pollutant emissions throughout the Basin. For example, the proposed project will comply with the requirements set forth by Rule 4901, which is to limit emissions from wood-burning fireplaces and heaters by restricting the number of such devices that are permitted in a residential development. Additionally, compliance with Rule 4901 would restrict the CO₂ emissions from the project. The CARB has adopted, pursuant to Assembly Bill 1493, emission standards that are intended to reduce GHG emissions from passenger vehicles and light trucks. Compliance with these rules and regulations would minimize GHG emissions associated with the project.

In addition, the project includes a number of mitigation measures (Mitigation Measures E.1 and E.2a through c) that not only address criteria pollutants but also GHGs. For instance, Mitigation Measure E.2a states that site design shall fulfill the following requirements to reduce emissions from motor vehicle activity:

- The project developers shall incorporate improvements for transit service, including bus turnouts, transit loading areas, and shelters.
- The project developers shall incorporate sidewalks and bicycle paths throughout the site and connect those facilities to any nearby pedestrian and bicycle facilities, including those located at open space areas, parks, schools, or commercial areas.
- The project developers shall incorporate secure bicycle storage and parking facilities throughout the site.

Mitigation Measure E.2b states that a trip reduction plan shall be prepared by the project developer as a tool to reduce emissions from motor vehicle activity. The trip reduction plan would address the implementation of the following features:

- Provision of matching services (for participants in carpools and vanpools) by employers with over 100 weekday employees or coordination with Caltrans' "Commuter Computer" program;
- Employer-based dissemination of commute information;
- Employer subsidies for transit passes and incorporation of transit stop facilities into site design;
- A program to guarantee rideshare participants a ride home in case of emergency;

- **Flex-time scheduling;**
- **Site plan design which encourages pedestrian movement between adjacent land uses;**
- **Incentives such as preferred location of 4 percent of parking for carpoolers and hybrid or other clean-fuel vehicles; and**
- **Encouraging employers to experiment with telecommuting options, where feasible.**

And finally, Mitigation Measure E.2c addresses actions that would be taken in site design preparation to limit emissions from energy consumption.

- **The project developers shall incorporate energy efficient building design features including automated control systems for heating and air conditioning and overall energy efficiency at least 10 percent beyond the requirements of the California Energy Code (Title 24, California Code of Regulations), using features such as increased wall and ceiling insulation beyond Energy Code requirements, light colored roof materials to reflect heat, and energy efficient lighting and lighting controls.¹⁰**
- **The project developers shall design buildings with windows and/or skylights oriented to maximize natural cooling and heating in accordance with the California Energy Commission’s 2005 Building Energy Efficiency Standards.**
- **The project developers shall incorporate approved deciduous trees to provide shade on the south- and west-facing sides of buildings.**

Implementation of the mitigation measures would further minimize the project’s GHG emissions. In summary, the GHG emissions from the project would be small in comparison to global and California emissions. In fact, California’s entire human-related contribution is less than 2 percent of the global emissions based on 2004 estimates. Therefore, although there are no quantitative thresholds to use, it is noteworthy that the project’s contribution as a percentage of global emissions and/or California emissions would be very small.

Section IV.H, Biological Resources

The last sentence at the end of the second full paragraph on p. IV.H.8 is revised as follows to fix an incorrect reference to the Biotic Study (included as an Appendix of the EIR):

The precise location of the wetlands is depicted on the habitat map as “freshwater marsh” area contained in the Biotic Study (Appendix ~~D~~E).

¹⁰ **San Joaquin Valley Unified Air Pollution Control District, Final Draft Staff Report, Rule 9510 – Indirect Source Review (ISR) and Rule 3180 – Administrative Fees For Indirect Source Review, December 14, 2005.**

Section IV.J, Geology, Soils, and Seismicity

Figure IV.I.1: Proposed Flood Control Solution, on p. IV.J.3, is replaced with the correct graphic – Figure IV.J.1: Soil Survey of Eastern Stanislaus County, California (see p. C&R.IV.17).

Section IV.N, Population and Housing

A new footnote is added at the end of the first paragraph, under Impact N.1 on p. IV. N.10, as follows:

The Tivoli Specific Plan area contains a total of 480 gross acres. This includes about 26 acres located within the future perimeter arterial streets rights-of-way, measured to the centerline of the streets. The net acreage total of 454 acres is used as the basis for the number of dwelling units generated by the proposed project.



SOURCE: USDA Natural Resources Conservation Service, Turnstone Consulting

TURNSTONE CONSULTING

TIVOLI SPECIFIC PLAN PROJECT

FIGURE IV.J.1: SOIL SURVEY OF EASTERN STANISLAUS COUNTY, CALIFORNIA

V. TIVOLI SPECIFIC PLAN PROJECT MITIGATION MONITORING AND REPORTING PROGRAM

In accordance with CEQA Guidelines § 15097, to ensure implementation of mitigation measures identified in the EIR as included in the project and those imposed as conditions of approval by the lead agency, a program for monitoring or reporting [Mitigation Monitoring and Reporting Program (MMRP)] must be adopted. Until mitigation measures are completed, the lead agency remains responsible for ensuring that implementation occurs in accordance with the program.

The attached MMRP lists the Tivoli Specific Plan Project mitigation measures that will be implemented. It identifies who is responsible for implementation of the mitigation measure and the necessary steps, or actions, to complete it. The MMRP describes how the measure will be monitored, who is responsible for the monitoring, and presents a schedule of when the mitigation is to be implemented.

**TIVOLI SPECIFIC PLAN PROJECT
MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
Agricultural Resources				
B.1. Compensation for loss of prime farmland	Project Developers	Project Developers shall provide current per-acre valuation, based on information from the California Department of Conservation if available, or from an independent appraisal based on comparable agricultural lands. A method for compensation for the entire specific plan area should be established with the first development proposal to avoid multiple individual efforts. Project Developers shall provide documentation of contribution to California Farmland Conservancy or to an equivalent program for funding farmland preservation in Stanislaus County.	Community and Economic Development Department shall review the farmland valuation information, compensation transactions and other documentation for concurrence.	Following concurrence from Modesto's Community and Economic Development Director and prior to building permit issuance.
B.3. Compensation for loss of prime farmland. (Same as Mitigation Measure B.1)	Same as Mitigation Measure B.1.	Same as Mitigation Measure B.1.	Same as Mitigation Measure B.1.	Same as Mitigation Measure B.1.

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
Transportation and Circulation¹				
<p>D.1d. Coffee Road at Claratina Avenue: At 75 percent buildout of the Tivoli Specific Plan area, the City shall conduct a traffic study, to be funded by the project developers, to determine the adequacy of the roundabout as intersection traffic control. If the approach volumes exceed the roundabout capacity, the project developers shall either add an additional lane to the roundabout or signalize the intersection.</p>	<p>Project Developers and City of Modesto</p>	<p>Project Developers shall fund the traffic study and if necessary be responsible for the road improvement plans and construction for the intersection of Coffee Road and Claratina Avenue. City of Modesto shall conduct the traffic study.</p>	<p>City Engineer shall review and approve required road improvement plans. Public Works Department shall inspect and accept required improvements. Traffic engineer shall review and approve the traffic study.</p>	<p>City of Modesto shall conduct the traffic study at 75 percent of buildout. Project developer shall provide required improvement plans prior to grading or building permit, whichever occurs first, at 75 percent of buildout. All required improvements shall be completed prior to the first final map recordation or certificate of occupancy, whichever occurs first, at 75 percent of buildout or as determined by the Facilities Master Plan (FMP) and Infrastructure Financing Plan (IFP).</p>
<p>D.1f. Coffee Road at Mable Avenue: The City shall add exclusive westbound left and right turn lanes.</p>	<p>City of Modesto</p>	<p>Project Developers shall contribute their fair share of the cost of implementation by paying into the Capital Facilities Fee program.</p>	<p>Public Works Department shall construct improvements.</p>	<p>All improvements shall be completed within five years of the first development of Phase I or completion of Phase I, whichever occurs first.</p>

¹ The analysis of traffic impacts is based on an assumed project buildout in ten years. Phase I is assumed to build out in five years or by 2012 and Phase II is assumed to build out in an additional five years or by 2017. If development proceeds slower than the assumed buildout schedule, then the timing of the mitigation measures may be revised.

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<p>D.1f. Oakdale Road at Mable Avenue: The project developers shall add a second southbound through lane.</p>	<p>Project Developers</p>	<p>Project Developers shall be responsible for the road improvement plans and construction for the intersection of Oakdale Road and Mable Avenue.</p>	<p>City Engineer shall review and approve road improvement plans. Public Works Department shall inspect and accept improvements.</p>	<p>For development that triggers the requirement for this improvement, provide improvement plans prior to grading or building permit, whichever occurs first. All improvements shall be completed prior to the first final map recordation or certificate of occupancy, whichever occurs first, of the first phase of development or as determined by the FMP and IFP.</p>
<p>D.1n. Oakdale Road at Sylvan Avenue: The project developers shall add a second eastbound left lane and third southbound through lane.</p>	<p>Project Developers</p>	<p>Project Developers shall be responsible for the road improvement plans and construction for the intersection of Oakdale Road and Sylvan Avenue.</p>	<p>City Engineer shall review and approve road improvement plans. Public Works Department shall inspect and accept improvements.</p>	<p>For development that triggers the requirement for this improvement, provide improvement plans prior to grading or building permit, whichever occurs first. All improvements shall be completed prior to the first final map recordation or certificate of occupancy, whichever occurs first, of the first phase of development or as determined by the FMP and IFP.</p>

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<p>D.2a. Claratina Avenue between McHenry Avenue and Oakdale Road: The project developers shall add a second eastbound lane and a second westbound lane.</p>	<p>Project Developers</p>	<p>Project Developers shall be responsible for the road improvement plans and construction for the segment of Claratina Avenue between McHenry Avenue and Oakdale Road.</p>	<p>City Engineer shall review and approve road improvement plans. Public Works Department shall inspect and accept improvements.</p>	<p>Provide improvement plans prior to street construction as described below. All improvements shall be completed concurrent with development of Phase I or as determined by the FMP and IFP.</p>
<p>D.2b. Sylvan Avenue between Roselle Avenue and Oakdale Road: The project developers shall add a second westbound lane.</p>				<p>Completed by Traffic Operations on December 20, 2006.</p>
<p>D.2c. Oakdale Road between Sylvan Avenue and Claratina Avenue: The project developers shall improve the southbound direction to three lanes between Sylvan Avenue and Claratina Avenue. (Improvements to the northbound direction to three lanes are assumed to be part of the project, to be implemented by project developers, and therefore do not need to be identified in this mitigation measure.)</p>	<p>Project Developers</p>	<p>Project Developers shall be responsible for the road improvement plans and construction for the segment of Oakdale Road between Sylvan Avenue and Claratina Avenue.</p>	<p>City Engineer shall review and approve road improvement plans. Public Works Department shall inspect and accept improvements.</p>	<p>For development that triggers the requirement for this improvement, provide improvement plans prior to grading or building permit, whichever occurs first. All improvements shall be completed prior to the first final map recordation or certificate of occupancy, whichever occurs first, of the first phase of development or as determined by the FMP and IFP.</p>

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<p>D.3g. Coffee Road at Claratina Road: Implement Mitigation Measure D.1.d, to conduct a traffic study at 75 percent buildout, to be funded by project developers, to determine the adequacy of the intersection traffic control. As with Measure D.1.d, if the approach volumes exceed the roundabout capacity, the project developers shall either add an additional lane to the roundabout or signalize the intersection.</p>	<p>Project Developers and the City of Modesto</p>	<p>Project Developers shall fund the traffic study and if necessary be responsible for the road improvement plans and construction for the intersection of Coffee Road and Claratina Avenue. City of Modesto shall conduct the traffic study.</p>	<p>City Engineer shall review and approve required road improvement plans. Public Works Department shall inspect and accept required improvements. Traffic Engineer shall review and approve the traffic study.</p>	<p>City of Modesto shall conduct the traffic study at 75 percent of buildout. Project developers shall provide required improvement plans prior to grading or building permit, whichever occurs first, at 75 percent of buildout. All required improvements shall be completed prior to the first final map recordation or certificate of occupancy, whichever occurs first, at 75 percent of buildout or as determined by the FMP and IFF.</p>
<p>D.3l. McHenry Avenue at Sylvan Avenue: The City of Modesto will add a third eastbound through lane and a third westbound through lane.</p>	<p>City of Modesto</p>	<p>Project Developers shall contribute their fair share of the cost of implementation by paying into the Capital Facilities Fee program.</p>	<p>Public Works Department shall construct improvements.</p>	<p>All improvements shall be completed within five years of the first development of Phase I or completion of Phase I, whichever occurs first.</p>

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<p>D.3m. Oakdale Road at Bridgewood Way: The project developers shall provide an exclusive eastbound right turn lane with signal overlap.</p>	<p>Project Developers</p>	<p>Project Developers shall be responsible for the road improvement plans and construction for the intersection of Oakdale Road and Bridgewood Way.</p>	<p>City Engineer shall review and approve road improvement plans. Public Works Department shall inspect and accept improvements.</p>	<p>For development that triggers the requirement for this improvement, provide improvement plans prior to grading or building permit, whichever occurs first. All improvements shall be completed prior to the first final map recordation or certificate of occupancy, whichever occurs first, of the second phase of development or as determined by the FMP and IFP.</p>

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<p>D.3p. Oakdale Road at Sylvan Avenue: The project developers shall add a third northbound through lane. The project developers shall fund actions by the City to change signal timing, implementing overlap phasing on the eastbound approach.</p>	<p>Project Developers</p>	<p>Project Developers shall be responsible for the road improvement plans and construction for the intersection of Oakdale Road and Sylvan Avenue to the City Engineer. Project Developers shall fund City actions to change signal timing and to implement overlap phasing on the eastbound approach.</p>	<p>City Engineer shall review and approve road improvement plans. Public Works Department shall inspect and accept improvements.</p>	<p>For development that triggers the requirement for this improvement, provide improvement plans prior to grading or building permit, whichever occurs first. All improvements shall be completed prior to the first final map recordation or certificate of occupancy, whichever occurs first, of the second phase of development or as determined by the FMP and IFP.</p>

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<p>D.3s. Roselle Avenue at Tivoli Road C: Fund a traffic study at 75 percent buildout to determine the adequacy of the intersection traffic control. If the approach volumes exceed the roundabout capacity, the project developers shall either add an additional lane to the roundabout or signalize the intersection.</p>	<p>Project Developers and City of Modesto</p>	<p>Project Developers shall fund the traffic study and if necessary be responsible for the road improvement plans and construction for the intersection of Roselle Avenue and Tivoli Road C. City of Modesto shall conduct the traffic study.</p>	<p>City Engineer shall review and approve required road improvement plans. Public Works Department shall inspect and accept required improvements. Traffic Engineer shall review and approve the traffic study.</p>	<p>City of Modesto shall conduct the traffic study at 75 percent of buildout. Project Developers shall provide required improvement plans prior to grading or building permit, whichever occurs first, at 75 percent of buildout. All required improvements shall be completed prior to the first final map recordation or certificate of occupancy, whichever occurs first, at 75 percent of buildout or as determined by the FMP and IFP.</p>
<p>D.4. Claratina Avenue from McHenry Avenue to Oakdale Road: Implement Mitigation Measure D.2a to add a second eastbound lane and a second westbound lane</p>	<p>Project Developers</p>	<p>Project Developers shall be responsible for the road improvement plans and construction for the segment of Claratina Avenue between McHenry Avenue and Oakdale Road.</p>	<p>City Engineer shall review and approve road improvement plans. Public Works Department shall inspect and accept improvements.</p>	<p>Provide improvement plans prior to street construction as described below. All improvements shall be completed concurrent with development of Phase II or as determined by the FMP and IFP.</p>

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<p>D.5g. Coffee Road at Claratina Avenue: Implement Mitigation Measure D.1d, to conduct a traffic study, at the project developers' expense at 75 percent buildout to determine the adequacy of the intersection traffic control. As with Measure D.1d, if the approach volumes exceed the roundabout capacity, the project developers shall either add an additional lane to the roundabout or signalize the intersection.</p>	<p>Project Developers and City of Modesto</p>	<p>Project Developers shall fund the traffic study and if necessary be responsible for the road improvement plans and construction for the intersection of Coffee Road and Claratina Avenue. City of Modesto shall conduct the traffic study.</p>	<p>City Engineer shall review and approve required road improvement plans. Public Works Department shall inspect and accept required improvements. Traffic Engineer shall review and approve the traffic study.</p>	<p>City of Modesto shall conduct the traffic study at 75 percent of buildout. Project Developers shall provide required improvement plans prior to grading or building permit, whichever occurs first, at 75 percent of buildout. All required improvements shall be completed prior to the first final map recordation or certificate of occupancy, whichever occurs first, at 75 percent of buildout or as determined by the FMP and IFF.</p>

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<p>D.5m. Oakdale Avenue at Bridgewood Way: The project developers shall provide an exclusive eastbound right turn lane with signal overlap.</p>	<p>Project Developers</p>	<p>Project Developers shall be responsible for the road improvement plans and construction for the intersection of Oakdale Road and Bridgewood Way.</p>	<p>City Engineer shall review and approve road improvement plans. Public Works Department shall inspect and accept improvements.</p>	<p>For development that triggers the requirement for this improvement, provide improvement plans prior to grading or building permit, whichever occurs first. All improvements shall be completed prior to the first final map recordation or certificate of occupancy, whichever occurs first, of the second phase of development or as determined by the FMP and IFP.</p>

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<p>D.5t. Roselle Avenue at Tivoli Road C: At 75 percent build-out, the City shall conduct a traffic study, funded by project developers, to determine the adequacy of the intersection traffic control. As with Measure D.1d, if the approach volumes exceed the roundabout capacity, the project developers shall either add an additional lane to the roundabout or signalize the intersection.</p>	<p>Project Developers and City of Modesto</p>	<p>Project Developers shall fund the traffic study and if necessary be responsible for the road improvement plans and construction for the intersection of Roselle Avenue and Tivoli Road C.</p> <p>City of Modesto shall conduct the traffic study.</p>	<p>City Engineer shall review and approve required road improvement plans.</p> <p>Public Works Department shall inspect and accept required improvements.</p> <p>Traffic Engineer shall review and approve the traffic study.</p>	<p>City of Modesto shall conduct the traffic study at 75 percent of buildout. Project Developers shall provide required improvement plans prior to grading or building permit, whichever occurs first, at 75 percent of buildout.</p> <p>All required improvements shall be completed prior to the first final map recordation or certificate of occupancy, whichever occurs first, at 75 percent of buildout or as determined by the FMP and IFF.</p>

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<p>D.5u. Roselle Avenue at Tivoli Road D: At 75 percent build-out, the City shall conduct a traffic study, funded by the project developers, to determine the adequacy of the intersection traffic control. As with Measure D.1d, if the approach volumes exceed the roundabout capacity, the project developers shall either add an additional lane to the roundabout or signalize the intersection.</p>	<p>Project Developers and City of Modesto</p>	<p>Project Developers shall fund the traffic study and if necessary be responsible for the road improvement plans and construction for the intersection of Roselle Avenue and Tivoli Road D. City of Modesto shall conduct the traffic study.</p>	<p>City Engineer shall review and approve required road improvement plans. Public Works Department shall inspect and accept required improvements. Traffic Engineer shall review and approve the traffic study.</p>	<p>City of Modesto shall conduct the traffic study at 75 percent of buildout. Project Developer shall provide required improvement plans prior to grading or building permit, whichever occurs first, at 75 percent of buildout. All required improvements shall be completed prior to the first final map recordation or certificate of occupancy, whichever occurs first, at 75 percent of buildout or as determined by the FMP and IFP.</p>
<p>D.6. The project developers shall add a second eastbound and westbound lane on Claratina Avenue between McHenry Avenue and Oakdale Road.</p>	<p>Project Developers</p>	<p>Project Developers shall be responsible for the road improvement plans and construction for the segment of Claratina Avenue between McHenry Avenue and Oakdale Road.</p>	<p>City Engineer shall review and approve road improvement plans. Public Works Department shall inspect and accept improvements.</p>	<p>Provide improvement plans prior to street construction as described below. All improvements shall be completed concurrent with development of Phase II or as determined by the FMP and IFP.</p>

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
Air Quality				
<p>E.1. The construction plans for each group of building permits shall incorporate the following recommendations from the District to minimize emissions during construction phases:</p> <ul style="list-style-type: none"> The project developers shall review Regulation VIII of the San Joaquin Valley Air Pollution Control District regulations and submit a compliance plan to the City of Modesto prior to commencing any phase of construction. The compliance plan must demonstrate that the current requirements of Regulation VIII will be implemented. 	Project Developers	Project Developers shall review Regulation VIII and submit a compliance plan to the City of Modesto's Community and Economic Development Department. The compliance plan shall be incorporated in construction contracts and implemented by developers.	Project Developers shall provide draft compliance plan to the Community and Economic Development Department for review and approval.	Compliance plan shall be submitted to and approved by the Community and Economic Development Department prior to the issuance of a grading or building permit, whichever occurs first.
<ul style="list-style-type: none"> Prior to the issuance of construction contracts, the project developers shall 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. It is anticipated that in the near future both NO_x and PM₁₀ control equipment will be available. The San Joaquin Valley Air Pollution Control District should be consulted during this process. 	Project Developers	Project Developers shall consult with SJVAPCD and identify available new technology and shall incorporate requirements for new technology in construction contracts.	Project Developers shall report to the Community and Economic Development Director on new technology to be included.	The Project Developers shall incorporate available new technology in construction contracts.

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<ul style="list-style-type: none"> The project developers shall limit traffic speed on unpaved roads to 15 miles per hour. 	Project Developers	The construction foreman or liaison shall post speed limit signs and ensure that construction vehicle operators travel at or less than 15 mph.	The construction foreman or liaison shall monitor speed limits. Project Developers shall monitor compliance throughout the construction duration.	The Project Developers shall install speed limit signs as part of the site preparation process prior to issuance of a grading permit. Implement measures throughout the construction duration.
<ul style="list-style-type: none"> The project developers shall install sandbags or other control measures to prevent silt runoff to public roadways from sites with a slope greater than 1 percent. <p>(cont'd.)</p>	Project Developers	All slopes shall be measured by the Project Developers and identified on the building permit plan set submitted. The construction foreman or liaison shall oversee the placement of sandbags or other runoff control measure(s) on all slopes determined to have a slope greater than 1 percent.	The construction foreman or liaison shall monitor runoff control measure(s) and shall conduct weekly runoff control measure(s) inspections and shall submit results in a monthly report to the Community and Economic Development Director.	The building permit submittal shall identify slope measurements. Implement measures throughout the construction duration.

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<ul style="list-style-type: none"> The project developers shall install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site, to prevent track-out of soil to public roadways. 	Project Developers	The construction foreman or liaison shall ensure that wheel washers and/or equipment washers are in place at all points of exit from the site and are correctly implemented.	Construction foreman or liaison shall record inspections in a daily construction log and submit results in a monthly report to the Community and Economic Development Director.	The washers shall be provided prior to issuance of grading or building permit, whichever occurs first. Implement measures throughout the construction duration.
<ul style="list-style-type: none"> The project developers shall install windbreaks at windward sides of construction areas, if necessary to prevent wind-blown dust. <p>(cont'd.)</p>	Project Developers	Windbreaks shall be installed by the Project Developers. The construction foreman or liaison shall ensure that windbreaks are correctly placed and implemented.	The construction foreman or liaison shall inspect installed windbreaks on a weekly basis and record inspections in the construction log. Inspection results shall be submitted in a monthly report to the Community and Economic Development Director.	Windbreaks shall be installed by the Project Developers prior to the issuance of grading or building permit, whichever occurs first. Implement measures throughout the construction duration.

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<ul style="list-style-type: none"> The project developers shall suspend excavation and grading activity when winds exceed 20 miles per hour. <p>(cont'd.)</p>	Project Developers	Project developers shall install wind speed measuring devices and ensure that these devices are correctly located and calibrated.	<p>The construction foreman shall cease all excavating and grading activities when wind speed measuring devices indicate speeds over 20 mph.</p> <p>Suspension of construction activity due to wind speeds shall be recorded in the construction log. Construction reports shall be submitted to the Community and Economic Development Director on a monthly basis.</p>	<p>Wind speed measuring devices shall be installed by the Project Developers prior to the issuance of grading or building permit, whichever occurs first.</p> <p>Implement measures throughout the construction duration.</p>

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<ul style="list-style-type: none"> The project developers shall limit the area subject to excavation, grading, and other construction activity at any one time. <p>(cont'd.)</p>	Project Developers	<p>The project sponsor shall provide a written statement with any request for development permits or other permits involving movement of soil supporting a determination that the request minimizes the amount of exposed soil on the project site during the relevant construction period. The Community and Economic Development Director will either accept the report or require additional means to reduce the amount of exposed soil, such as hydroseeding or planting vegetation with irrigation, in areas that are proposed to be exposed for more than 20 days with no construction activity.</p> <p>Construction shall comply with the General Construction Permit.</p>	<p>The construction foreman or liaison shall ensure that construction activities do not exceed the allowable area of excavation and grading activity permitted on the site and shall oversee implementation of any required best management practices.</p> <p>The construction foreman or liaison shall record excavation and grading activities in a construction log on a daily basis and submit results in a monthly report to the Community and Economic Development Director.</p>	<p>Project Developer shall provide a plan to reduce soil exposure prior to the issuance of grading or building permit, whichever occurs first.</p> <p>Implement measures throughout the construction duration.</p>

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<ul style="list-style-type: none"> The project developers shall ensure that the accumulation of mud or dirt is expeditiously removed from adjacent public streets at least once every 24 hours when construction activities 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). 	Project Developers	The construction foreman or liaison shall establish and implement a daily street sweeping schedule during construction activities that involve movement of soil.	The construction foreman or liaison shall monitor daily street sweeping and provide a daily log. Results shall be submitted in a monthly report to the Community and Economic Development Director.	Project Developer shall provide a daily street sweeping schedule prior to the issuance of grading or building permit, whichever occurs first. Implement measures throughout the construction duration.
<ul style="list-style-type: none"> The project developers shall use alternative-fuel construction equipment, where feasible. 	Project Developers	Project Developers shall consult with SJVAPCD to identify feasible goals for equipment use. These goals shall be incorporated into construction contracts. The Project Developers shall use alternative-fuel construction equipment throughout the construction duration, where feasible.	The Project Developers shall report to the Community and Economic Development Director the alternative-fuel equipment to be used in each phase.	Project Developer shall provide a list of any alternative equipment prior to the issuance of grading or building permit, whichever occurs first. Implement measures throughout the construction duration.
<ul style="list-style-type: none"> The project developers shall minimize idling time (e.g., to a 10-minute maximum). <p><i>(cont'd.)</i></p>	Project Developers	The construction foreman or liaison shall limit idling time on the construction site to a 10-minute maximum.	The construction foreman or liaison shall monitor idling.	Implement measures throughout the construction duration.

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<ul style="list-style-type: none"> The project developers shall limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use to the minimum practical. 	Project Developers	The construction foreman or liaison shall limit the hours of heavy-duty equipment and/or the amount of equipment in use on the construction site.	The construction foreman or liaison shall monitor hours and use of heavy-duty equipment.	Implement measures throughout the construction duration.
<ul style="list-style-type: none"> The project developers shall replace fossil-fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set), where feasible. 	Project Developers	Project Developers shall incorporate requirements to replace fossil-fueled equipment with electrically driven equivalents, where feasible.	Project Developers shall report to the Community and Economic Development Director about electrically driven equipment to be used in each phase.	The Project Developers shall use electrically driven equipment throughout the construction duration, where feasible.
<ul style="list-style-type: none"> The project developers shall take steps to curtail construction activity during periods of high ambient pollutant concentrations; this may include reducing construction activity during the peak hour of vehicular traffic on adjacent roadways or ceasing construction activity during days declared as Spare the Air days by the San Joaquin Valley Air Pollution Control District. <p><i>(cont'd.)</i></p>	Project Developers	The construction foreman or liaison shall comply with traffic control programs to curtail construction activities during periods of high ambient pollutant concentrations based on advisories from the SJVAPCD, such as on declared 'Spare the Air' days.	The construction foreman or liaison shall curtail or cease construction activity based on SJVAPCD advisories.	During advisory periods, such as 'Spare the Air' days, construction activity shall be curtailed or stopped.

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<ul style="list-style-type: none"> The project developers shall implement activity management to reduce cumulative short-term impacts. 	Project Developers	Project Developers shall submit and implement an activity management plan.	Community and Economic Development Department shall review the activity management plan.	Activity management plan shall be submitted to and approved prior to the issuance of a grading or building permit, whichever occurs first. Implement measures throughout the construction duration.
<p>E.2a. The site design shall fulfill the following requirements to reduce emissions from motor vehicle activity:</p>				
<ul style="list-style-type: none"> The project developers shall incorporate improvements for transit service, including bus turnouts, transit loading areas, and shelters. <p>(cont'd.)</p>	Project Developers	Project Developers shall be responsible for a plan for bus turnouts, loading and shelters along perimeter streets to the Community and Economic Development Department.	The Transit Manager and City Engineer shall review and approve the plan.	Review and approval of transit service improvements shall occur before approval of each Final Development Plan. All improvements shall be completed prior to certificate of occupancy of the first phase of development or as determined by the FMP and IFP.

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<ul style="list-style-type: none"> The project developers shall incorporate sidewalks and bicycle paths throughout the site and connect those facilities to any nearby pedestrian and bicycle facilities, including those located at open space areas, parks, schools, or commercial areas. 	Project Developers	Project Developers shall submit plans to the Community and Economic Development Department that identify the appropriate locations of all pedestrian and bicycle facilities elements and implement the plans.	The Community and Economic Development Department shall review the plans.	Review and designation of pedestrian and bicycle facilities shall occur before approval of each Final Development Plan. All improvements shall be completed prior to certificate of occupancy of each project.
<ul style="list-style-type: none"> The project developers shall incorporate secure bicycle storage and parking facilities throughout the site. 	Project Developers	Project Developers shall submit plans to the Community and Economic Development Department that identify all the bicycle storage and parking facilities on the project site and implement the plans.	The Community and Economic Development Department shall review the plans.	Review of on-site bicycle storage and parking facilities shall occur before approval of each Final Development Plan. All improvements shall be completed prior to certificate of occupancy of each project.

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<p>E.2b. The project developers shall prepare a trip reduction plan to reduce emissions from motor vehicle activity. The plan shall be reviewed and approved by the City of Modesto prior to occupation of each element of the proposed project. To be compliant with the policies of the <i>Urban Area General Plan</i>, the trip reduction plan shall address how the following features would be implemented:</p> <ul style="list-style-type: none"> • Provision of matching services (for participants in carpools and vanpools) by employers with over 100 weekday employees or coordination with Caltrans’ “Commuter Computer” program; • Employer-based dissemination of commute information; • Employer subsidies for transit passes and incorporation of transit stop facilities into site design; • A program to guarantee rideshare participants a ride home in case of emergency; • Flex-time scheduling; • Site plan design which encourages pedestrian movement between adjacent land uses; • Incentives such as preferred location of 4 percent of parking for carpools and hybrid or other clean-fuel vehicles; and • Encouraging employers to experiment with telecommuting options, where feasible. 	<p>Project Developers</p>	<p>Project Developers shall submit trip reduction plans, and ensure, at a minimum, that all of the required elements are included in the plan.</p> <p>Project Developers shall ensure that all measures detailed in the trip reduction plan are being carried out.</p>	<p>The trip reduction plan shall be submitted for review and approval by the Community and Economic Development Department prior to certificate of occupancy of each phase of the project.</p> <p>The Project Developers shall submit status results of the trip reduction plan in an annual report to the Community and Economic Development Director.</p>	<p>The trip reduction plan shall be submitted and approved prior to certificate of occupancy of each applicable project.</p> <p>Implement measures according to the plan.</p>
<p>E.2c. The site design shall fulfill the following requirements to reduce emissions from energy consumption:</p> <ul style="list-style-type: none"> • The project developers shall incorporate energy efficient building design features including automated control systems for heating and air conditioning and overall energy efficiency at least 10 percent beyond the requirements of the California Energy Code (Title 24, California Code of Regulations), using features such as increased wall and ceiling insulation beyond Energy Code requirements, light colored roof materials to reflect heat, and energy efficient lighting and lighting controls. <p><i>(cont'd.)</i></p>	<p>Project Developers</p>	<p>Project Developers shall submit construction drawings showing energy efficient building design features and implement the measures.</p>	<p>The Building Division shall review and approve all construction plans to ensure that all required energy efficiency measures are included.</p>	<p>Prior to building permit issuance of each project, construction plans shall show that all energy efficient measures are included.</p> <p>Implement measures prior to certificate of occupancy.</p>

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<ul style="list-style-type: none"> The project developers shall design buildings with windows and/or skylights oriented to maximize natural cooling and heating in accordance with the California Energy Commission's 2005 Building Energy Efficiency Standards. 	Project Developers	Project Developers shall submit construction drawings showing energy efficient building design features and implement the measures.	The Building Division shall review and approve all construction plans to ensure that all required energy efficiency measures are included.	Prior to building permit issuance of each project, construction plans shall show that all energy efficient measures are included. Implement measures prior to certificate of occupancy
<ul style="list-style-type: none"> The project developers shall incorporate approved deciduous trees to provide shade on the south- and west-facing sides of buildings. 	Project Developers	Project Developers shall submit site plans showing shade trees on the south- and west-facing sides of buildings and implement the plans.	The Department of Parks, Recreation and Neighborhoods shall review and approve all landscape plans.	Prior to building permit issuance of each project, landscape plans shall be approved. Implement measures prior to certificate of occupancy.
<p>E.6. See Mitigation Measures E.1, E.2a, E.2b, and E.2c</p>	Same as Mitigation Measures E.1, E.2a, E.2b, and E.2c.	Same as Mitigation Measures E.1, E.2a, E.2b, and E.2c.	Same as Mitigation Measures E.1, E.2a, E.2b, and E.2c.	Same as Mitigation Measures E.1, E.2a, E.2b, and E.2c
<p>E.7. See Mitigation Measure E.2a, E.2b, and E.2c.</p>	Same as Mitigation Measure E.2a, E.2b, and E.2c.	Same as Mitigation Measure E.2a, E.2b, and E.2c.	Same as Mitigation Measure E.2a, E.2b, and E.2c.	Same as Mitigation Measure E.2a, E.2b, and E.2c.

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
Noise				
<p>F.2a. Design and implement new barriers for noise control at exterior locations of proposed residential development adjacent to major roadways.</p>	Project Developers	Project Developers shall submit construction plans showing the location and design features of noise control barriers and implement the features.	The Community and Economic Development Department shall review and approve all construction plans to ensure that all noise control features are included.	<p>Prior to building permit issuance of each project, construction plans shall show all noise control features are included.</p> <p>The noise control features shall be installed prior to certificate of occupancy.</p>
<p>F.2b. Provide shielding for outdoor use areas by locating these areas behind buildings adjacent to major roadways.</p>	Project Developers	Project Developers shall submit construction plans showing the location and design features of noise reduction features and implement the features.	The Community and Economic Development Department shall review and approve all construction plans to ensure that all noise reduction features are included.	<p>Prior to building permit issuance of each project, construction plans shall show all noise reduction features are included.</p> <p>The noise reduction features shall be implemented prior to certificate of occupancy.</p>

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<p>F.3. Each development project that involves commercial uses or multi-family residential buildings that would include outdoor mechanical equipment shall carry out the following:</p> <ul style="list-style-type: none"> • Retain a qualified acoustical engineer to review the development project during the design phase, prior to approval of building permits. • Submit a report to the City by the acoustical engineer that calculates the noise levels at the nearest residential property lines that would result from proposed mechanical equipment, determines whether noise levels would exceed the City's Normally Acceptable standards, and identifies means to reduce exterior noise levels to an Ldn of 60 dB. • Noise reduction measures that must be considered by the acoustical engineer include: <ul style="list-style-type: none"> - use of acoustical silencers on inlet and discharge openings of mechanical equipment, - installation of parapets or enclosures with louvers or other barriers to shield noise, - orientation of equipment so that it faces away from sensitive receptors, - orientation or setback of buildings to increase distance from sensitive receptors. • Other noise reduction measures that would accomplish the same or similar purposes should be included if applicable to the particular building proposed. 	<p>Project Developers</p>	<p>Project Developers shall submit a noise report to the Community and Economic Development Department and implement the features.</p>	<p>The Community and Economic Development Department shall review and approve the noise report.</p>	<p>A noise report shall be provided and approved prior to approval of each applicable Final Development Plan.</p> <p>Prior to building permit issuance of each project, construction plans shall show all noise reduction features are included.</p> <p>The noise reduction features shall be implemented prior to certificate of occupancy.</p>

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<p>F.4. A qualified acoustical engineer shall be retained to review the site plans and building designs for proposed commercial activities when located adjacent to sensitive residential or educational land uses. The acoustical engineer shall consider the following measures, and shall identify a complete list of measures that will reduce noise levels at the nearest residential property line to an Ldn of 60 dB:</p> <ul style="list-style-type: none"> • Limiting loading and exterior warehouse activities to daytime hours from 8:00 a.m. to 7:00 p.m. • Requiring loading and trash compacting and collection activities to be fully enclosed. • Establishing minimum setback distances from rear yards for single family residences and from common open space for multi-family residential buildings for locations of commercial loading docks, warehousing activity areas, and trash compaction and collection areas in commercial developments. 	<p>Project Developers</p>	<p>Project Developers shall submit a noise report to the Community and Economic Development Department and implement the noise features.</p>	<p>The Community and Economic Development Department shall review and approve the noise report.</p>	<p>A noise report shall be provided and approved prior to approval of each applicable Final Development Plan.</p> <p>Prior to building permit issuance, construction plans shall show all noise reduction features are included.</p> <p>The noise reduction features shall be implemented prior to certificate of occupancy.</p>
<p>Hazards</p>				
<p>G.2. Conduct remaining Phase I Environmental Site Assessments, conduct site investigations and implement remediation as necessary.</p>	<p>Project Developers</p>	<p>Project Developers shall retain a registered environmental assessor to conduct Phase I Environmental Site Assessments on properties where the assessment was not previously prepared and implement the remediation.</p>	<p>The Community and Economic Development Department shall review and approve the Phase I Environmental Site Assessments.</p>	<p>Conduct Phase I Environmental Site Assessments prior to issuance of grading or building permit, whichever occurs first.</p> <p>Remediation shall be implemented prior to issuance of grading or building permit or as determined by the Phase I ESA.</p>

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<p>Biological Resources</p> <p>H.3. When wetland habitat cannot be avoided, any reduction in the 2.51 acres of wetlands will be compensated for, at a minimum ratio of 1:1, by the project proponents by implementing one of the four mitigation alternatives described in the <i>Department of Fish and Game Recommended Wetland Definition, Mitigation Strategies, and Habitat Value Assessment Methodology</i>: In-kind, On-site; In-kind, Off-site; Out-of-kind, On-site; or Out-of-kind, Off-site. The project sponsors are responsible for submitting their specific wetland mitigation strategy to CDFG for review and gain approval prior to issuance of a building permit. The wetland mitigation strategy shall include providing additional land for the dual use park/basin if the mitigation occurs on-site. Should the project sponsor select an off-site strategy that affects USACE or CDFG regulated habitats, the project sponsor shall be responsible for obtaining all necessary permits. The project sponsors would also be responsible for obtaining Streambed Alteration Agreements from CDFG if they are determined to be required for removing agricultural irrigation ditches.</p>	<p>Project Developers</p>	<p>Project Developers shall retain a qualified biologist to develop and implement a wetland mitigation strategy to compensate for the loss of wetlands.</p>	<p>CDFG shall review and approve the wetland mitigation strategy.</p>	<p>Provide approved wetland mitigation strategy prior to approval of an Area Plan for any project containing or directly adjacent to the wetlands. Implement wetland mitigation strategy prior to issuance of a grading or building permit, whichever occurs first.</p>
<p>H.4. Pre-construction surveys to avoid nest disturbance. In order to assure that nesting Swainson's Hawks will not be disturbed by construction, a qualified ornithologist shall conduct pre-construction surveys of the project site and adjacent areas within 0.5 miles of the project site. Survey Period I occurs from January 1 to March 20, Period II from March 21 to April 5, Period III from April 6 to April 20, Period IV from April 21 to June 10 (surveys not recommended during this period because identification is difficult, as the adults tend to remain within the nest for longer periods of time), and Period V from June 11 to July 30. No fewer than three surveys shall be completed, in at least each of the two survey periods immediately prior to project initiation. If a nest site is found, consultation with CDFG shall be required to ensure project initiation will not result in nest disturbance.</p>	<p>Project Developers</p>	<p>Project Developers shall retain a qualified ornithologist to conduct pre-construction surveys of project site and adjacent areas within 0.5 mile of project site during at least two of the survey periods identified. Identify and implement appropriate mitigation measures.</p>	<p>CDFG shall review and approve the pre-construction surveys to ensure that project initiation will not result in nest disturbance.</p>	<p>Prior to issuance of the first grading or building permit, whichever occurs first.</p>

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<p>H.5. Compensation for loss of foraging habitat. Loss of 297.5 acres of foraging habitat for Swainson’s Hawks shall be mitigated by providing offsite Habitat Management (HM) lands as described in the CDFG’s <i>Staff Report regarding Mitigation for Impacts to Swainson’s Hawks (Buteo swainsoni) in the Central Valley of California</i> because the site was confirmed to be foraging habitat for Swainson’s Hawks through direct observation and is likely within ten miles of an active nest (used during one or more of the last five years).</p>	<p>Project Developer</p>	<p>Project Developer shall provide and implement mitigation plans in accordance with CDFG requirements.</p>	<p>CDFG shall review and approve the habitat mitigation strategy.</p>	<p>Provide approved habitat mitigation strategy prior to approval of the first Final Development Plan. Implement habitat mitigation strategy prior to issuance of the first grading or building permit, whichever occurs first.</p>
<p>The acreage of off-site management lands to be provided will depend on the distance between the project site and the nearest active nest site. The 1994 CDFG staff report states:</p> <ul style="list-style-type: none"> • Projects within one mile of an active nest tree shall provide: <ul style="list-style-type: none"> – One acre of HM land (at least 10% of the HM land requirements shall be met by fee title acquisition or a conservation easement allowing for the active management of the habitat, with the remaining 90% of the HM lands protected by a conservation easement [acceptable to the Department] on agricultural lands or other suitable habitats that provide foraging habitat for Swainson’s Hawk) for each acre of development authorized (1:1 ratio); or – One-half acre of HM land (all of the HM land requirements shall be met by fee title acquisition or a conservation easement [acceptable to the Department] which allows for the active management of the habitat for prey production on the HM lands) for each acre of development authorized (0.5:1 ratio). <p><i>(cont’d.)</i></p>				

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<ul style="list-style-type: none"> Projects within 5 miles of an active nest tree but greater than 1 mile from the nest tree shall provide 0.75 acres of HM land for each acre of urban development authorized (0.75:1 ratio). All HM lands protected under this requirement may be protected through fee title acquisition or conservation easement (acceptable to the department) on agricultural lands or other suitable habitats that provide foraging habitat for Swainson's Hawks. 				
<ul style="list-style-type: none"> Projects within 10 miles of an active nest tree but greater than 5 miles from an active nest tree shall provide 0.5 acres of HM land for each acre of urban development authorized (0.5:1 ratio). All HM lands protected under this requirement may be protected through fee title acquisition or conservation easement (acceptable to the Department) on agricultural lands or other suitable habitats that provide foraging habitat for Swainson's Hawks. 				
<ul style="list-style-type: none"> Management Authorization holders/project sponsors shall provide for the long-term management of the HM lands by funding a management endowment (the interest on which shall be used for managing the HM lands) at the rate of \$400 per HM acre. <p>(cont'd.)</p>				

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<p>Current records within the CNDDDB are more than five years old, so they alone cannot be used to confirm a mitigation ratio for the loss of approximately 298 acres of foraging habitat. The CNDDDB records do, however, provide guidance. The mitigation ratio depends on whether the project site is within one of three zones: 1) less than a mile; 2) between one and five miles; or 3) between five and ten miles. Nests have been recorded within the riparian habitats along both the Stanislaus River and Tuolumne River within ten miles of the project site. Even though the existing records along these rivers are more than five years old, active unpublished nests along these rivers within the last five years are nearly certain to have occurred. Therefore, this analysis assumes that active Swainson's Hawks nests are present within ten miles of the project site.</p> <p>Nest season surveys for Swainson's Hawks should be conducted to confirm whether an active nest occurs within one of the closer zones. Assuming that nests are present within ten miles, however, reduces the area requiring nest-season surveys from 314.2 square miles to 78.5 square miles; the area within 5 miles of the project site.</p>				

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<p>H.6a. Implementation of formal CDFG guidelines (Staff Report on Burrowing Owl Mitigation) to avoid and minimize impacts to Burrowing Owls. In conformance with federal and state regulations regarding the protection of raptors, a habitat assessment in accordance with CDFG guidelines for Burrowing Owls should be completed prior to the start of construction. Burrowing Owl habitat on the project site and within a 500-foot (150 m) buffer zone should be assessed. If the habitat assessment concludes that the site and immediate vicinity lack suitable Burrowing Owl habitat, no additional action would be warranted. However, if suitable habitat is located on, or immediately adjacent to, the site, all Burrowing Owl habitat should be mapped at an appropriate scale, and the following mitigation measures should be implemented:</p> <ol style="list-style-type: none"> 1. In conformance with federal and state regulations regarding the protection of raptors, a pre-construction survey for Burrowing Owls, in conformance with CDFG guidelines, should be completed no more than 30 days prior to the start of construction within suitable habitat. Three additional surveys should also be completed per CDFG guidelines prior to construction. 2. No Burrowing Owls will be evicted from burrows during the nesting season (February 1 through August 31). Eviction outside the nesting season may be permitted pending evaluation of eviction plans and receipt of formal written approval from the CDFG authorizing the eviction. 3. A 250-foot (76 m) buffer, within which no new activity will be permissible, will be maintained between project activities and nesting Burrowing Owls during the nesting season. This protected area will remain in effect until August 31, or at the CDFG's discretion and based upon monitoring evidence, until the young owls are foraging independently. 4. If accidental take (disturbance, injury, or death of owls) occurs, the CDFG will be notified immediately. 	<p>Project Developers</p>	<p>Project Developer shall retain a qualified biologist to conduct pre-construction survey for breeding or resident burrowing owls in pastures, fallow fields, canal rights of way and other areas where ground squirrels occupy or have occupied burrows or pipes or other locations that could be used by burrowing owls. If found, establish and implement construction schedule to avoid nesting season, identify buffer areas, and report accidental take to CDFG.</p>	<p>CDFG shall review the habitat assessment and mitigation measures.</p>	<p>Complete survey and establish and implement construction schedule and buffer area prior to issuance of the first grading or building permit, whichever occurs first, and monitor during construction.</p>

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<p>H.6b. Compensation for loss of Burrowing Owl habitat. If pre-construction surveys determine that Burrowing Owls occupy the site and avoiding development of occupied areas is not feasible, then habitat compensation on off-site mitigation lands should be implemented. Habitat Management (HM) lands comprising existing Burrowing Owl foraging and breeding habitat should be acquired and preserved. An area of 6.5 acres (2.6 ha) (the amount of land found to be necessary to sustain a pair or individual owl) should be secured for each pair of owls, or individual in the case of an odd number of birds. As part of an agreement with the CDFG, the project applicant should secure the performance of its mitigation duties by providing the CDFG with security in the form of funds that would:</p> <ul style="list-style-type: none"> • Allow for the acquisition and/or preservation of 6.5 acres (2.6 ha) of HM lands; • Provide initial protection and enhancement activities on the HM lands, potentially including, but not limited to, such measures as fencing, trash clean-up, artificial burrow creation, grazing or mowing, and any habitat restoration deemed necessary by CDFG; • Establish an endowment for the long-term management of the HM lands; and • Reimburse the CDFG for reasonable expenses incurred as a result of the approval and implementation of this agreement. <p>Pending CDFG approval, HM lands providing foraging habitat for Swainson’s Hawks (see “Loss of Swainson’s Hawk Foraging Habitat” below) may also be used to mitigate impacts to Burrowing Owls provided the HM lands provide existing Burrowing Owl foraging and breeding habitat.</p>	<p>Project Developers and Project Biologist</p>	<p>If avoidance is not feasible, work with CDFG to secure a habitat mitigation agreement.</p>	<p>CDFG shall review and approve the habitat mitigation plan.</p>	<p>Prior to issuance of the first grading or building permit, whichever occurs first.</p>
<p>H.7. Same as Mitigation Measures H.3, H.4, H.5, H.6a, and H.6b.</p>	<p>Same as Mitigation Measures H.3, H.4, H.5, H.6a, and H.6b.</p>	<p>Same as Mitigation Measures H.3, H.4, H.5, H.6a, and H.6b.</p>	<p>Same as Mitigation Measures H.3, H.4, H.5, H.6a, and H.6b.</p>	<p>Same as Mitigation Measures H.3, H.4, H.5, H.6a, and H.6b.</p>

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
Hydrology and Water Quality				
<p>I.1. The project proponent shall prepare a SWPPP for each development project under the Specific Plan (or one master SWPPP for all development) designed to reduce potential impacts to surface water quality through the construction period of all of the project components (whether or not the particular portion of the project disturbs more than one acre). The SWPPP shall emphasize measures designed to minimize erosion and off-site sedimentation.</p>	Project Developers	Project Developers shall prepare and implement SWPPP.	The City Engineer shall review the SWPPP.	Complete the SWPPP prior to issuance of a grading or building permit, whichever occurs first, for each project. SWPPP measures shall be implemented during grading and construction for each project.
<p>It is not required that the SWPPP be submitted to the RWQCB, but must be maintained on-site and made available to RWQCB staff upon request. The SWPPP shall include:</p> <ul style="list-style-type: none"> Specific and detailed BMPs designed to mitigate construction-related pollutants. At minimum, BMPs shall include practices to minimize the contact of construction materials, equipment, and maintenance supplies (e.g., fuels, lubricants, paints, solvents, adhesives) with storm water. The SWPPP shall specify properly designed, centralized storage areas that keep these materials out of the rain. 	Project Developers	Project Developers shall maintain copy of the SWPPP on the construction site and implement the SWPPP.	The City of Modesto shall inspect on a periodic basis in accordance with the provisions set forth in the City's NPDES permit.	SWPPP shall be prepared prior to excavation or grading permits are issued and shall be implemented during grading and construction for each project.
<ul style="list-style-type: none"> An important component of the storm water quality protection effort is knowledge of the site supervisors and workers. To educate on-site personnel and maintain awareness of the importance of storm water quality protection, site supervisors shall conduct regular tailgate meetings to discuss pollution prevention. The frequency of the meetings and required personnel attendance list shall be specified in the SWPPP. 		Project Developers shall prepare a drainage plan and conduct inspections to ensure approved design is being implemented.	The City Engineer shall review and approve drainage plan.	Provide drainage plan prior to approval of the grading plan. Drainage plan shall be implemented during grading and construction for each project.

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<ul style="list-style-type: none"> The SWPPP shall specify a monitoring program to be implemented by the construction site supervisor, and must include both dry and wet weather inspections. In addition, in accordance with State Water Resources Control Board Resolution No. 2001-046, monitoring would be required during the construction period for pollutants that may be present in the runoff that are “not visually detectable in runoff.” 				
<ul style="list-style-type: none"> The City staff shall review and approve project SWPPP prior to developer obtaining a Grading and Building Permit. Project SWPPP shall include and adequately address all elements in the State General Construction Permit (Waste Discharge Requirements for Discharges of Stormwater Runoff Associated with Construction Activity, State Water Resources Control Board Order Number 99-08-DWQ). 				
<ul style="list-style-type: none"> BMPs designed to reduce erosion of exposed soil may include, but are not limited to, soil stabilization controls, watering for dust control, perimeter silt fences, placement of hay bales, and sediment basins. The potential for erosion is generally increased if grading is performed during the rainy season as disturbed soil can be exposed to rainfall and storm runoff. If grading must be conducted during the rainy season, the primary BMPs selected shall focus on erosion control; that is, keeping sediment on the site. End-of-pipe sediment control measures (e.g., basins and traps) shall be used only as secondary measures. Entry and egress from the excavation area shall be carefully controlled to minimize off-site tracking of sediment. Vehicle and equipment wash-down facilities shall be designed to be accessible and functional during both dry and wet conditions. 				

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<p>I.2. The City shall ensure that development under the proposed project meets all the requirements of the current Municipal NPDES Permit (NPDES Permit No. R5-2002-0132 as amended by Order No. R5-2003-0182) for operation-phase water quality treatment. The drainage plan for each proposed development under the Specific Plan shall include features and operational BMPs to reduce potential impacts to surface water quality associated with operation of the project. The final design shall include measures designed to mitigate potential water quality degradation of runoff from all portions of the completed development. In general, “passive,” low-maintenance BMPs (e.g., grassy swales, porous pavements) are preferred over active filtering or treatment systems. An operations and maintenance plan shall be developed and implemented to inspect and maintain BMPs in perpetuity.</p>	<p>Project Developers</p>	<p>Project Developers shall prepare a site drainage plan or require construction contractor to prepare plan. Implement plan.</p>	<p>City Engineer shall review and approve drainage plans.</p>	<p>Drainage plan shall be prepared prior to issuance of a grading permit and shall be implemented during grading and construction for each project.</p>
<p>The final design team for the development project shall review and incorporate as many concepts as practicable from the City’s <i>Guidance Manual for New Development Stormwater Quality Control Measures, Start at the Source, Design Guidance Manual for Stormwater Quality Protection</i> and the <i>California Stormwater Quality Association’s Stormwater Best Management Practice Handbook, Development and Redevelopment</i>. BMPs to be implemented by the developers within the plan area may include, but are not limited to, the BMPs described below for the construction and operation phases of the projects:</p>				
<p><i>During the Construction Phase</i></p> <ul style="list-style-type: none"> Erosion control BMPs may include preservation of existing vegetation, use of hydraulic mulch, hydroseeding, soil binders, earth dikes and drainage swales, velocity dissipation devices and implementation of channel bank stabilization techniques; Temporary sediment control BMPs may include use of silt fences, sediment traps, sediment basins, check dams, fiber rolls, and drainage inlet protection; <p><i>(cont’d.)</i></p>				

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<p><i>During the Operation Phase</i></p> <ul style="list-style-type: none"> Permanent operation-phase BMPs may include: minimization of directly connected impervious surfaces, use of permeable pavements or unit pavers, grassy bioswales, stormwater planters, covering of refuse handling areas, stenciling drainage inlets, wet ponds, and detention basins. 				
<p>At a minimum, runoff from all components of the project shall receive some level of treatment prior to discharging to the detention basins. Runoff would then be detained in the basins prior to being pumped into the Modesto Irrigation District's canal.</p>				
<p>I.3a. As a condition of approval of the final grading and drainage plans for the first project proposed in the plan area, the developer must acquire written approval from the MID to discharge runoff to the MID Main Canal (up to 5.0 cfs), and provide this documentation to the City of Modesto Public Works Department. If this first project, or any subsequent projects, propose to use some alternative stormwater drainage design that does not require discharge to the MID Main Canal, then additional supplemental CEQA review shall be conducted for these projects. Should MID not approve discharge to its facility an alternative design may include infiltration trenches at the bottom of the proposed ponds in combination with retention and/or retention of a higher volume (100-yr 6-day) frequency storm runoff. This design may increase the size of the detention basin(s), thus requiring additional land to be utilized for drainage, land that otherwise would be occupied by structures or parking.</p>	<p>Project Developers</p>	<p>Project Developers shall be responsible for plans to discharge runoff to the MID Main Canal. The developer must acquire written approval from the MID or the City of Modesto and Modesto Irrigation District must enter into an agreement to discharge water in to the MID Main Canal. Alternative stormwater drainage design must be approved if MID approval is not obtained.</p>	<p>City Engineer shall coordinate the agreement with MID and develop an alternative design if necessary.</p>	<p>Securing MID approval to discharge runoff into the MID Main Canal shall be completed and implemented or an approved alternative design shall be implemented prior to approval of the first final grading and drainage plans or as determined by the FMP and IFP.</p>

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<p>I.3b. As a condition of approval of the final grading and drainage plans for all projects proposed within the plan area it must be demonstrated through detailed hydraulic analysis that implementation of the proposed drainage plans will:</p> <ul style="list-style-type: none"> • Include adequately sized detention facilities to accommodate anticipated runoff associated with the 100-year storm event. A licensed professional engineer shall prepare the final drainage plan for the project and plans must be submitted to the City of Modesto Public Works for review and approval. • Include drainage components that are designed in compliance with City of Modesto standards. The grading and drainage plans shall be reviewed for compliance with these requirements by the Department of Public Works; and • Establish a funding mechanism for maintenance and annual inspections of the detention basin, drainage ditches, and drainage inlets. Any accumulation of sediment or other debris shall be promptly removed. An annual report documenting the inspection and any remedial action conducted shall be submitted to the City of Modesto Public Works Department for review. 	<p>Project Developers</p>	<p>Prepare site drainage plan or require construction contractor to prepare plan. Project Developers shall implement plan.</p>	<p>City Engineer</p>	<p>The final grading and drainage plans shall be approved prior to issuance of a grading permit and shall be implemented prior to acceptance of improvements or issuance of building permit, whichever occurs first, or where appropriate as determined by the FMP and IFP.</p> <p>An alternative temporary retention basin may be considered for regional commercial development.</p>

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<p>I.4. The Tivoli Specific Plan project proponent shall:</p> <ul style="list-style-type: none"> Design and construct the proposed on-site development so that the sheetflow flooding generated from the upstream watershed that can occur in the region will be safely passed through the proposed development. These flows shall be contained within the streets and be dispersed on the downstream side of the project site in a manner that does not concentrate or increase flows, ensuring that the potential for increased erosion or flooding downstream is minimized. Ensure that finished floor elevations of all residential, commercial, and industrial structures be a minimum of one foot above the elevation of 100-year sheetflow flooding. Contribute their fair share of the cost to design and construct the proposed northeast flood control solution. 	<p>Project Developers</p>	<p>Prepare site drainage plan or require construction contractor to prepare plan.</p> <p>Project Developers shall implement plan.</p> <p>Project Developers shall contribute fair share of infrastructure costs into a fund.</p>	<p>City Engineer</p>	<p>The final grading and drainage plans shall be approved prior to issuance of a grading permit and shall be implemented prior to acceptance of improvements or certificate of occupancy, whichever occurs first.</p>
<p>I.8. Prior to approval of a grading plan for development of a particular parcel of the Specific Plan area, a well survey shall be conducted to determine the location and characteristics of each well for that particular parcel. The survey shall be conducted and documented by a State-registered geologist or engineer, and the results submitted to the City for review. The water supply wells shall either be:</p> <ol style="list-style-type: none"> Properly abandoned in compliance with the California Department of Water Resources, California Well Standards and Stanislaus County Code, Chapter 9.36 prior to final approval of the grading plan, or Inspected by a qualified professional to determine whether each well is properly sealed at the surface to prevent infiltration of water-borne contaminants into the well casing or surrounding gravel pack. The California Well Standards require an annular surface seal of at least 20 feet. If any of the wells are found not to comply with this requirement, the applicant shall retain a qualified well driller to install the required seal. Documentation of the inspections and seal installations, if any, shall be provided to the City prior to final approval of the grading plan. 	<p>Project Developers</p>	<p>Project Developers shall conduct a well survey to determine location and characteristics of each well. The survey shall be conducted by a state-registered geologist or engineer, and results shall be submitted to the City Engineer and implemented by the developers.</p>	<p>The City Engineer shall review the well survey and determine whether the well be abandoned or sealed.</p>	<p>The well survey shall be conducted prior to approval of a grading permit for development of the Specific Plan area and shall be implemented prior to certificate of occupancy.</p>

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
Geology, Soils, and Seismicity				
<p>J.1. In locations underlain by expansive soils and/or non-engineered fill, the designers of foundations and improvements (including sidewalks, roads, and utilities) shall consider these conditions. The design-level geotechnical investigation, to be prepared by licensed professionals and approved by the City Building Department, shall include measures to ensure potential damages related to expansive soils and non-uniformly compacted fill are minimized. Mitigation options may range from removal of the problematic soils and replacement, as needed, with properly conditioned and compacted fill, to design and construction of improvements to withstand the forces exerted during the expected shrink-swell cycles and settlements.</p>	Project Developers	Project Developers shall retain a licensed professional to prepare a geotechnical report and implement the measures.	Building Division shall review and approve the geotechnical report.	The geotechnical report shall be prepared and approved prior to the issuance of grading or building permit, whichever occurs first. Implement mitigation measures during construction.
<p>J.2. Prior to issuance of a grading permit, a site-specific grading plan shall be prepared by a licensed professional and submitted to the City Building Department for review and approval. The plan shall include specific recommendations for mitigating potential settlement associated with fill placement and areas of different fill thickness.</p>	Project Developers	Project Developers shall retain a licensed professional to prepare site-specific grading plans and implement the plans.	Building Division shall review and approve the site-specific grading plans.	The site specific grading plan shall be prepared and approved prior to issuance of a grading permit. Implement recommended measures during construction.
Community Services				
<p>K.3. Prior to development of the northeast area of the Tivoli Specific Plan, project developers must provide the necessary funding for the construction of a Modesto Fire Department Fire Station to house an engine company and a truck company.</p>	Project Developers	Project Developers shall provide funding for the construction of a fire station when development occurs in the northeast portion of the Tivoli Specific Plan.	Community and Economic Development Modesto Fire Department	Funding to be provided prior to issuance of a building permit.

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
Utilities and Services Systems				
<p>L.1. Prior to or concurrent with development, the project sponsors and any project applicants for future development in the Tivoli Specific Plan area shall install all on-site collection system improvements which are necessary to serve the development. Prior to issuance of a building permit, the project applicants will be required to contribute toward their fair share of the required off-site collection system improvements through payment of future capacity charges, as adopted by the City or through an equivalent funding measure. In addition, prior to or concurrent with development, the project developers shall fund and install all off-site infrastructure which are necessary to serve the development.</p>	<p>Project Developers</p>	<p>Project Developers shall be responsible for installation of on-site collection system improvements and shall contribute a fair share of the costs to construct off-site collection system improvements. Project Developers shall fund and construct all off-site infrastructure necessary to serve the project site.</p>	<p>City Engineer shall review and approve infrastructure improvements to ensure that the City's Standard Specifications are incorporated.</p>	<p>All improvements shall be completed prior to issuance of the first building permit of Phase I or as determined by the FMP and IFP.</p>
<p>L.2. Prior to issuance of a building permit, the project applicants will be required to contribute toward their fair share of the required wastewater treatment and disposal facilities through payment of future capacity charges, as adopted by the City, or through an equivalent funding measure. In addition, the City cannot commence tertiary treatment without a new NPDES permit from the RWQCB. The RWQCB is encouraged to issue the new NPDES permit in a manner that would allow for successful implementation of the City's proposed tertiary treatment. While the City is optimistic that an appropriate NPDES permit will eventually be issued, this action is beyond the City's jurisdiction and control and therefore the City cannot assure that the necessary treatment and disposal infrastructure will be permitted prior to development.</p>	<p>Project Developers and City of Modesto</p>	<p>City of Modesto shall ensure that Project Developers contribute a fair share of the costs to construct wastewater treatment and disposal system improvements. City of Modesto shall be responsible for obtaining a new NPDES permit.</p>	<p>Department of Public Works</p>	<p>Prior to issuance of any building permit.</p>
<p>L.3. Same as Mitigation Measure B.1. Compensation for loss of prime farmland.</p>	<p>Same as Mitigation Measure B.1.</p>	<p>Same as Mitigation Measure B.1.</p>	<p>Same as Mitigation Measure B.1.</p>	<p>Same as Mitigation Measure B.1.</p>

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<p>L.11. Prior to excavation for construction for the improvements to the wastewater collection and treatment systems for near-term development, the City shall use reasonable means to determine the presence of soil or groundwater contamination. Those reasonable means may consist of tracer gas surveys, soil or groundwater sampling, and/or conducting a Phase I Environmental Site Assessment and, if necessary, a Phase II assessment, in accordance with the most recent ASTM International standard. Where the results of these studies indicate that soil or groundwater contamination is present, any necessary remediation shall be conducted.</p>	<p>City of Modesto</p>	<p>City of Modesto shall retain a registered environmental assessor to conduct Phase I Environmental Site Assessments.</p>	<p>The Public Works Department shall review and approve the Phase I Environmental Site Assessments.</p>	<p>Conduct Phase I Environmental Site Assessments prior to issuance of any construction contract. Implement prior to start of construction.</p>
<p>L.14. Pre-Construction Surveys and Agency Coordination. Pre-construction surveys should be conducted prior to project-related activities that may impact the resources of Dry Creek or the Tuolumne River in order to identify significant impacts. If Dry Creek, the Tuolumne River, or their tributaries are impacted by project activities, U.S. Army Corps of Engineers (USACE) permits and a Streambed Alteration Agreement from the California Department of Fish and Game (CDFG) would be required. If regulated habitats are impacted by project activities, USACE permits and a Streambed Alteration Agreement from CDFG would be required. Early consultation with the USACE and CDFG is recommended to determine adequate protocols, as project modification and/or mitigation measures may be necessary and would require agency approval.</p>	<p>City of Modesto and Project Biologist</p>	<p>Retain qualified biologist to conduct pre-construction surveys for projects that would impact Dry Creek and Tuolumne River and obtain USACE permit and Streambed Alteration.</p>	<p>CDFG shall review pre-construction surveys. USACE, USFWS, and any other affected agencies will review permit applications.</p>	<p>Conduct surveys prior to issuance of any construction contract. Implement prior to start of construction.</p>
<p>L.15. Implement Mitigation Measure H.4 and Mitigation Measure H.5.</p>	<p>See Mitigation Measures H.4 and H.5.</p>	<p>See Mitigation Measures H.4 and H.5.</p>	<p>See Mitigation Measures H.4 and H.5.</p>	<p>See Mitigation Measures H.4 and H.5.</p>
<p>L.16. Implement Mitigation Measures H.6a and H.6b.</p>	<p>See Mitigation Measures H.6a and H.6b.</p>	<p>See Mitigation Measures H.6a and H.6b.</p>	<p>See Mitigation Measures H.6a and H.6b.</p>	<p>See Mitigation Measures H.6a and H.6b.</p>
<p>L.17. Implement Mitigation Measure H.4.</p>	<p>See Mitigation Measure H.4.</p>	<p>See Mitigation Measure H.4.</p>	<p>See Mitigation Measure H.4.</p>	<p>See Mitigation Measure H.4.</p>

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<p>L.18a. Microtunnel under slough near 2.3 mgd of tertiary treatment.</p>	<p>Public Works Department and Construction Contractor Representative</p>	<p>Prepare monitoring and contingency plan for micro-tunneling or require construction contractor to prepare plan. Implement plan.</p>	<p>Public Works Department shall construct in accordance with City's Standard Specifications.</p>	<p>Plan shall be prepared prior to commencement of micro-tunneling under a riparian area or other identified wetland and shall be implemented during micro-tunneling.</p>
<p>L.18b. Pre-Construction Surveys and Agency Coordination. This mitigation measure pertains to microtunneling across the east-west slough north of the proposed 2.3 mgd of tertiary treatment (including the construction access portals) and also pertains to any wetlands or canals that might be crossed by proposed piping between the tertiary facilities and the rest of the Secondary Plant. Pre-construction surveys should be conducted prior to project-related activities that may impact wetland areas and those areas potentially under the jurisdiction of the USACE and/or CDFG in order to identify significant impacts. If these areas would be impacted by project activities, USACE permits and a Streambed Alteration Agreement from CDFG would be required. These agencies would request adequate measures to offset impacts to riparian and aquatic resources. Early consultation with the USACE and CDFG is recommended to determine adequate protocol, as project modification and/or mitigation measures may be necessary and would require agency approval.</p>	<p>See Mitigation Measure L.14.</p>	<p>See Mitigation Measure L.14.</p>	<p>See Mitigation Measure L.14.</p>	<p>See Mitigation Measure L.14.</p>
<p>L.19. The City shall prepare a Stormwater Pollution Prevention Plan (SWPPP) designed to reduce potential impacts to surface water quality through the construction period of the wastewater system components (whether or not the particular portion of the project disturbs more than one acre). The SWPPP shall emphasize measures designed to minimize erosion and off-site sedimentation.</p>	<p>See Mitigation Measure I.1.</p>	<p>See Mitigation Measure I.1.</p>	<p>See Mitigation Measure I.1.</p>	<p>See Mitigation Measure I.1.</p>

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
<p>L.21. In locations underlain by expansive soils and/or non-engineered fill, the designers of the Tivoli Lift Station and sewer pipes shall consider these conditions. The design-level geotechnical investigation, to be prepared by licensed professionals and approved by the City Engineer, shall include measures to ensure potential damages related to expansive soils and non-uniformly compacted fill are minimized. Mitigation options may range from removal of the problematic soils and replacement, as needed, with properly conditioned and compacted fill, to design and construction of improvements to withstand the forces exerted during the expected shrink-swell cycles and settlements.</p>	<p>Project Developers</p>	<p>Project Developers shall be responsible for a geotechnical analysis that must be prepared by a licensed professional and shall implement the measures.</p>	<p>City Engineer shall review and approve the geotechnical analysis.</p>	<p>Prepare and approve geotechnical analysis prior to approval of final grading and drainage plans. Implement recommended measures prior to the issuance of the first building permit or where appropriate as determined by the FMP and IFP.</p>
<p>L.22. Prior to issuance of a grading permit for each development site in the Tivoli Specific Plan area, a site-specific grading plan shall be prepared by a licensed professional and submitted to the City Engineer for review and approval. The grading plan shall include specific recommendations for mitigating potential settlement associated with fill placement and areas of different fill thickness in relation to then-existing wastewater collection facilities. In addition, the City shall inspect sewer lines after adjacent construction has been completed and shall remedy any differential settlement of wastewater collection facilities.</p>	<p>Project Developers</p>	<p>Prepare site drainage plan or require construction contractor to prepare plan. Project Developers shall implement plan.</p>	<p>City Engineer</p>	<p>The final grading and drainage plans shall be approved prior to the issuance of a grading permit. Implement the plan prior to acceptance of improvements or the first certificate of occupancy, whichever occurs first, or where appropriate as determined by the FMP and IFP.</p>
<p>L.25. Implement Mitigation Measures L.1 and L.2.</p>	<p>See Mitigation Measures L.1 and L.2</p>	<p>See Mitigation Measures L.1 and L.2</p>	<p>See Mitigation Measures L.1 and L.2</p>	<p>See Mitigation Measures L.1 and L.2</p>
<p>L.26. Same as Mitigation Measure B.3.</p>	<p>See Mitigation Measure B.3.</p>	<p>See Mitigation Measure B.3.</p>	<p>See Mitigation Measure B.3.</p>	<p>See Mitigation Measure B.3.</p>

Mitigation Measure	Mitigation Responsibility	Monitoring Actions	Monitoring / Reporting Responsibility	Schedule
L.27. See mitigation measures listed under Impact E.2.	See Mitigation Measure E.2.	See Mitigation Measure E.2.	See Mitigation Measure E.2.	See Mitigation Measure E.2.
L.28. See mitigation measures listed under Impacts L.15 and L.16.	See Mitigation Measures L.15 and L.16.	See Mitigation Measures L.15 and L.16.	See Mitigation Measures L.15 and L.16.	See Mitigation Measures L.15 and L.16.
Water Supply				
<p>M.2. In order to maintain adequate water pressure in the City’s delivery system, it would be necessary to install two new wells that would have a combined capability to meet or exceed the project’s peak-hour demand of 2,160 gallons per minute and maximum-day demand of approximately 6.57 af/day. One well must be fully developed and operational by the time of the initial project development. The second well must be provided and operational during the second phase of development or as determined by the City of Modesto.</p> <p>One or both of these wells could be located within the Tivoli Specific Plan area; however, it may be necessary to reduce the extent of residential or commercial development in order to accommodate the wells, pumps, distribution system, and groundwater treatment facilities. One of the wells may instead be installed east of the project area as is currently expected with the Grogan Well site. Installation and development of the wells would not create any new impacts within the Tivoli Specific Plan area; installation east of the project area would involve typical construction impacts such as temporary, localized noise and dust production.</p>	Project Developers	Project Developers shall be responsible for providing/funding the wells. Wells are installed by the City of Modesto.	The City Engineer shall review and approve the proposed wells.	<p>First well to be developed and operational prior to the issuance of the first building permit of the first phase of development or as determined by the FMP and IFP.</p> <p>Second well to be developed and operational prior to or concurrent with the issuance of the first building permit of the second phase of development or as determined by the FMP and IFP.</p>
<p>General Notes:</p> <p>The Capital Facilities Fee and other applicable fee programs identify regional infrastructure improvements (such as roads, sewer, water, etc.) that are based on the buildout of the City’s <i>Urban Area General Plan</i>. These projects are identified in the City’s Capital Improvement Program. If a development project occurs in Tivoli that triggers the infrastructure improvements be constructed in advance of the CIP schedule, then the development will be responsible to construct the identified improvement. The developer will enter into a reimbursement agreement with the City, construct the project, and will be reimbursed per the terms of the agreement.</p>				

