

CHAPTER 4 PROJECT ALTERNATIVES

4.1 Introduction

Pursuant to the California Environmental Quality Act (CEQA) Guidelines, environmental impact reports (EIRs) are required to “describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives” (14 CCR 15126.6(a)). This alternatives analysis is prepared in support of CEQA’s goals to foster informed decision making and public participation (14 CCR 15126.6(a)). An EIR is not required to evaluate the environmental impacts of alternatives at the same level of detail as the proposed project, but it must include enough information to allow meaningful evaluation, analysis, and comparison with the proposed project.

The alternatives analysis is required even if the alternatives “would impede to some degree the attainment of the project objectives, or would be more costly” (14 CCR 15126.6(b)). An EIR must evaluate “only those alternatives necessary to permit a reasoned choice” (14 CCR 15126.6(f)) and does not need to consider “every conceivable alternative” to a project (14 CCR 15126.6(a)). The alternatives evaluated should be “potentially feasible” (14 CCR 15126.6(a)), but inclusion of an alternative in an EIR does not constitute definitive evidence that the alternative is in fact “feasible.” The final decision regarding the feasibility of alternatives lies with the decision makers for a given project who must make the necessary findings addressing the feasibility of alternatives for avoiding or substantially reducing a project’s significant environmental effects (California Public Resources Code, Section 21081; see also 14 CCR 15091).

This chapter describes the project alternatives selected for analysis, evaluates the environmental impacts associated with them, and compares the impacts with those of the Yosemite Avenue-Gardner Avenue to Hatch Road Annexation Project (proposed project). This chapter also identifies those alternatives considered by the City of Merced (City) but not carried forward for detailed analysis and the basis for the City’s decision to omit those alternatives from the detailed analysis.

In conformity with CEQA, the purpose of this analysis is to focus on alternatives that are potentially feasible, and that would avoid or substantially lessen any of the significant effects of the project. The analysis in the Environmental Analysis, Chapters 4.1 through 4.12, finds that the proposed project would result in one significant and unavoidable impact:

Impact 3.2-3: The proposed project could contribute to cumulative loss in agricultural resources. This would be a significant and unavoidable impact.

4.2 Project Objectives

The primary objectives of the proposed project as set forth in Chapter 2, Project Description, are to:

1. Develop an attractive and high-quality mixed-use project comprising housing, retail and general commercial.
2. Provide quality and affordable living space for the local housing market in close proximity to commercial uses.
3. Create a low-carbon footprint living environment desirable to eco-conscious residents through the use of select building materials, low-energy appliances, and native landscaping.
4. Operate a professionally managed secure living space for residents that includes dedicated village-style retail, restaurant, and mixed-use.
5. Produce economic benefits by creating hundreds of construction jobs, twelve to fifteen jobs operating the housing project when completed, and dozens of retail and restaurant job opportunities for the village retail and mixed-use center.
6. Provide residents a variety of transit options.

4.3 Summary of Project Alternatives

Development of Project Alternatives

In developing the project alternatives evaluated in this EIR, the EIR preparers worked with city staff to explore various modifications to the project that could reduce environmental effects while responding to the project objectives and reflecting any suggestions for project alternatives that were provided in the public comments received in response to the Notice of Preparation. This effort focused on reducing the project's significant and unavoidable impacts related to the conversion of Prime and Unique Farmland to non-agricultural land uses.

Alternatives Considered but Rejected

In addition to the alternatives selected for additional analysis, the following alternatives were initially considered but rejected from further consideration. The CEQA Guidelines provide that reasons to eliminate potential alternatives from detailed consideration in an EIR can include (1) failure to meet most of the basic project objectives, (2) infeasibility, and (3) inability to avoid significant environmental impacts. Factors that may be considered to determine if an alternative

is feasible include site suitability, economic viability, and general plan consistency. The following alternatives were preliminarily considered but rejected from further evaluation for the reasons described below.

1. **Offsite Alternative:** Under this potential alternative, the proposed project would be developed on another site within the City. There is vacant land in the northern portion of the City limits, northwest of El Capitan High School, that is designated for Neighborhood Commercial (NC) and both High to Medium High Density Residential (HMD) and High Density Residential (HDR) that could accommodate the project. As shown in Figure 4-1, the vacant land considered for this alternative is generally located east of State Route 59, south of Nevada Street and Old Lake Road, east of G Street, and north of Bellevue Road. There is more than 30 acres of vacant land in this area and thus the development could be placed in several one of specific locations within this general area. As shown on Figure 4-1, the area immediately west of Fahrens Creek and south of an alignment that would connect Nevada Street and Old Lake Road carries all three of the land use designations that could accommodate the proposed development. This area is designated as Farmland of Local Importance.

There is no existing public road access to this area. Access could be provided by extending Old Lake Road westerly across Fahrens Creek and connecting with Nevada Street, or by extending Farmland Avenue westerly across Fahrens Creek. The subject property and most adjacent properties are currently in agricultural production.

This potential alternative was rejected from further consideration because while it would avoid the project's significant effect associated with loss of Prime Farmland and Unique Farmland, it would increase impacts in other environmental resource areas. This potential alternative would constitute leapfrog development. It would require extending public roads and utilities to the site and would develop urban land uses in an area that is largely rural, with no adjacent or proximate commercial or residential land uses. Further, there are limited transit, bicycle, and pedestrian facilities in this area. Thus, residents of the site would need to drive greater distances to access services and visit other city residents than residents of the proposed project site. For example, this potential alternative site is four miles from Merced College and commercial land uses along East Yosemite Avenue and five miles from Merced Mall, while the proposed project site is approximately two miles from Merced College and three miles from Merced Mall. This potential alternative would not be consistent with goals and policies of the General Plan (City of Merced 2012) and the 2018 Regional Transportation Plan/Sustainable Community Strategy (RTP/SCS) (MCAG 2018) that encourage compact development patterns, infill development, limiting development and related impacts on agricultural lands along the City's urban fringe, and

placing new urban development contiguous to existing urban areas and where the new development has reasonable access to public services and facilities.

2. **All commercial option:** Under this alternative, the project site would be constructed entirely with commercial land uses. This alternative was rejected from further consideration because this alternative would not achieve the basic project objectives related to developing a mixed-use project and it would result in greater environmental effects than the proposed project. This potential alternative would not avoid or reduce the project's significant impact due to loss of Prime Farmland and Unique Farmland. A large commercial development would no longer be a local-serving neighborhood commercial center. It would be considered regional-serving and thus would be expected to result in substantially higher traffic volumes and associated vehicle miles traveled (VMT). It could also result in conflicts with the surrounding residential subdivisions within the City limits and the rural residential land uses in Merced County north and east of the project site. Further, this potential alternative would not be consistent with the Merced Vision 2030 General Plan and would not help to satisfy the housing needs identified in the long term planning documents for the City of Merced, UC Merced, and the RTP/SCS.
3. **All residential option:** Under this potential alternative, the project site would be constructed entirely with residential land uses. Replacing the proposed 66,000 square feet of commercial space with apartments could accommodate approximately 40 additional apartment units. This alternative was rejected from further consideration because it would not achieve the basic project objectives related to developing a mixed-use project and it would not reduce the project's environmental effects. This potential alternative would not avoid or reduce the project's significant impact due to loss of Prime Farmland and Unique Farmland. It would increase demands for water and other public services, including increasing the amount of wastewater generated at the site and conveyed through the existing 18-inch sewer line in East Yosemite Avenue. As discussed in Section 3.11, this sewer line is expected to be at 90% capacity in the cumulative scenario; increased residential development at the project site would exacerbate this condition. It would also slightly increase VMT associated with the project because residents would not have access to any onsite commercial land uses. The next closest commercial area is approximately one mile west of the site thus many residents would drive to access such services.

Project Alternatives Selected for Analysis

This section provides an evaluation of the environmental effects of each alternative relative to the environmental effects of the proposed project. These conclusions are listed in the alternatives summary matrix provided at the end of this discussion.

A brief overview of each alternative selected for analysis is provided below while subsequent sections provide additional description of the alternative and present analysis comparing the impacts of each alternative to those of the proposed project.

Alternative 1: No Project Alternative. This alternative assumes no development would occur, and the site would remain in its current condition. All buildings and other site improvements would be retained at existing locations.

Alternative 2: Agricultural Retention Alternative. This alternative would retain approximately 9.77 acres of Prime Farmland in the northern portion of the project site and extend the residential development easterly into an approximately 5-acre portion of the proposed Remainder Area. Figure 4-2, Agricultural Retention Alternative, identifies the area of Prime Farmland that would be retained and the portion of the Remainder Area that would be developed as part of The Crossings project under this alternative. This alternative would reduce the extent of development by approximately 4.7 acres, which could result in a slight decrease in the amount of residential units and commercial space within the site.

Alternative 3: Reduced Density Alternative. This alternative would develop 60 fewer residential units than the proposed project and include a 1.5-acre neighborhood park within the project site.

4.4 Alternative 1: No Project

CEQA requires that an EIR consider a No Project alternative, which could be one in which no development occurs within the project site or could be one in which development consistent with the General Plan and zoning designations occurs. The project site is located within the City's Sphere of Influence and would require annexation prior to any development occurring. Thus, the No Project alternative assumes no development would occur, and the site would remain in its current condition.

Aesthetics

The proposed project would result in less than significant impacts to visual resources with the exception of the potentially significant impact regarding exposing neighboring land uses to light and glare. Implementation of Mitigation Measure 3.1a, which requires lighting on the sight to be 'dark sky friendly' would ensure that proposed project would have a less than significant impact.

Under the No Project Alternative, there would be no change in the land uses of the project site and no changes to existing visual conditions and visual character of the site. Thus, the No Project/No Build Alternative would avoid all impacts to visual resources and would have reduced aesthetic impacts compared to the proposed project.

Agricultural Resources

The proposed project would have a significant and unavoidable impact regarding the conversion of 28.4 acres of Prime and Unique Farmland to non-agricultural uses even after the implementation of mitigation. Under the No Project Alternative, the Prime and Unique Farmland would be retained in its current condition. Thus, the No Project Alternative would avoid all impacts to agricultural resources and would have reduced agricultural resources impacts compared to the proposed project.

Air Quality

The proposed project would have less than significant impacts regarding air quality emissions and the health impacts of Toxic Air Contaminants with the exception of potential exposure to the *Coccidioides immitis* (*C. immitis*) fungus, which causes Valley Fever, from construction activities. Implementation of Mitigation Measure 3.3a during all construction phases of the project would reduce this impact to a less-than-significant level.

Under the No Project Alternative, no construction would occur, there would be no increase or decrease in air pollutant emissions, and there would be no change in the potential for people within the site to be exposed to the *C. immitis* fungus. Thus, the No Project Alternative would result in no impacts to air quality.

Biological Resources

The proposed project would result in potentially significant impacts to biological resources associated with impacts to special status plants and wildlife, loss of riparian habitat, possible disturbance to nesting birds, loss of trees, and impacts to potential jurisdictional waters of the State. With implementation of mitigation measures specified in Section 3.4, these impacts would be reduced to less than significant levels.

No construction would occur under the No Project Alternative. This alternative would result in no changes to biological resources. No nesting birds would be disturbed, all existing trees would remain in place, and no impacts to wetlands would occur.

No development would occur under the No Project Alternative and there would be no loss of or disturbance to biological resources. Therefore, the No Project Alternative would have reduced biological resources impacts compared to the proposed project.

Cultural Resources

The proposed project would result in less than significant impacts to cultural resources and the site was not found to contain resources that would be eligible for listing under NRHP and CRHR

designation criteria or other significant cultural resources. The proposed project would have a potentially significant impact due to the potential to uncover subsurface archaeological resources, tribal cultural resources, human remains, and/or paleontological resources; these would be reduced to a less than significant impact after implementation of the mitigation measures described in Section 3.5.

Under the No Project Alternative, there would be no change in the project site, which would remain in agricultural production. This alternative would result in no impacts to cultural resources and would not create a potential for discovery of subsurface resources.

Energy

The proposed project would increase consumption of electrical and natural gas energy as well as petroleum-based fuels during construction and operation. The proposed project would result in less than significant impacts related to energy consumption during project construction and operation and would not require mitigation.

Under the No Project Alternative, there would be no change in the project site's land uses and associated energy consumption. The No Project Alternative would have no impact regarding energy consumption.

Greenhouse Gas Emissions

The proposed project would result in less than significant impacts related to greenhouse gas (GHG) emissions during project construction and operation. Under the No Project Alternative, no construction would occur, and the No Project Alternative would neither increase nor decrease emissions of GHGs. Thus, the No Project Alternative would result in no impacts associated with GHG emissions.

Hydrology, Water Quality and Drainage

The proposed project would increase development onsite but would not result in a significant increase in stormwater. Compliance with state and local requirements for erosion control and use of Best Management Practices (BMPs) to protect water quality, the project would not result in a significant degradation of water quality during project construction and operation. The proposed project would result in less than significant impacts to groundwater supply, increase in stormwater flows that could exceed capacity of stormwater infrastructure, and increase in sediment and erosion on local waterways during construction.

There would be no impacts to hydrology, drainage, or water quality related to an increase in stormwater, loss of groundwater, or inadequate stormwater infrastructure under the No Project

Alternative because there would be no earth-disturbance or increase in impervious surfaces at the project site. Therefore, impacts would be reduced compared to the proposed project.

Land Use and Planning

The proposed project would alter the land use of the project site and require amending the General Plan and zoning designations for the site. The proposed neighborhood commercial and residential land uses would be compatible with the surrounding land uses. Therefore, the proposed project would have a less than significant impact regarding impacts to land uses.

The No Project Alternative would result in no changes to land uses within the project. However, this alternative would not be consistent with the General Plan, which anticipates annexation of the site to the City and development of residential land uses. If this site were retained as agricultural land in perpetuity, while other adjacent properties are annexed to the City and developed with urban and suburban uses, it would create an island of agricultural land. This alternative would not be consistent with the General Plan goals related to encouraging compact development patterns, infill development, and placing new urban development contiguous to existing urban areas and where the new development has reasonable access to public services and facilities. Thus, this alternative would have no land use impacts in the short-term but could result in cumulative impacts associated with conflicts with the General Plan, land use incompatibilities, and increasing development pressures for lands on the fringe of the City.

Noise

The proposed project would result in less-than-significant impacts associated with noise generated during project construction and operation with the exception of the potentially significant impact regarding potential for nighttime construction to result in sleep disruption or interference with relaxation in the evening period and operational noise from increased activity levels within the project site. However, after implementation of the mitigation measures discussed in Section 3.10, the proposed project would have a less than significant impact.

The No Project Alternative would avoid all noise generation from construction and increases in traffic and onsite activity associated with the proposed project. Therefore, the No Project Alternative would have reduced noise impacts compared to the proposed project.

Public Services and Utilities

The proposed project would result in less-than-significant impacts associated with project-generated impacts to water usage, wastewater infrastructure, solid waste, schools, recreational facilities, libraries, fire response services, and law enforcement response services.

The No Project Alternative would avoid all increases in demands for public services and utilities at the project site because no change in the current land use of the site would occur. However, as discussed in the Land Use section above, in the cumulative condition, retention of this site as agricultural land could increase development pressures for lands located further from existing City services and utilities, which could increase environmental effects associated with infrastructure installation to serve those properties.

Transportation and Circulation

The proposed project would increase traffic in the project vicinity as a result of the new trips generated by the proposed project. The proposed project would have less than significant impacts on transit, bike and pedestrian facilities, associated with transportation hazards, and associated with VMT generation.

The No Project Alternative would not introduce any development to the project site and therefore would not result in any changes to transportation and circulation conditions in the project vicinity compared to existing conditions. However, as discussed in the Land Use section above, in the cumulative condition, retention of this site as agricultural land could increase development pressures for lands located on the fringe of the City which would increase the distance that residents of those areas would need to travel to access commercial services. Thus, in the cumulative scenario, this alternative could increase impacts associated with VMT.

4.5 Alternative 2: Agricultural Retention

Under this alternative, a 9.77-acre portion of prime farmland located in the northern portion of the site would be retained as agricultural land, as shown on Figure 4-2. The southern boundary of this retained agricultural area would extend from the southern boundary of the 9.4-acre portion of the Remainder Area in the northwest corner of the project site. To keep the development area as close as possible to the amount included in proposed project, the residential development would be extended east into an approximately 5-acre portion of the Remainder Area. This area is proposed to be pre-zoned Low Density Residential (R-1-10) under the proposed project but would be zoned Medium High Density (MHD) under this alternative. This area is designed Farmland of Local Importance and Semi-Agricultural and Rural Commercial Land. This alternative would result in development of approximately 23.9 acres rather than the 28.6 acres of development under the proposed project. Thus, the total number of residential units and extent of commercial space may be slightly reduced. It is assumed this development would accommodate approximately 56,000 square feet of commercial uses and 480 residential units, compared to the 66,000 square feet of commercial space and 570 residential units included in the proposed project.

By reducing the extent of development, this alternative would also reduce the amount of wastewater generated by the project. This would reduce the volume of flows in the 18-inch sewer

line in East Yosemite Avenue, making a greater amount of capacity available for future projects in the SOI/SUDP. This alternative contemplates reducing the development by approximately 85%, which would reduce the wastewater generation of the project to a total of 125,840 gpd, as shown in Table 4-1, Agricultural Retention Alternative Wastewater Generation, compared to the 149,235 gpd that would be generated by the proposed project.

**Table 4-1
Agricultural Retention Alternative Wastewater Generation**

Proposed Development	Parcel Acres	Land Use		Flow Factor		Average Dry Weather Flows (gpd) ¹
		Quantity	Units	Value	Units	
Dwelling Units		480	Du	257	gpd/du	123,360
Commercial ²	1.3			1,500	gpd/acre	2,015
Clubhouse ³	0.31			1,500	gpd/acre	465
Totals						125,840

Notes:

- ¹ gpd = gallons per day
- ² 56,000 sf (one story) = 1.3 acres
- ³ 13,700 sf (one story) = 0.31 acres; Assuming Public General Use wastewater generation rate from City’s Sewer Master Plan (City of Merced 2017)

Aesthetics

The proposed project would result in less than significant impacts to visual resources with the exception of the potentially significant impact regarding exposing neighboring residential land uses to light and glare. Implementation of Mitigation Measure 3.1a, which requires lighting on the site to be ‘dark sky friendly’, would ensure that proposed project would have a less than significant impact.

Similar to the proposed project, the Agricultural Retention Alternative would alter the viewshed of the project site through the development of a similar amount of residential and commercial/mixed land uses as the proposed project. As adjacent properties support existing residences, this Alternative would have the same potential impact as the proposed project related to glare and light of the constructed land uses. Retention of agricultural land in the northern portion of the project site would not substantially alter the changes in visual character or introduction of light and glare because there would be no changes to the proposed commercial land use and the residential land uses would still be visible from properties north of the site. Through the implementation of the mitigation measure identified in Section 3.1, the Agricultural Retention Alternative would have a similar impact regarding aesthetic resources and the potential for light and glare as the proposed project.

Agricultural Resources

The proposed project would have a significant and unavoidable impact due to the conversion of 28.4 acres of Prime and Unique Farmland to non-agricultural uses. This Agricultural Retention Alternative would reduce the amount of Prime Farmland converted to a non-agricultural land use by 9.77 acres as compared to the proposed project. However, while the overall acreage would be reduced, this alternative would still require the conversion of designated Prime and Unique agricultural land to a non-agricultural land use. Therefore, the Agricultural Retention Alternative would have a reduced impact as compared to the proposed project, but it would remain a significant and unavoidable impact. Further, the land north of the project site is also within the City's Sphere of Influence and Specific Urban Development Plan (SOI/SUDP), and thus is anticipated for future development of urban and/or suburban land uses. Retaining the 9.77-acre portion of Prime Farmland within the project site would eventually result in an island of agricultural land, which would reduce the value of this portion of the site for continued agricultural production.

Air Quality

The proposed project would have less than significant impacts regarding air quality emissions and the health impacts of Toxic Air Contaminants with the exception of potential exposure of the *C. immitis* fungus from construction activities. Implementation of Mitigation Measure 3.3a during all construction phases of the project would reduce this impact to a less-than-significant level.

The Agricultural Retention Alternative would reduce the amount of Prime farmland developed but would require a similar level of construction and grading that would result in a similar level of potential exposure to the *C. immitis* fungus. Therefore, the Agricultural Retention Alternative would result a less than significant impact after mitigation, consistent with the proposed project.

Biological Resources

The proposed project would result in potentially significant impacts to biological resources associated with impacts to special status plants and wildlife, loss of riparian habitat, possible disturbance to nesting birds, loss of trees, and impacts to potential jurisdictional waters of the State. With implementation of mitigation measures identified in Section 3.4, these impacts would be reduced to less than significant levels.

The Agricultural Retention Alternative would develop the project site for both residential and commercial land uses but would retain the Prime Farmland located in the northern portion of the site. This alternative would not develop the northern portion of the site along the northern potentially jurisdictional drainage. In addition, this alternative would slightly reduce the total area of development (by approximately 4.7 acres). Therefore, the alternative would have a slightly reduced impact to biological resources compared to the proposed project. However, the impact

would remain potentially significant as the remainder of the site would be developed under this alternative and would have potentially significant impacts to biological resources associated with impacts to special status plants and wildlife, with the loss of riparian habitat, possible disturbance to nesting birds, and impacts to potential jurisdictional waters of the State. With implementation of the mitigation measures identified in Section 3.4 of the EIR, this alternative would have a less than significant impact, which would be the same as the proposed project.

Cultural Resources

The proposed project would result in less than significant impacts to cultural resources and the site was not found to contain resources that would be eligible for listing under NRHP and CRHR designation criteria or other significant cultural resources. The proposed project would have a potentially significant impact due to the potential to uncover subsurface archaeological resources, tribal cultural resources, human remains, and/or paleontological resources; these would be reduced to a less than significant impact after implementation of the mitigation measures described in Section 3.5.

The Agricultural Retention Alternative would develop the project site for both residential and commercial land uses, reducing the total development area by approximately 4.7 acres. Therefore, this alternative would slightly reduce the potential for discovery of subsurface cultural resources. However, the impact would remain potentially significant and would require implementation of the same mitigation measures as the proposed project, as identified in Section 3.5 of the EIR, to reduce the impact to a less than significant level.

Greenhouse Gas Emissions

The proposed project would result in less than significant impacts related to GHG emissions during project construction and operation.

The Agricultural Retention Alternative would develop the project site for both residential and commercial land uses but would retain the Prime Farmland located in the northern portion of the site. This alternative would have slightly reduced GHG emissions during construction due to the reduced area of grading and would have slightly reduced GHG emissions as the proposed project during project operation due to the slight reduction in the amount of development. The impact would remain less than significant, consistent with the proposed project.

Energy

The proposed project would increase consumption of electrical and natural gas energy as well as petroleum-based fuels during construction and operation. The proposed project would result in

less than significant impacts related to energy consumption during project construction and operation and would not require mitigation.

The Agricultural Retention Alternative would develop the project site for both residential and commercial land uses. It would retain the Prime Farmland located in the northern portion of the site but expand the development footprint easterly and develop slightly less commercial and residential space than the proposed project. Thus, this alternative would slightly reduce energy consumption associated with the project and would implement the same energy conservation measures as are required of the proposed project under state and local regulations. This alternative would result in the same less than significant energy consumption impact as the proposed project.

Hydrology, Water Quality and Drainage

The proposed project would introduce urban development to the project site but would not result in a significant increase in stormwater or result in a significant degradation of water quality during project construction and operation. The proposed project would result in less than significant impacts to groundwater supply, increase in stormwater flows that could exceed capacity of stormwater infrastructure, and increase in sediment and erosion on local waterways during construction.

The Agricultural Retention Alternative would develop the project site for both residential and commercial land uses but would slightly reduce the total footprint of development and the total amount of impervious surfaces. This would slightly reduce the amount of onsite stormwater detention necessary. This alternative would implement similar BMPs to protect water quality as the proposed project. This alternative would result in the same less than significant impacts to hydrological resources as the proposed project.

Land Use and Planning

The proposed project would alter the land use of the project site and require amending the General Plan and zoning designations for the site. The proposed residential and commercial land uses would be compatible with the surrounding land uses. Therefore, the proposed project would have a less than significant impact regarding impacts to land uses.

The Agricultural Retention Alternative would develop the project site for both residential and commercial land uses but would retain the Prime Farmland located in the northern portion of the site. This Alternative would develop the site in a similar manner as the proposed project with the exception of the northern portion of prime farmland that would be retained. While the Agricultural Retention Alternative would shift the boundary of where agricultural land abuts medium-high density residential land, it would not avoid placement of residential land adjacent to agricultural

land. Thus, this Alternative would result in a similar less than significant land use impacts as the proposed project in the short-term. However, as discussed above, the land north of the project site is also within the City's SOI/SUDP, and thus is anticipated for future development of urban and/or suburban land uses. Retaining the 9.77-acre portion of Prime Farmland within the project site would eventually result in an island of agricultural land, which would increase the degree of land use incompatibility and conflicts and could result in an inability to create a contiguous community in this portion of the SOI/SUDP.

Noise

The proposed project would result in less-than-significant impacts associated with noise generated during project construction and operation with the exception of the potentially significant impact regarding potential for nighttime construction to result in sleep disruption or interference with relaxation in the evening period and operational noise from increased activity levels within the project site. However, after implementation of the mitigation measures discussed in Section 3.10, the proposed project would have a less than significant impact.

The Agricultural Retention Alternative would develop the project site for both residential and commercial land uses but would retain the Prime Farmland located in the northern portion of the site. This alternative would result in a similar level of construction and operational noise as the proposed project. Construction of this alternative would result in a similar potential to disrupt sleep or interfere with evening relaxation as well as noise disturbance from the increased activity levels within The Crossings development that could impact residential neighbors. Therefore, with the implementation of the mitigation measures discussed in Section 3.10, the Agricultural Retention Alternative would have a similar less than significant impact after mitigation.

Public Services and Utilities

The proposed project would result in less-than-significant impacts associated with project-generated impacts to water usage, wastewater infrastructure, solid waste, schools, recreational facilities, libraries, fire response services, and law enforcement response services. However, in the cumulative condition, the existing 18-inch sewer line in East Yosemite Avenue would reach 90% of its capacity, which exceeds the City's standard of maintaining sewer lines with 70% available capacity.

The Agricultural Retention Alternative would develop the project site for both residential and commercial land uses but would retain the Prime Farmland located in the northern portion of the site. This Alternative would result in a similar increase in onsite population and land use intensity and therefore would result in a similar less than significant impact to water usage, wastewater infrastructure, solid waste, schools, recreational facilities, libraries, fire response services, and law enforcement response services.

The Agricultural Retention Alternative would develop 90 fewer residential units than the proposed project and reduce wastewater generation from the project site by approximately 15%. This would reduce the contribution of the project to the ultimate capacity of the 18-inch sewer line in East Yosemite Avenue, from approximately 104 gallons per minute under the proposed project to approximately 87 gallons per minute under this alternative, and thus would slightly reduce the project's contribution to this cumulative impact. However, based on the anticipated development within the SOI/SUDP and population projections for the City, the reduced amount of development within the project site would likely be replaced with additional residential development elsewhere in the SOI/SUDP, including possibly in a location where wastewater flows would contribute to the same 18-inch sewer line that would receive wastewater from the proposed project. Thus, the reduced development within the project site may not lead to an ultimate reduction in the flows within this line and the cumulative impact would be unchanged. However, the Agricultural Retention Alternative would have a reduced contribution to this impact.

Transportation and Circulation

The proposed project would increase traffic in the project vicinity as a result of the new trips generated by the proposed project. The proposed project would have less than significant impacts on transit, bike and pedestrian facilities, associated with transportation hazards, and associated with VMT generation.

The Agricultural Retention Alternative would develop the project site for both residential and commercial land uses but would slightly reduce the total amount of development compared to the proposed project. The reduction in onsite development would not alter the need to provide bicycle, pedestrian, transit, and vehicular access to the site. It would slightly reduce the total volume of traffic generated by the project but would not alter the project's effect on VMT by project residents and visitors to the commercial uses within the site. Therefore, this alternative would result in the same less than significant impacts related to transportation and circulation as the proposed project.

4.6 Alternative 3: Reduced Density

This alternative would reduce the amount of residential development onsite to reduce the amount of wastewater generated by the project, which would reduce the amount of wastewater contributed to the 18-inch sewer line in East Yosemite Avenue. This would reduce the amount of capacity in the sewer line required to serve the proposed project, making a great amount of capacity available for future projects in the SOI/SUDP. This alternative contemplates developing approximately 80% of the proposed residential units, for a total of 456 units. This would reduce the wastewater generation of the project to a total of 119,937 gpd, as shown in Table 4-2, Reduced Density Alternative Wastewater Generation, compared to the 149,235 gpd that would

be generated by the proposed project. By removing 114 apartment units, the project site could accommodate an onsite neighborhood park of approximately 1.5 acres, thus meeting a portion of the project's parks demand onsite rather than through the payment of in-lieu fees. It is assumed that the park would not include restrooms and therefore would not contribute to wastewater generation. Further, it is assumed the park would be configured to connect to the commercial portion of the project and extend between the residential buildings in the apartment village portion of the project, and thus would primarily be located internal to the project site but still be accessible to the public.

**Table 4-2
Reduced Density Alternative Wastewater Generation**

Proposed Development	Parcel Acres	Land Use		Flow Factor		Average Dry Weather Flows (gpd) ¹
		Quantity	Units	Value	Units	
Dwelling Units		456	Du	257	gpd/du	117,192
Commercial ²	1.52			1,500	gpd/acre	2,280
Clubhouse ³	0.31			1,500	gpd/acre	465
Totals						119,937

Notes:

¹ gpd = gallons per day

² 66,000 sf (one story) = 1.52 acres

³ 13,700 sf (one story) = 0.31 acres; Assuming Public General Use wastewater generation rate from City's Sewer Master Plan (City of Merced 2017)

Aesthetics

The proposed project would result in less than significant impacts to visual resources with the exception of the potentially significant impact regarding the impact of glare and light on neighboring residential land uses. Implementation of Mitigation Measures 3.1a, which requires lighting on the sight to be 'dark sky friendly,' would ensure that proposed project would have a less than significant impact.

The Reduced Density Alternative would develop the same portions of the project site as the proposed project, although approximately 1.5 acres internal to the site would be developed with a park. The reduced residential development would be designed in a similar way as the proposed project but would include two fewer buildings and one building would be smaller than under the proposed project. Under the conceptual alternative design, the park would be placed internal to the project site, thus the visual character of the site as viewed from external points would be the same or largely similarly to views of the proposed project. This alternative would implement Mitigation Measure 4.1a and therefore would result in the same less than significant impact as the proposed project.

Agricultural Resources

The proposed project would have a significant and unavoidable impact regarding the conversion of 28.4 acres of Prime and Unique Farmland to non-agricultural uses even after implementation of mitigation. This alternative would develop the project site with a similar footprint thereby impacting a similar amount of Prime and Unique Farmland to non-agricultural uses. Therefore, this alternative would result in the same significant and unavoidable impact to farmland even after implementation of mitigation measure identified in Section 3.2.

Air Quality

The proposed project would have less than significant impacts regarding air quality emissions and the health impacts of Toxic Air Contaminants with the exception of potential exposure of the *C. immitis* fungus from construction activities. Implementation of Mitigation Measure 3.3a during all construction phases of the project would reduce this impact to a less-than-significant level.

This alternative would require a similar level of construction and would disturb the same soil as the proposed project. Therefore, this alternative would have the same less than significant impact regarding air quality emissions and same potentially significant impact regarding the potential exposure of the *C. immitis* fungus from construction activities as the proposed project and would also require implementation of Mitigation Measure 3.3a.

Biological Resources

The proposed project would result in potentially significant impacts to biological resources associated with impacts to special status plants and wildlife, with the loss of riparian habitat, possible disturbance to nesting birds, loss of trees, and impacts to potential jurisdictional waters of the State. With implementation of mitigation measures specified in Section 3.4, these impacts would be reduced to less than significant levels.

Construction of this alternative would occur within the same construction footprint and disturbance area as the proposed project. As a result, this alternative would have the same potentially significant impact to biological resources as the proposed project and would be required to implement the same mitigation measures.

Cultural Resources

The proposed project would result in less than significant impacts to cultural resources and the site was not found to contain resources that would be eligible for listing under NRHP and CRHR designation criteria or other significant cultural resources. The proposed project would have a potentially significant impact due to the potential to uncover subsurface archaeological resources,

tribal cultural resources, human remains, and/or paleontological resources; these would be reduced to a less than significant impact after implementation of the mitigation measures described in Section 3.5.

Construction of this alternative would occur within the same construction footprint and disturbance area as the proposed project. As a result, this alternative would have the same potentially significant impact to cultural resources as the proposed project and would be required to implement the same mitigation measures.

Greenhouse Gas Emissions

The proposed project would result in less than significant impacts related to GHG emissions during project construction and operation.

This alternative would result in a slightly reduced level of construction and number of residential units compared to the proposed project. This would slightly reduce the total GHG emissions associated with construction and operation but would not change the amount of GHG emissions per capita. Therefore, this alternative would result in the same less than significant impact regarding GHG emission as the proposed project.

Energy

The proposed project would increase consumption of electrical and natural gas energy as well as petroleum-based fuels during construction and operation. The proposed project would comply with state and local requirements to integrate energy conservation measures in the project and thus would result in less than significant impacts related to energy consumption during project construction and operation.

This alternative would result in a slightly reduced level of construction and number of residential units compared to the proposed project while incorporating the same sustainability features as the proposed project. The reduction in the number of dwelling units would slightly reduce the total energy consumption associated with construction and operation but would not change the amount of energy consumption per capita. Therefore, this alternative would result in the same less than significant impact regarding GHG emission as the proposed project.

Hydrology, Water Quality and Drainage

The proposed project would increase development onsite but would not result in a significant increase in stormwater or result in a significant degradation of water quality during project construction and operation. The proposed project would result in less than significant impacts to

groundwater supply, increase in stormwater flows that could exceed capacity of stormwater infrastructure, or increase in sediment and erosion on local waterways during construction.

Construction of this alternative would occur within the same construction footprint and disturbance area as the proposed project but would slightly reduce the extent of impervious surfaces onsite because it would replace a portion of the residential development with a neighborhood park. As a result, this alternative would slightly reduce impacts to hydrology, water quality, and drainage compared to the proposed project, but impacts would remain less than significant, consistent with the proposed project.

Land Use and Planning

The proposed project would alter the land use of the project site and require amending the General Plan and zoning designations for the site. The proposed land uses would be compatible with the surrounding land uses. Therefore, the proposed project would have a less than significant impact regarding land use.

Like the proposed project, this alternative would require a land use changes and rezone for the development of the site. Although the number of dwelling units would be slightly reduced overall, the proximity of new residential structures to adjacent land uses would not change. Therefore, the Reduced Density alternative would have the same less than significant land use impacts as the proposed project.

Noise

The proposed project would result in less-than-significant impacts associated with noise generated during project construction and operation with the exception of the potentially significant impact regarding potential for nighttime construction to result in sleep disruption or interference with relaxation in the evening period and operational noise from increased activity levels within the project site. However, after implementation of the mitigation measures discussed in Section 3.10, the proposed project would have a less than significant impact.

This alternative would result in a slightly reduced level of construction and number of residential units compared to the proposed project. This would slightly reduce the total vehicle trips associated with the project and thus slightly reduce the transportation-related noise generated by the project. Although the number of dwelling units would be slightly reduced overall, the proximity of new residential structures to adjacent land uses would not change. Thus, there would be no change in the potential for activity within the project site to expose nearby residents to increased noise levels. Therefore, with the implementation of the mitigation measures discussed in Section 3.10, the Reduced Density Alternative would have the same less than significant impact after mitigation as the proposed project.

Public Services and Utilities

The proposed project would result in less-than-significant impacts associated with project-generated impacts to water usage, wastewater infrastructure, solid waste, schools, recreational facilities, libraries, fire response services, and law enforcement response services. However, in the cumulative condition, the existing 18-inch sewer line in East Yosemite Avenue would reach 90% of its capacity, which exceeds the City's standard of maintaining sewer lines with 70% available capacity.

The Reduced Density Alternative would develop 114 fewer residential units than the proposed project and reduce wastewater generation from the project site by approximately 19%. This would reduce the contribution of the project to the ultimate capacity of the 18-inch sewer line in East Yosemite Avenue, from approximately 104 gallons per minute under the proposed project to approximately 83 gallons per minute under this alternative, and thus reduce the project's contribution to this cumulative impact. However, based on the anticipated development within the SOI/SUDP and population projections for the City, the reduced density within the project site would likely be replaced with additional residential development elsewhere in the SOI/SUDP, including possibly in a location where wastewater flows would contribute to the same 18-inch sewer line that would receive wastewater from the proposed project. Thus, the reduced development within the project site may not lead to an ultimate reduction in the flows within this line and the cumulative impact would be unchanged. However, the Reduced Density Alternative would have a reduced contribution to this impact.

Transportation and Circulation

The proposed project would increase traffic in the project vicinity as a result of the new trips generated by the proposed project. The proposed project would have less than significant impacts on transit, bike and pedestrian facilities, associated with transportation hazards, and associated with VMT generation.

This alternative would develop the project site for both residential and commercial land uses but would decrease the number of residences. This alternative would result in a reduced extent of transportation activity, including a reduced total number of vehicle trips, but would not be expected to alter the VMT per capita generated from the land uses within the project site. Therefore, this alternative would have the same less than significant transportation impacts as the proposed project.

4.7 Summary Matrix

A matrix displaying the major characteristics and significant environmental effects of each alternative relative to those of the proposed project is provided in Table 4-3, Project Alternatives Impacts Summary.

**Table 4-3
Project Alternatives Impacts Summary**

Environmental Issue	Proposed Project Impacts	Alternative 1: No Project	Alternative 2: Agricultural Retention	Alternative 3: Reduced Density
Aesthetics	LTS	▼	—	—
Agricultural Resources				
Project Specific Impacts	LTS	▼	▼	—
Cumulative Impacts	SU	▼	▼ (SU)	— (SU)
Air Quality	LTS	▼	—	—
Biological Resources	LTS	▼	▼	—
Cultural Resources	LTS	▼	▼	—
Greenhouse Gas Emissions	LTS	▼	—	—
Energy	LTS	▼	—	—
Hydrology and Water Quality	LTS	▼	▼	▼
Land Use				
Project Specific Impacts	LTS	▼	▼	—
Cumulative Impacts	LTS	▲	▲	—
Noise	LTS	▼	—	—
Public Services and Utilities				
Project Specific Impacts	LTS	▼	▲	—
Cumulative Impacts	LTS	▲	▼	▼
Transportation				
Project Specific Impacts	LTS	▼	—	—
Cumulative Impacts	LTS	▲	▲	▲

▲ Alternative is likely to result in greater impacts to issue when compared to proposed project.

— Alternative is likely to result in similar impacts to issue when compared to proposed project.

▼ Alternative is likely to result in reduced impacts to issue when compared to proposed project.

LTS = Less-than-significant impact.

SU=Significant and Unavoidable

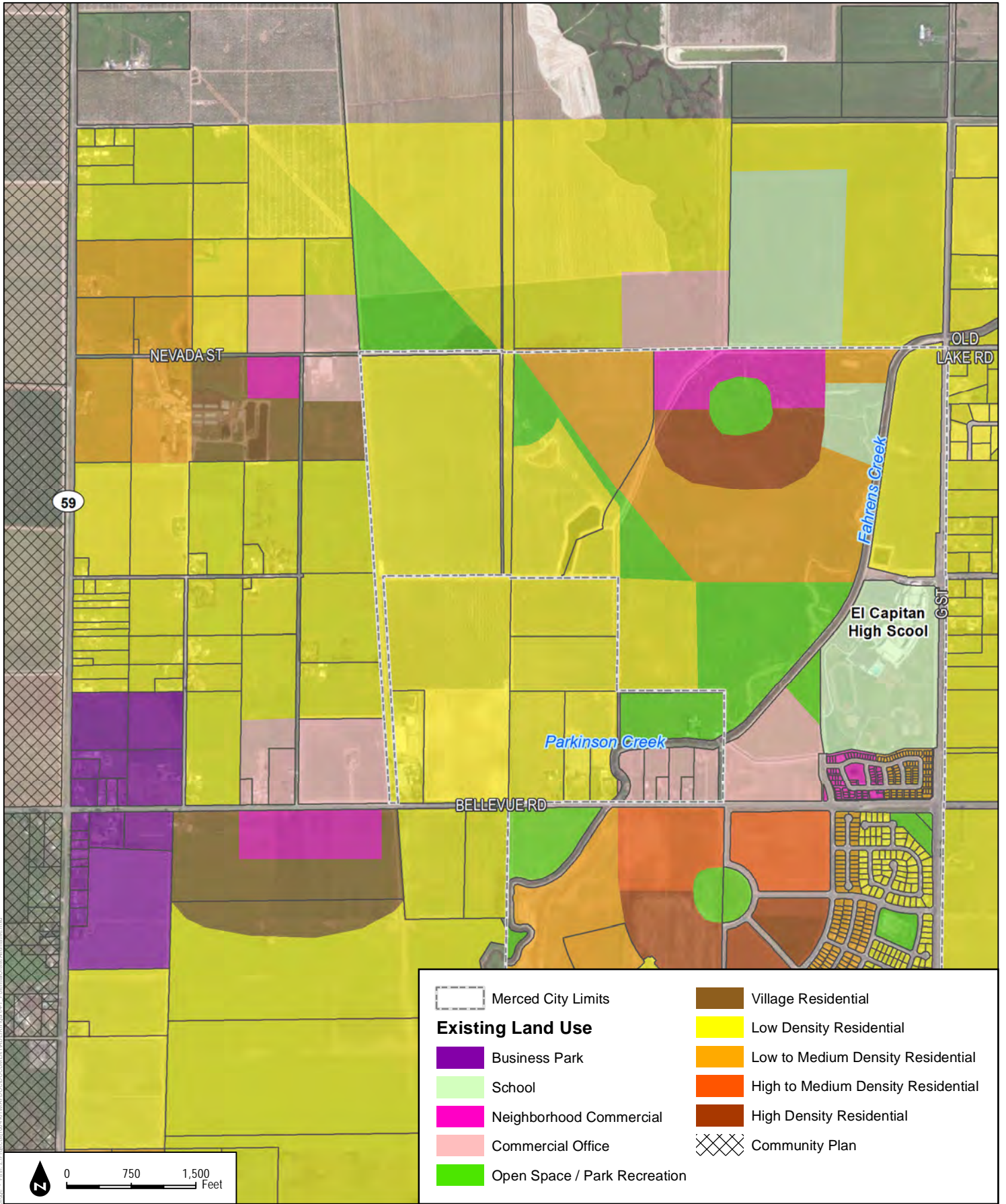
4.8 Environmentally Superior Alternative

As indicated in Table 4-3, the No Project Alternative would result in the least environmental impacts and would be the environmentally superior alternative because it would avoid all impacts associated with the proposed project for all resource areas. However, Section 15126.6(e)(2) of the CEQA Guidelines states that if the environmentally superior alternative is the No Project

Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. In this case, the environmentally superior alternative is the Agricultural Retention Alternative because it would slightly reduce the potential for impacts in five of the resource areas evaluated: agricultural resources, biological resources, cultural resources, hydrology and water quality, and the project's contribution to cumulative public services and utilities impacts.

It is important to note that all of the impacts under the proposed project, with the exception of a significant and unavoidable agricultural impact, would be less than significant or would be reduced to a less-than-significant level with implementation of mitigation measures. The Agricultural Retention Alternative would reduce the extent of the significant and unavoidable project impact due to loss of Prime Farmland, but would still result in the loss of a portion of the Prime Farmland within the project site and thus the impact would remain significant and unavoidable.

In addition, the Agricultural Retention Alternative could increase land use and transportation impacts in the cumulative scenario by encouraging leapfrog development and increasing the potential for development to occur further north within the SOI/SUDP, which could result in greater VMT per capita in the local area. Thus, selection of the Agricultural Retention Alternative would not be capable of avoiding any of the project's significant impacts and would not substantially reduce any of the project's significant impacts.



- | | |
|------------------------------|------------------------------------|
| Merced City Limits | Village Residential |
| Existing Land Use | Low Density Residential |
| Business Park | Low to Medium Density Residential |
| School | High to Medium Density Residential |
| Neighborhood Commercial | High Density Residential |
| Commercial Office | Community Plan |
| Open Space / Park Recreation | |

0 750 1,500 Feet

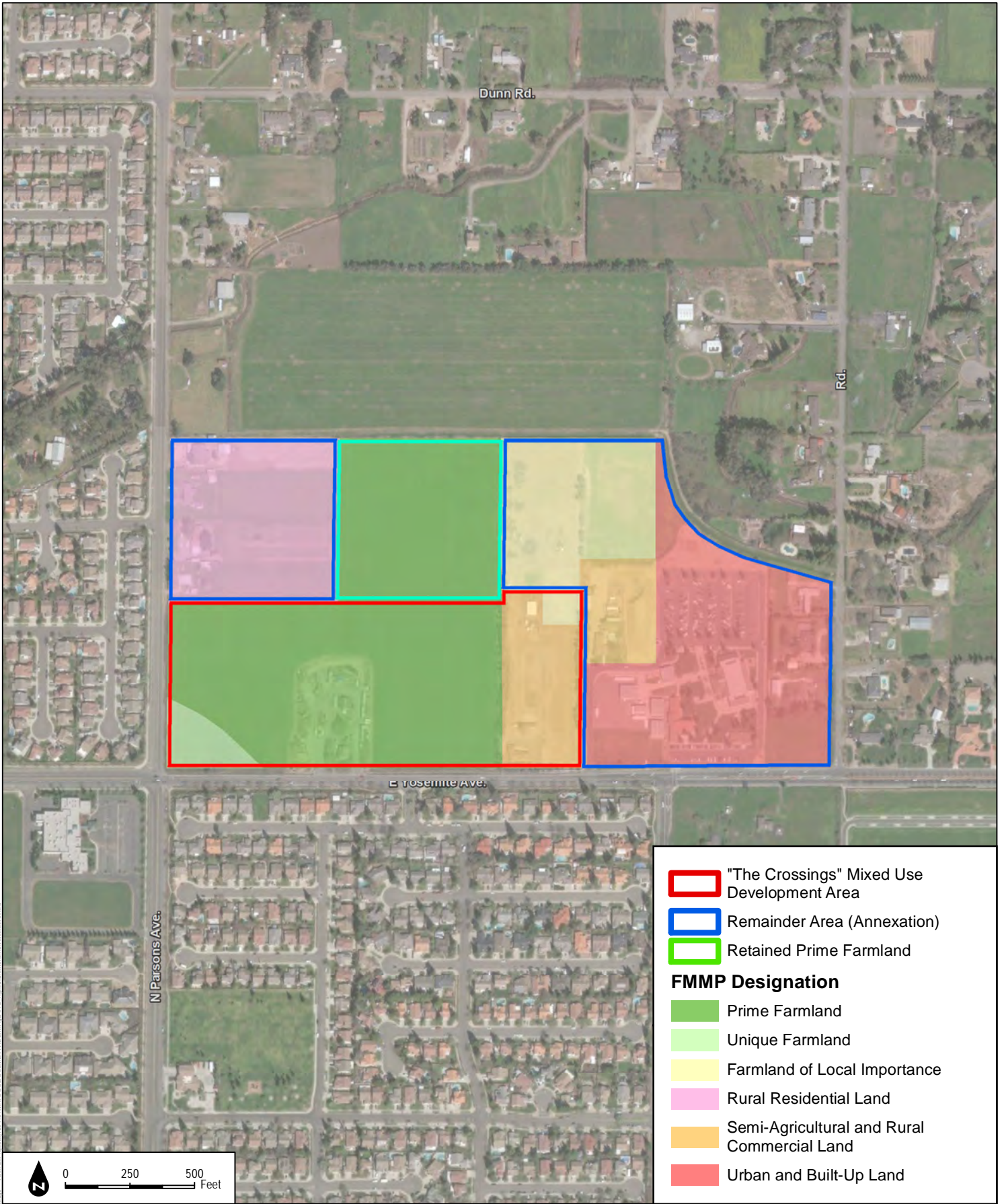
SOURCE: Bing Maps 2019, County of Merced 2014

DUDEK

Yosemite Avenue - Gardner Avenue to Hatch Road Annexation Project

FIGURE 4-1
Potential Offsite Alternative

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SOURCE: Bing Maps 2019, County of Merced 2014



Yosemite Avenue - Gardner Avenue to Hatch Road Annexation Project

FIGURE 4-2
Agricultural Retention Alternative

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