
REVISED FINAL ENVIRONMENTAL IMPACT REPORT VOLUME 2

NEWBRIDGE SPECIFIC PLAN



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COUNTY OF SACRAMENTO
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14 PUBLIC SERVICES

SETTING

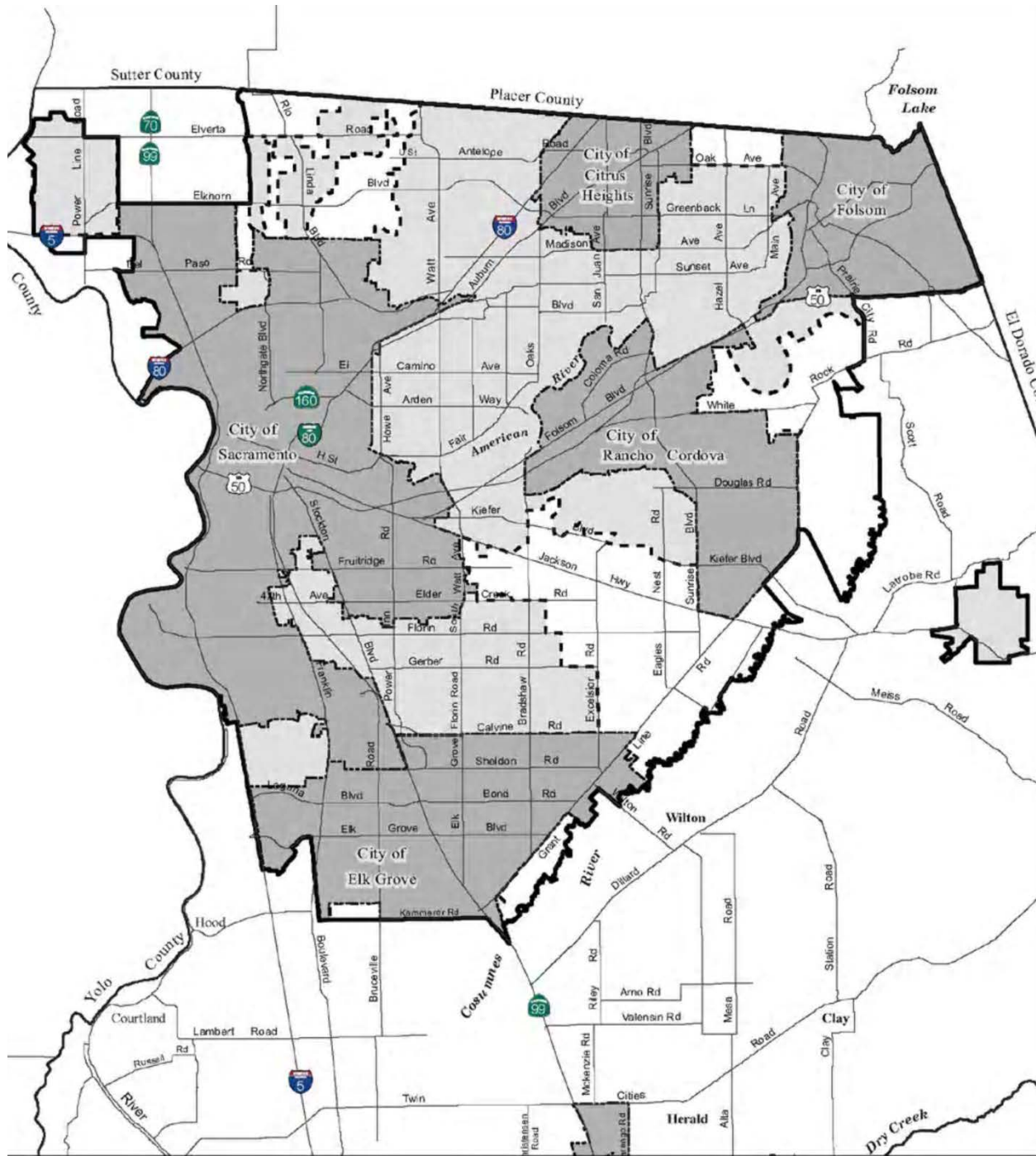
The Project is located within the Urban Services Boundary (USB), as defined in the Land Use Element of the County of Sacramento General Plan (Plate PS-1). The USB indicates the ultimate boundary of the urban area in the unincorporated County. None of the Project area is within the Urban Policy Area (UPA). The Urban Policy Area defines the area expected to receive urban levels of public infrastructure and services within the 20-year planning period. In order to receive urban public services, the Project must be within both the UPA and USB. To this end, the Project includes a General Plan Amendment to move the UPA to include approximately 1,095 acres of the Project site.

The Project is located within the following public service districts:




Fire Protection:	Sacramento Metropolitan Fire District
Law Enforcement:	Sacramento County Sheriff's Department
Solid Waste:	County Waste Management and Recycling Division
School District:	Elk Grove Unified School District
Park District:	Cordova Recreation and Park District
Libraries:	Sacramento Public Library System

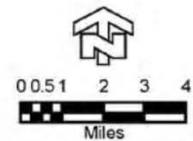
This chapter analyzes the Project's potential impacts on service providers due to future development of this site in accordance with the land use designations proposed. Wastewater (sewer), water supply, and energy services are addressed in the Public Utilities chapter of this EIR, while transit services are addressed in the Traffic and Circulation chapter.

Plate PS-1: Urban Policy Area and Urban Services Boundary



USB and UPA Boundaries

-  Urban Services Boundary
-  Urban Policy Area
-  Incorporated Areas



PROJECT CHARACTERISTICS

According to the NewBridge Specific Plan, the Project includes 3,075 new households and 8,238 new residents within the Project area, and 2,530 employees, as well as approximately 500,000 square feet of office, retail and mixed use space. In order to provide and fund public services to support the proposed uses, the Project will use a combination of existing fee programs, Mello-Roos bond financing, a new funding mechanism – NewBridge Specific Plan Fee, and Community Facility Districts (CFDs) both for capital facilities and maintenance.

The Project area is partially vacant, in which a portion is currently occupied by the Sacramento Rendering Company. Due to the Project's distance from existing public services, improvements related to infrastructure and public facilities will be required to adequately support the Project. As part of the Project proposal, a Draft NewBridge Specific Plan Public Facilities Financing Plan (Financing Plan, dated July, 2018) was submitted identifying a strategy to finance new infrastructure and other public facilities and improvements required to serve the proposed land uses within the NewBridge area (available in Appendix PS-1). The Financing Plan provides the estimated costs and timing of needed facilities as well as a strategy to match the timing and costs with the availability of probable funding sources. Pursuant to General Plan Policy LU-120, the Financing Plan is required to be approved concurrent with the Project. At this time the Financing Plan is a draft, so reviewers should note that the total costs stated herein are subject to change. Various public service providers were consulted during the development of the initial draft of the Financing Plan, and will continue to be consulted in order to prepare the final draft, to determine needs generated by the Project and the funding required to meet those needs.

Infrastructure improvements detailed in the Financing Plan include roadways, sanitary sewer facilities, water facilities, and storm drain facilities (refer to Chapter 15 Public Utilities). Public facility improvements detailed in the Financing Plan include fire facilities, landscape corridors, parks, open space and trails, habitat and wetlands, library facilities, transit facilities, and schools. It is estimated that infrastructure and facility costs will be approximately 295 million dollars.

In order to fund the needed infrastructure and facilities a combination of funding sources will be utilized including:

- existing County and other public agency fee programs
- a new NewBridge Specific Plan Fee Program, which include the following funding mechanisms:
 - bond funding through a Mello-Roos Community Facilities District (CFD)
 - NewBridge Infrastructure CFD
 - NewBridge Maintenance/Transit CFD

- Jackson Corridor Trails CFD
- Cordova Recreation and Park District Park Maintenance CFD
 - developer advancements and reimbursements
- a new regional Jackson Corridor Traffic Impact Fee (JCTIF) (roads)
- a new Cordova Recreation and Park District Fee (parks)
- a new South Sacramento Habitat Conservation Plan Fee(SSHCP) (preserve maintenance, endowment)

The Financing Plan has been developed in coordination with affected service providers in order to ensure that adequate funding is available for facilities and infrastructure needed to serve Project development.

Aside from the capital improvement costs detailed in the Financing Plan, the Project proposal includes an Urban Services Plan (Appendix PS-2) which describes the service levels and financing strategy to fund an urban level of public services that will be provided to future residents, businesses and employees in the Project area. The services provided by independent agencies and the County will be funded from the County general fund, user fees, new special taxes or assessments, and existing property tax allocations.

REGULATORY SETTING

SACRAMENTO COUNTY GENERAL PLAN

In order to assure adequate service levels and adequate funding for those services, the Sacramento County General Plan includes the following policies:

- LU-65. Levels of service shall be consistent with policies in this Plan, or where none are applicable, shall use Federal and State environmental standards and commonly accepted industry norms and standards as guidelines.
- LU-66. Assure service availability, adequacy, and funding at each stage of the development process for all public services for the life of the project consistent with the intent of the adopted Public Facilities Financing Plan and accompanying Phasing Plan.
- LU-69. Supplemental mitigation fees may be established by the Board of Supervisors provided they find that supplemental fees are critical and necessary to meet the facility funding needs of a service provider and that traditional methods are inadequate.

FIRE PROTECTION AND EMERGENCY SERVICES

CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

In accordance with CCR Title 8 Sections 1270, “Fire Prevention” and Section 6773 “Fire Protection and Fire Equipment”, the California Occupational Safety and Health Administration (Cal/OSHA) has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials; fire hose sizing requirements; restrictions on the use of compressed air; access roads; and the testing, maintenance, and use of all fire fighting and emergency medical equipment.

EMERGENCY RESPONSE/ EVACUATION PLANS

The State of California passed legislation authorizing the Office of Emergency Services (OES) to prepare a Standard Emergency Management System (SEMS) program, which sets forth measures by which a jurisdiction should handle emergency disasters. Non-compliance with SEMS could result in the State withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster.

FIRE CODES AND GUIDELINES

The availability of sufficient water flows and pressure are a basic requirement of the fire districts. Fire District requirements are determined for specific development projects at the design stage and are based on the Uniform Building Code (UBC). In addition to meeting minimum fire flow requirements, all development projects within the unincorporated area are required to meet other various fire protection requirements identified in the plan check and review process. The Fire District specifications require that fire sprinklers be installed in all new commercial construction that exceeds 3,600 square feet and some residential properties exceeding 2,999 square feet. Also, for structures exceeding 3,600 square feet, the district requires water pressure of at least 20 pounds per square inch residual pressure at 1,000 gallons per minute flow. The district also requires that all traffic signals installed on a site include traffic control devices that allow the Fire District to activate the light and therefore control the flow of traffic in order to maintain adequate response times.

FIRE DISTRICT MASTER PLANS

Fire District Master Plans provide policy guidance, objectives, and activities in an effort to improve emergency response to the districts’ citizens, use existing resources more efficiently, and improve district facilities. These plans address deficiencies with existing fire stations, including age and condition issues; noncompliance with building codes; the ability to respond to emergencies following an earthquake; and lack of apparatus rooms of sufficient size to store present-day emergency-response equipment. SMFD has defined a 20-year plan to deal with new infrastructure needs and augment/replace equipment.

SACRAMENTO COUNTY GENERAL PLAN PUBLIC FACILITIES ELEMENT

Sacramento County General Plan Policies PF-54 through PF-64 are pertinent to fire protection and emergency services. These policies are intended to support the stated

goal of the Fire Protection and Emergency Services Section of the General Plan which is to have “efficient and effective fire protection and emergency response serving existing and new development.”

The policies in the Public Facilities Element that support the County’s emergency services strategies and are relevant to the Project are as follows:

- PF-54. Require new development to install fire hydrants and associated water supply systems which meet the fire flow requirements of the appropriate fire district.
- PF-55. New development shall provide access arrangements pursuant to the requirements of the California Fire Code.
- PF-56. Infill development shall be provided adequate off-site improvements to meet on-site fire flow requirements.
- PF-57. New development, redevelopment or traffic signal replacement shall require the installation of emergency signal activation systems in all street improvements requiring signalization when requested by a fire district.
- PF-58. Traffic calming measures should be used wherever possible in a manner that does not delay emergency vehicle responses.
- PF-59. Alternative methods of fire protection and access must be instituted if access is reduced to emergency vehicles.
- PF-60. Require that structures of four stories or more in height provide on-site equipment and facilities to the satisfaction of the appropriate fire district, consistent with industry norms and standards.
- PF-61. Mitigation fees may be established by the Board of Supervisors or Fire Districts for the purpose of funding adequate fire protection and emergency medical response facilities provided they find that such fees are critical and necessary to meet the facility funding needs of the fire district and that existing methods of financing are inadequate.
- PF-63. Mitigation fees established by County ordinance or Fire District shall, together with other reasonably assured sources of funding identified in the fire district's financing plan, be sufficient to implement the adopted financing plan.
- PF-64. No building permit for new residential or commercial construction shall be issued when there is a Board of Supervisors certified fire district financing plan for any applicable fire district, which provides for mitigation fees, until the applicant has contributed all required mitigation fees.

LAW ENFORCEMENT SERVICES

SACRAMENTO COUNTY GENERAL PLAN PUBLIC FACILITIES ELEMENT

Sacramento County General Plan Policies PF-50 through PF-53 are pertinent to Law Enforcement services. These policies are intended to support the stated goal of the Sheriff Section of the General Plan which is to have “adequate Sheriff Services and Facilities for the Unincorporated Areas of Sacramento County.” The law enforcement policy relevant to the Project is as follows:

- PF-53. Design neighborhoods and buildings in a manner that prevents crime and provides security and safety for people and property; when feasible.

SOLID WASTE SERVICES

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA)

The Resource Conservation and Recovery Act (RCRA) was enacted in 1976 to protect human health and the environment from potential hazards of waste disposal, to conserve energy and natural resources, to reduce the amount of waste generated, and to ensure that wastes are managed in an environmentally sound manner (EHSO, 2009). Under RCRA, the United States Environmental Protection Agency (US EPA) has the authority to control hazardous wastes from the “cradle to grave”. This includes the generation, transportation, treatment, storage and disposal of hazardous wastes (US EPA, 2009). RCRA also sets a framework for the management of non-hazardous solid wastes. In 1986, amendments to RCRA enabled the US EPA to address underground storage tanks storing petroleum and other hazardous substances.

RCRA authorizes states to develop and enforce their own waste management programs. State programs must be approved and authorized by the US EPA.

CALIFORNIA INTEGRATED WASTE MANAGEMENT ACT AND CALRECYCLE (FORMERLY THE CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD)

Regulations for solid waste disposal in California began with the enactment of the Solid Waste Management and Resource Recovery Act of 1972. This statute created the Solid Waste Management Board, giving it authority related to solid waste handling, disposal and reclamation.

The Integrated Waste Management Act of 1989 is the result of two pieces of legislation, AB 939 and SB 1322, which created the California Integrated Waste Management Board (which has been renamed CalRecycle). The Integrated Waste Management Act mandated a goal of 25 percent diversion of each city’s and county’s waste from disposal by 1995 and 50 percent diversion in 2000, with a process to ensure environmentally safe disposal of waste that could not be diverted. CalRecycle plays a central role of promoting achievement of the waste diversion as mandated by the Act (Cal EPA, 2009). Further, Assembly Bill 341, adopted in 2011, established statewide targets for recycling of 75 percent by 2020 through source reduction, recycling and composting (CalRecycle, 2017).

CalRecycle is the State agency designated to oversee, manage, and track California's 92/44 million tons of waste generated each year. They provide grants and loans to help California cities, counties, businesses and organizations meet the State's waste reduction, reuse and recycling goals. CalRecycle promotes a sustainable environment where these resources are not wasted, but can be reused or recycled. In addition to many programs and incentives, the Board promotes the use of new technologies for the practice of diverting California's resources away from landfills (CalRecycle, 2018). The Board is responsible for ensuring that State waste management programs are primarily carried out through local enforcement agencies (LEAs). The California Water Resources Control Board and the Central Valley Regional Water Quality Control Board also regulate waste disposal (the latter actually regulated solid waste prior to CalRecycle).

Sacramento County Department of Waste Management and Recycling (DWMR)

The Sacramento County Department of Waste Management and Recycling (DWMR) is responsible for maintaining a waste management system for residents and businesses in the unincorporated areas of the County. The DWMR has responsibility for garbage recycling and collection services, garbage disposal and recycling facilities, and recycling programs. The DWMR oversees the waste management collection and disposal services for approximately 150,000 residential customers every week. The DWMR collects and disposes/processes 128,000 tons of trash, 75,000 tons of green waste, and 37,000 tons of recyclables each year.

SOLID WASTE ADVISORY COMMITTEE

The Solid Waste Advisory Committee (SWAC) is an advisory panel consisting of appointed representative from each jurisdiction in Sacramento County. The SWAC is the State-mandated Local Task Force (as mandated by the California Public Resources Code Section 40950), which coordinates waste management and recycling efforts throughout the County. The SWAC advises the County Board of Supervisors, the city councils of the cities within the County, and the Sacramento Regional County Solid Waste Authority (SWA) on all matters relating to the County of Sacramento Integrated Waste Management Plan and all matters relating to integrated waste management, including public education; source reduction; recycling; composting; transformation; materials recovery/resource recovery and marketing; and the collection, transfer, processing, and disposal of refuse and recycling.

SACRAMENTO COUNTY INTEGRATED WASTE MANAGEMENT PLAN

The County of Sacramento adopted the Sacramento County Integrated Waste Management Plan in March 1996, and it was approved by CalRecycle in May 1998. The plan was re-approved as part of the mandatory 5-year review process in March of 2009. This plan consists of the following:

- Siting Element (entire county: cities and unincorporated areas)
- Summary Plan (entire county: cities and unincorporated areas)
- Source Reduction & Recycling Elements (by City, County, or Regional Agency)
- Household Hazardous Waste Elements (by City, County, or Regional Agency)

- Non-disposal Facility Elements (by City, County, or Regional Agency)

These documents are the main sources and references for solid waste facility planning in Sacramento County. The Siting Element and Summary Plan are prepared and administered by the County of Sacramento, Department of Waste Management & Recycling. The remaining documents are prepared and administered by each individual jurisdiction or regional agency.

SACRAMENTO REGIONAL SOLID WASTE AUTHORITY (SWA)

The Sacramento Regional Solid Waste Authority is a joint powers authority of Sacramento County and the City of Sacramento. SWA was formed in December 1992 to assume the responsibility for solid waste, recycling, and disposal needs for businesses and apartment complexes in the Sacramento area. The SWA regulates commercial solid waste collection by franchised haulers and offers recycling services to multi-family dwelling units. SWA is governed by a Board of Directors consisting of elected officials from the City of Sacramento and the unincorporated area of Sacramento County. The following SWA recycling ordinances apply to the unincorporated areas of the County.

SWA ORDINANCES

The SWA has adopted three recycling ordinances that target three distinct waste streams: (1) The Business Recycling Ordinance, adopted in 2007 for commercial generators who subscribe to 4 cubic yards or more of refuse service per week; (2) The Certification of C&D [Construction and Demolition] Debris Sorting Facilities Ordinance, adopted in 2008, that creates a program for mixed C&D facilities that dovetails with both City and County C&D Ordinances for builders; and (3) The Multifamily Recycling Ordinance, adopted in 2009, that requires owners of multifamily properties with over 5 units to subscribe to a recycling service for their tenants.

LOCAL ENFORCEMENT AGENCY

Local enforcement agencies (LEAs) have the primary responsibility for ensuring the correct operation and closure of solid waste facilities in the state. They also have responsibilities for guaranteeing the proper storage and transportation of solid wastes. The Sacramento County Environmental Management Department (EMD) is authorized as the LEA under Division 30 of the Public Resources Code and Title 14 of the California Code of Regulations.

SACRAMENTO COUNTY GENERAL PLAN PUBLIC FACILITIES ELEMENT

Sacramento County General Plan Policies PF-20 through PF-26 are pertinent to solid waste. These policies are intended to support the stated goal of the Solid Waste Services and Facilities Section of the General Plan which is to have a “safe, efficient and environmentally sound operation of solid waste facilities in Sacramento County.”

The majority of the policies in the General Plan pertain to service providers and not to development projects. The policies in the Public Facilities Element that support the

County's Solid Waste Services strategies and are relevant to the Project relate to fees to support adequate waste facilities and are as follows:

- PF-23. Solid waste collection, handling, recycling, composting, recovery, transfer and disposal fees shall recover all capital, operating, facility closure and maintenance costs.
- PF-24. Solid waste disposal fees and rate structures shall reflect current market rates and provide incentives for recovery.

SCHOOL SERVICES

LEROY F. GREENE SCHOOL FACILITIES ACT OF 1998

The "Leroy F. Greene School Facilities Act of 1998", also known as Senate Bill No. 50 (SB 50) established a State program to provide per-pupil funding for new construction and modernization of existing school facilities. (OPSC, 2009). The passage of Proposition 1A in 1998 allowed SB 50 to be fully implemented.

SB 50 limited the power of cities and counties to require mitigation of school facilities as a condition of approving new development and authorized school districts to assess fees (at various levels) to directly offset the costs associated with increased capacity as a result of new development.

OFFICE OF PUBLIC SCHOOL CONSTRUCTION AND THE STATE ALLOCATION BOARD

The State Allocation Board is responsible for determining the allocation of state resources used for the new construction and modernization of local public school facilities. The SAB is also responsible for the administration of the State School Facility Program, the State Relocatable Classroom Program and the Deferred Maintenance Program. The SAB is the policy-level body for the programs administered by the Office of Public School Construction (OPSC, 2009). The Office of Public School Construction, as staff to the State Allocation Board, implements and administers the School Facility Program and other programs of the State Allocation Board. The Office of Public School Construction also has the responsibility of verifying that all applicant school districts meet specific criteria based on the type of funding which is being requested. (OPSC, 2009)

There have been four Kindergarten – University Public Education Facilities Bond Acts passed by voters (Proposition 1A, 47, 44 and 1D) that allocated billions of dollars in general obligation bonds for K – 12 facilities through the School Facility Program. These funds help assist school districts with overcrowding, accommodating future enrollment growth and repairing and modernization of older facilities.

CALIFORNIA EDUCATION CODE

The California Education Code authorizes the California Department of Education to develop site selection standards for school districts. The California Department of Education School Facilities Planning Division has prepared a School Site Selection and

Approval Guide that provides criteria for location appropriate school sites in the State of California.

Site selection is determined based on a screening and ranking procedure. The criteria, in order of importance are listed below:

1. Safety
2. Location
3. Environment
4. Soils
5. Topography
6. Size and Shape
7. Accessibility
8. Public Services
9. Utilities
10. Cost
11. Availability
12. Public Acceptance

SACRAMENTO COUNTY OFFICE OF EDUCATION

The Sacramento County Office of Education is responsible for delivering quality education to more than 238,000 K – 12 public school students in Sacramento County. The Sacramento County Office of Education provides technical assistance, curriculum and instructional support, staff development, legal and financial advice and oversight to 13 school districts. SCOE also directly educates more than 30,000 children and adults.

SACRAMENTO COUNTY GENERAL PLAN PUBLIC FACILITIES ELEMENT

The Sacramento County General Plan policies that are pertinent to public school facilities are policies PF-27 through PF-39. These policies are intended to support the stated goal of the Public School Facilities Section of the General Plan which is to have “new public schools which serve as a neighborhood focus and maintain a quality learning environment for Sacramento County’s residents as the County population increases.”

The General Plan policies related to public schools generally pertain to developing schools that are functionally and physically integrated within their surrounding neighborhoods; that are developed through a coordinated planning effort between school districts; and that are at levels equal to state standards for school enrolment and school site size for all Sacramento schools. School related policies in the General Plan focus on how schools will be sited and developed rather than on how development may affect schools. School facilities mitigation is covered under California Government Codes noted above. Applicable General Plan policies are:

- PF-27. Community plans shall identify all existing and planned school sites and shall include guidelines and conceptual examples for incorporating new schools into overall neighborhood design.

- PF-28. Community and Specific Plans shall consider the needs of community colleges and address the feasibility and appropriateness of off-campus facilities, particularly in TODs.
- PF-29. Schools shall be planned as a focal point of neighborhood activity and interrelated with neighborhood retail uses, churches, neighborhood and community parks, greenways and off-street paths whenever possible.
- PF-30. New elementary schools in the urban area should be planned whenever possible so that almost all residences will be within walking distance of the school (one mile or less) and all residences are within two miles of a school.
- PF-31. Schools shall be planned adjacent to neighborhood parks whenever possible and designed to promote joint use of appropriate facilities. The interface between the school and park shall be planned with an open design and offer unobstructed views to promote safety.
- PF-32. Elementary schools shall not be located along arterials and thoroughfares. Junior high and high schools should be located near roadways with adequate capacity and should provide adequate parking to facilitate the transport of students.
- PF-34 All school site plans shall be designed to minimize traffic speed and maximize traffic flow around the school, allowing for several access points to and from the site.
- PF-35. New schools should link with planned bikeways and pedestrian paths wherever possible.
- PF-38. Land dedications or reservations for schools should meet state guidelines for school parcel size. Where more than one owner or development project is involved, there shall be appropriate assurances and conditions to assure that requisite acreage can and will be assembled to meet facility site requirements.
- PF-39. Specific Plans shall show the location of future school sites based upon adopted school district master plans and criteria in the General Plan.

PARK AND RECREATION SERVICES

CALIFORNIA GOVERNMENT CODE SECTION 66477

California Government Code Section 66477 (Quimby Act) allows local governments to exact land dedications or fees in lieu for park purposes from new subdivisions. The law prescribes a standard consistent with the circumstances of each park district based on a minimum of 3 acres and a maximum of 5 acres per 1,000 residents. Sacramento County's Office of Planning and Environmental Review and Municipal Services Agency oversee these requirements in the unincorporated area.

TITLE 22

Title 22 of the Sacramento County Code provides direction on calculating park acreage requirements for residential developments. Depending on the jurisdiction, residential developments are required to provide dedicated land for park construction or pay in-lieu fees.

SACRAMENTO COUNTY GENERAL PLAN PUBLIC FACILITIES ELEMENT

The Sacramento County General Plan policies that are pertinent to park facilities are policies PF-120 through PF-131. These policies are intended to support the stated goal of the Local Park Acquisition and Maintenance Section of the General Plan which is to have “adequate and well-funded local park facilities for existing and new developments.”

The policies in the Public Facilities Element that support the County’s park services strategies and are relevant to the Project are as follows:

- PF-122. To help assure that local recreation and park district Master Plan standards for levels of service may be achieved and maintained, the County may require new development to dedicate land, pay in-lieu fees, development impact fees, or otherwise contribute a fair share to the acquisition and development of parks and recreation facilities. For development in infill areas where land dedication may not be practical, the County in cooperation with the affected park district may explore creative alternatives for providing park and recreation facilities.
- PF-123. At a minimum, new residential developments approved by the County shall provide sites for local parks for their prospective residents consistent with the Quimby Act and the land dedication standards for each local recreation and park district adopted by Sacramento County in Chapter 22.40 of the Sacramento County Code. These requirements may be satisfied by land dedication, payment of fees in lieu of dedication, or on-site improvements per the provisions of Chapter 22.40, which will be regularly updated to reflect changing demography. These include the baseline standard of three acres of land for parks per 1,000 residents or in cases where existing parklands within a park district exceed three acres per 1,000 population, that higher ratio shall be the standard for new developments up to a maximum of five acres of land for parks per 1,000 residents based on calculations specified in SCC Chapter 22.40.
- PF-125. The County shall promote the provision of on-site recreational amenities and gathering places that are available to the public by large scale development projects and may consider providing incentives such as density bonuses or increases in building coverage for that purpose.
- PF-127. Require new residential developments to participate in park O & M financing mechanisms where established by local park districts or the County.
- PF-128. Encourage park development adjacent to school sites and the formation of joint use agreements between school and park districts.

- OS-10. Sacramento County shall seek to attain the County Regional Park System standard of 20 acres of regional parkland per 1,000 population.

LIBRARIES

SACRAMENTO COUNTY GENERAL PLAN PUBLIC FACILITIES ELEMENT

The Sacramento County General Plan policies that are pertinent to library facilities are policies PF-40 through PF-49. These policies are intended to support the stated goal of the Library Facilities and Service Section of the General Plan which is to provide for “satisfactorily designed, safe, and well-maintained library facilities using current and future technologies in Sacramento County.”

The policies in the Public Facilities Element that support the County’s library services strategies and are relevant to the Project are as follows

- PF-40. New and remodeled library facilities shall meet adopted standards for square footage and parcel size; materials and equipment; and services programs and staffing commensurate with the population served.
- PF-42. Share capital costs of library construction and renovation for existing residents through bond financing or other appropriate measures and by new residents and workers through fees on new development.
- PF-43. Include community library needs among facilities to be financed by financing districts created in new urban areas.
- PF-45. New commercial development in financing districts shall contribute to library financing such that fees based on projected employment are approximately equivalent to the fees for an equivalent number of new residents.
- PF-46. Incorporate planned libraries into community and specific plans for new development.

LIBRARY FACILITY MASTER PLAN 2007 – 2025

The Library Facility Master Plan for the Sacramento Public Library System sets forth general standards and criteria for the renovation and construction of all new libraries. Existing and future library needs are largely population driven, e.g., for every 30,000 residents in a community, at least one full service library is required. Ideally, new libraries would have 0.4 to 0.6 square feet per capita with some basic minimum and maximum sizes. The Facility Master Plan also establishes preferred sizing and footprint and desirable components such as volumes and collection, meeting rooms, study areas, computer terminals and so on. Each of these items is standards driven. One of the most critical items for future library development is location. A new library in a poor location is an under-utilized library, and conversely, an older, under-sized library in a good location is a highly used library. Important location criteria include: land availability, cost, quality of the site, size, accessibility (parking, pedestrian access, public transportation), and synergy/location with other public and private uses. For example, a

new library is often better positioned in a new town square, rather than in a residential neighborhood.

SIGNIFICANCE CRITERIA

The criteria used to evaluate the significance of public services impacts resulting from the proposed Project were developed based on CEQA Guidelines and on professional standards. Impacts of the proposed Project on public services were considered significant if implementing the Project would:

1. Result in substantial adverse physical impacts associated with the provision of emergency services;
2. Result in substantial adverse physical impacts associated with the provision of law enforcement services;
3. Result in service by a landfill with insufficient permitted capacity to accommodate the Project's solid waste disposal needs;
4. Result in non-compliance with federal, state, and local statutes and regulations related to solid waste.
5. Result in substantial adverse physical impacts associated with the provision of public school services;
6. Result in substantial adverse physical impacts associated with the provision of park and recreation services, or result in substantial physical deterioration of an existing facility due to increased use;
7. Result in substantial adverse physical impacts associated with the provision of library services.
8. Result in a service demand that cannot be met by existing or reasonably foreseeable future service capacity.

IMPACTS AND ANALYSIS

IMPACT: CONSTRUCTION OF FACILITIES

The funding of new facilities, land acquisition, and other issues are discussed within the impact sections to follow, which are specific to the type of facility (schools, parks, etc.). This section discusses the overall impacts that can be expected to result from constructing new facilities, which will generally include schools, libraries, Sheriff's facilities, fire stations, and parks. The proposed Project will increase the demand on a number of services, as described in the sections that follow, to support development within the Project area. In most cases the demands will require the construction of new facilities which will result in physical impacts. These construction activities will take place within the Project boundaries in areas designated for developed uses, consistent with the provisions of the Specific Plan. The relevant topical chapters of this EIR

disclose the physical impacts of full development of the proposed Project, which includes areas where a fire station and other public facilities would be constructed, and provide mitigation as appropriate.

Public service facilities construction will not result in any substantial physical impacts specific to public services that are not already an inherent part of overall Project impacts; impacts specific to public facility construction related to fire services, law enforcement services, solid waste services, school services, park services, and library services are *less than significant*.

MITIGATION MEASURES:

None required.

IMPACT: FIRE PROTECTION AND EMERGENCY SERVICES

The Project site is within the service area of the Sacramento Metropolitan Fire District (SMFD). The Fire District does not have any adopted performance standards, but it strives to maintain minimum response times of five minutes in 90% of all cases, which is a national voluntary standard set by the National Fire Protection Association. The proposed Project will increase the demand for SMFD fire protection and emergency services. This increase in demand will require additional staff and fire facilities in order to maintain service levels and to ensure that adequate fire protection is provided.

In the Project vicinity, the SMFD has stations in Rancho Cordova (Station 68, off of Anatolia Drive east of Sunrise Boulevard) and in Sloughhouse (Station 58 on Sloughhouse Road near Jackson Highway). The Specific Plan includes a 2.5 acre fire station site south of Kiefer Boulevard near Sunrise Boulevard. This location offers convenient access to Jackson Highway and the ability to serve the Project area. The SMFD has communicated to the applicant that the location of the fire station may move, as the final land use plans of the surrounding master plans become final and response times can be calculated. The new fire station will be built as development plans come forward and the need arises, as determined and implemented by SMFD. According to the proposed Financing Plan, funding for the construction and operation of the fire facilities will be provided by the District-wide SMFD Fire Facilities fee collected at the time of building permits and through property tax revenues.

Based on the Project site, the SMFD requires one station to serve the site (Fire Department Growth Analysis for the Sacramento Metropolitan Fire District, July 2013). It is anticipated that the station will require a truck company, an engine company, and a medic company. With adherence to existing regulations and the construction of new fire facilities on site, impacts associated with fire protection services will be *less than significant*.

MITIGATION MEASURES:

None required.

IMPACT: LAW ENFORCEMENT SERVICES

The Project is within the service area of the Sacramento County Sheriff's Department (SSD) and includes a substantial number of housing units as well as associated non-residential uses, which will increase the demand of SSD services. The proposed Project includes a maximum of 3,075 residential units which will provide housing for a residential population of approximately 8,238 residents.

Safety and law enforcement issues are addressed within the NSP as well as both the Financing Plan and the Urban Services Plan. The Project states that law enforcement services will continue to be provided by SSD.

General staffing ratio requirements of the SSD require an increase in staffing based on the staffing ratio of 0.75 deputies per 1,000 citizens. To meet the Sheriff Department's 0.75 officers per 1,000 persons staffing goal, approximately 6 staff members would need to be added to the department to account for the increased demand generated by the Project.

Funding for the expected increase in law enforcement services is detailed in the NSP Financing Plan. Law enforcement services will be funded through the County Police Services Community Facilities District 2005-1 (CFD 2005-1) annual special tax. Taxes will be levied on each new residential unit developed within the Project area in accordance with the provisions of CFD 2005-1.

In addition to the funding mechanisms already in place to help provide for adequate law enforcement services generated by new development, the General Plan contains policies for the planning and development of law enforcement facilities, such as law enforcement programs (educational and crime preventative programs), design of neighborhoods and regulating security measures through the Zoning Code, Uniform Building Code and Land Development Ordinances. These funding mechanisms, policies and regulations will ensure that the Sheriff's Department can adequately serve the new growth. Impacts to law enforcement services are *less than significant*.

MITIGATION MEASURES:

None required.

IMPACT: SOLID WASTE SERVICES

The Project area is provided with solid waste collection service by the Sacramento County Department of Waste Management and Recycling. The Kiefer Landfill is the primary municipal solid waste disposal facility in Sacramento County. The proposed Project will allow for the construction of 3,075 residential units, approximately 500,000 square feet of commercial and office uses. Development of the proposed Project will result in an increased demand for solid waste services.

The landfill facility area is 660 acres in size and, according to DWMR staff (D. Ghirardelli), is currently permitted to accept a daily average of 3,389 tons of waste and

currently receives approximately 657,000 tons per year. CalRecycle’s website indicates that the landfill’s permitted capacity is approximately 117 million cubic yards. According to the Cal Recycle website, the landfill’s remaining capacity is approximately 112 million cubic yards and based on current disposal rates, Kiefer Landfill’s anticipated “ceased operations date” (the estimated date when the facility will reach its permitted capacity) is 2064.

The proposed Project will not be served by a landfill with insufficient permitted capacity to accommodate the Project’s solid waste disposal needs nor will the Project be in non-compliance with federal, state, and local statutes and regulations related to solid waste. The impacts of the proposed Project on solid waste service are considered *less than significant*.

MITIGATION MEASURES:

None required.

IMPACT: SCHOOL SERVICES

The Project site is within the service area of the Elk Grove Unified School District (EGUSD). Development of the proposed Project would result in increases to the localized student population. The NSP projects that student enrollment resulting from the Project will be approximately 1,851 total students, with approximately 1,008 of these in grades K – 6 (elementary school), 315 in grades 7 – 8 (middle school), and 528 in grades 9 – 12 (high school). According to the Financing Plan, the Project will generate the need for 1.2 elementary schools but only about 27% of a middle and 24% of a high school. The students and funding for the portion of the high school not attributable to the Project will come from areas outside of NSP.

School services are addressed in the NewBridge Specific Plan as well as the Financing Plan. The Plan reserves one 9.4 acre elementary school site in the central portion of the Project area. A 11.5 acre community park site is planned immediately east of the school site and will create a joint-use recreational facility. The school may be a one- or two-story building and the ultimate facility planning and timing of development will be determined by the EGUSD. Although no development is currently proposed in the “West” portion of the Project, a second elementary school is conceptually planned in the “West” portion of the Project area in order to plan for longer-term potential locations due to increased development in the general area. The planning of the school will be coordinated with the EGUSD for consistency with the District’s school facilities master planning in the Jackson Road corridor. Middle and high school students in the Project area will attend middle schools and high school planned in the nearby Jackson Township, Arboretum and Suncreek projects. According to the Financing Plan, assuming Level II fees identified in the School Facilities Needs Analysis (March 2017), the NSP is estimated to generate \$33.8 million through existing fee programs. The Financing Plan also indicates two other funding sources: State funding and the EGUSD Mello-Roos CFD No.1.

EGUSD Facilities and Planning Department staff (K. Williams) has indicated that EGUSD has been working with the Project proponents to be sure that adequate school facilities can be accommodated within the Project area and is satisfied with the proposed development and financing plans for the needed schools. EGUSD staff also indicated that EGUSD will monitor the development of the Project as well as development patterns in the EGUSD to anticipate when new schools will be required and will initiate the school development process prior to the anticipated need in order to be sure that adequate school facilities are available to support the student population of the EGUSD (pers. comm. October 2015).

Financial impacts to school districts for facilities are addressed under California Government Code Sections 65995(h) and 65996(b). Section 65995(h) states that the payment or satisfaction of a fee, charge, or other requirement levied or imposed pursuant to Section 17620 of the Education Code is deemed to be full and complete mitigation of the impacts for the planning, use, development, or the provisions of adequate school facilities. Section 65996(b) finds that these provisions provide full and complete school facilities mitigation. Since the Project will comply with Government Code Sections 65995(h) and 65996(b), impacts related to the provision of school services are considered *less than significant*.

MITIGATION MEASURES:

None required.

IMPACT: PARK AND RECREATION SERVICES

The Project area is located within the Cordova Recreation and Park District (CRPD). The CRPD services the City of Rancho Cordova and the unincorporated portions of Sacramento County including Larchmont, Rosemont, Mather, and Gold River areas. Jackson Highway is the southern boundary of the District. CRPD is an independent, special district within the County of Sacramento and is governed by an elected Board.

The NSP describes proposed Project parks and open space in Section 6.1- 6.2, and indicates that a total of seven community and neighborhood parks will be distributed throughout the Project area with one adjacent to the new elementary school site. The parks range in size from 2.9 to 11.5 acres in size and will provide a variety of facilities that will accommodate local recreational needs. The park facilities will likely include open ball fields, hardcourts, restrooms, playgrounds, tot lots, and picnic areas suitable to size of the park and the CRPD list of park amenities. The NSP Design Guidelines provide conceptual park plans, but ultimately recognizes that the final design of parks is subject to approval by the CRPD.

The largest park, 11.5 acres, is associated with the elementary school and will allow for joint-use opportunities for outdoor recreation facilities. Parks are linked to adjacent land uses and in some case to each other via a network of parkways. As described on page 5-18 of the NSP, parkways are specially designed landscape corridors that form a plan-wide network of street-separated pathways for bicycle and pedestrian circulation. This design feature places all residential uses within 1,000 feet of a neighborhood park or

open space. Parks will incorporate water conservation measures including turf limitation, low water use planting and smart irrigation systems or centrally controlled irrigation systems.

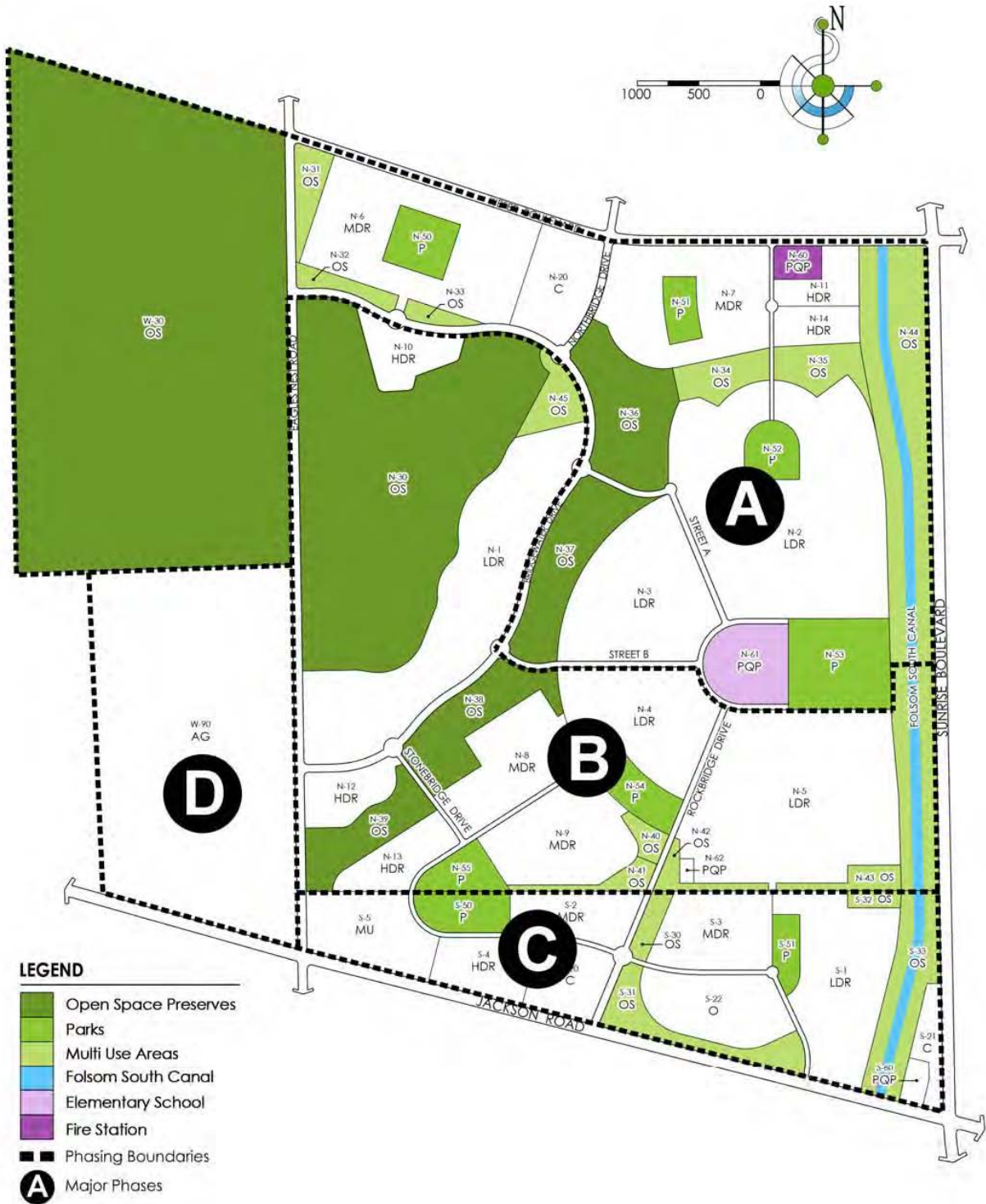
The Quimby Act and the Sacramento County General Plan require a minimum of three and a maximum of five acres of parkland per 1,000 residents. The General Plan also indicates that park districts can require a greater minimum in park land dedication up to five acres per 1,000 people. The CRPD Strategic Master Plan requires five acre per 1,000 people land dedication. Park land dedication requirements as outlined in the NSP are calculated based on household size. As seen in Table 14-1 below, a minimum of 41.2 acres of park land is required to be dedicated within the NewBridge plan area. Between the seven neighborhood and community parks, 41.3 acres of formal parkland will be dedicated to the CRPD.

Table 14-1: Park Land Dedication

	Single Family (LDR/MDR) Units	Multi- Family (HDR) Units	Total Units	Single Family (LDR/MDR) Park Demand (0.0142/unit)	Multi-Family (HDR) Park Demand (0.0119/unit)	Park Acreage Requirement
NewBridge North	1,689	726	2,415	24	8.6	32.6
NewBridge South	315	345	660	4.5	4.1	8.6
NewBridge West	0	0	0	0	0	0
	2,004	1,071	3,075			41.2

In addition to the parks above, the Project also includes approximately 473.4 acres of land designated open space. Within this open space designation there are multiple categories of use: preserve, multi-use area, Folsom South Canal, and community garden. There is a 50-foot buffer along the preserve features that will allow for passive recreation including walking, biking, benches, and interpretative signs. Passive recreation exists along the Folsom South Canal and will also be incorporated into the multi-use open space areas.

Plate PS-2: Parks, Open Space and Public Facilities Plan



The Financing Plan estimates the general park development costs based on the CRPD Park Impact Fee Nexus Study. For the parks identified as neighborhood parks the development cost is estimated to be \$9.4 million based on an average cost of \$472,648 per acre and community parks are \$15.1 million based on an average cost of \$702,159 per acre. All of the park acres are proposed to be dedicated as part of the large-lot map, though it is possible that modifications will be made as part of later small-lot Tentative Subdivision Maps. The County Land Development Ordinance (Title 22 of Sacramento County Code) requires that Tentative Subdivision Maps and Tentative Parcel Maps be conditioned to dedicate land, pay a fee in lieu thereof, or provide a combination of dedication and in-lieu fees for park facilities consistent with Quimby requirements. Any changes would be required to maintain Quimby conformity.

According to the Financing Plan, the precise timing of park development will be the responsibility of the CRPD. However, it was assumed that the construction of neighborhood parks will be completed by the developer and community parks will be completed by CRPD. The funding for park improvements will be through payment of the CRPD Park Impact Fee. This fee has not yet been adopted by the County, but the Financing Plan assumes fee adoption. In total, the NSP will pay \$27.7 million in CRPD Park Impact fees, which equal the full cost of park construction.

The Urban Services Plan details the estimated annual cost for park maintenance services for the new parks proposed for the Project. The annual cost for park maintenance is estimated to be approximately \$860,000. The cost of park maintenance is proposed to be fully covered by the proposed NewBridge Maintenance/Transit CFD special taxes/assessments which will be allocated to benefiting residents.

Similarly, the NSP will include regional trail facilities with varying widths and enhanced crossings, but provide off-street linkages and connections with existing and planned regional trail facilities. At buildout, the costs are estimated at \$8 million and could be funded through payment into fee programs, not yet identified. Programs could include the Sacramento County Transportation Development Fee (SCTDF) or the JCTIF. To the extent that funding is not provided in the JCTIF, trails will be funded by the NSP fee. Funding sources for the two excluded elements would be placed in a funding mechanism developed by the County for regional connections.

The Urban Services Plan also details the estimated annual costs for the regional trail maintenance. The annual cost for regional trail maintenance is estimated to be approximately \$136,396. The cost of regional trail maintenance is proposed to be fully covered by the proposed NewBridge Maintenance/Transit CFD special taxes/assessments or the Jackson Corridor Trails CFD when developed.

The Project is consistent with the requirements of the Quimby Act and the General Plan and Project residents will use the proposed parks within the Project area; therefore, the Project will not increase the demand for existing park services such that a substantial physical deterioration of existing facilities will result. Impacts to park and recreation services will be *less than significant*.

MITIGATION MEASURES:

None required.

IMPACT: LIBRARIES

The Sacramento Public Library System provides library services to the residents of Sacramento County. The library system is comprised of interdependent branches providing services to all residents. Branches are grouped by services, geography, and usage patterns to provide efficient and economical services to the residents of the County. The Sacramento Public Library is a joint powers agency between the County of Sacramento and the cities of Sacramento, Citrus Heights, Elk Grove, Galt, Isleton, and Rancho Cordova (Sacramento Public Library website, 2018).

The Project residents would increase the demand for library services provided by the Sacramento Public Library System and nearby libraries such as the Rancho Cordova Community Library. However, Sacramento Public Library staff reviewed the proposed plan and determined that Libraries does not see a need for a Library branch in the Plan area at this time (D. Tucker, 2013). According to the Financing Plan, funding for library services is from annual property tax revenues allocated to the Library Authority and from countywide library facilities development impact fee. The Urban Service Plan identifies an annual funding shortfall for operating costs, in which the shortfall would be funded through the NewBridge Maintenance/Transit CFD.

The Project will not increase demand on library services beyond existing capacity; therefore, the Project will not result in substantial adverse physical impacts associated with the provision of library services. Impacts related to library services are *less than significant*.

MITIGATION MEASURES:

None required.

15 PUBLIC UTILITIES

INTRODUCTION

The following analysis addresses the ability of existing water service, sewer service, and energy service providers to supply utility services to the Project. The analysis describes the relevant master planning of the utility services and whether the infrastructure and demands of the Project are consistent with the utility master plans. The potential physical impacts of constructing facilities are described, as are the potential physical impacts of water, sewer, and energy demands.

Please note that the analysis for supply and/or demand utilizes the proposed Project land use plan. However, sizing of sewer infrastructure utilizes different assumptions. In order to adequately size infrastructure to support possible future development in the West Planning Area, 660 single-family dwelling units were assigned for this area.

ENVIRONMENTAL SETTING

WATER SUPPLY

Twenty-eight water purveyors supply water to customers within Sacramento County. The Project is within the service area of the Sacramento County Water Agency (SCWA). SCWA currently provides water service to portions of the City of Rancho Cordova, all of the City of Elk Grove, and a significant portion of unincorporated Sacramento County beginning near the current Urban Policy Area boundary and ending at the Urban Services Boundary. The Project is located in SCWA's Zone 40 service area. The amount of water available to supply SCWA's customers is defined by individual water rights, surface water contracts, groundwater pumping limitations, and the infrastructure necessary to treat, pump, and deliver water.

SACRAMENTO COUNTY WATER AGENCY (ZONE 40)

Zone 40 serves an area of approximately 86,000 acres. The current water supply is obtained from a mix of groundwater, surface water, recycled water, and remediated water. SCWA manages its supplies conjunctively; that is, in wet years when there is abundant surface water available SCWA will divert the maximum amount of surface water allowed, while minimizing groundwater usage. The aquifer can replenish during these wet years, so that in dry years when surface water becomes less abundant SCWA can pump groundwater to meet needs.

Zone 40 groundwater is provided from the Central Groundwater Basin by the Sacramento County Water Agency using commercial wells and treatment plants located throughout its service area. Hydrologically, the Central Groundwater Basin underwent significant pumping that resulted in an unacceptable groundwater elevation decline. As a result of this decline, the basin is currently being managed by the Sacramento

Groundwater Authority, which has adopted a groundwater management plan for the purpose of maintaining and protecting the basin’s long term sustainable yield and quality consistent with the Sacramento Water Forum’s objectives; the Water Forum Agreement, adopted via a Memorandum of Understanding between the County and other stakeholders, was designed to define a reliable and safe water supply through 2030 while protecting environmental resources. These documents can be accessed at the following web addresses: www.scgah2o.org and <http://www.waterforum.org/>.

Water supply analyses supporting the Water Forum Agreement allocate up to 40,900 acre-feet of groundwater annually on a long-term basis for Zone 40. Remediated water supplies for Zone 40 are based on yields from the various groundwater extraction and treatment plants that Aerojet and Boeing operate to clean up contaminated water in the vicinity of their historical operations. Through an agreement between Sacramento County, SCWA, and Aerojet-Gencorp dated May 18, 2010, remediated groundwater pumped from the Central Basin is returned to Zone 40. This amounts to approximately 8,900 acre-feet per year. Recycled water is tertiary treated wastewater from Sacramento Regional County Sanitation District (SRCSD) sold to SCWA for non-potable uses. Currently, recycled water is not used for residential landscaping.

The SCWA conjunctive use program includes the delivery of surface water within the Zone 40 boundaries as part of a comprehensive program to maintain the long-term, regional balance of the groundwater basin. SCWA has several sources of surface water supplies totaling up to 71,858 acre-feet per year (AFY) available on a long-term average:

- SCWA has entered into a contract with the U.S. Bureau of Reclamation (USBR) for 22,000 AFY of Central Valley Project (CVP) supplies from the American River pursuant to Public Law (PL) 101-514 (often referred to as “Fazio water”). Of this 22,000 AFY, 7,000 AFY has been subcontracted to the City of Folsom for diversion from Folsom Lake. The remaining 15,000 AFY will be diverted by SCWA from the Sacramento River. The long-term average availability of this supply is 14,050 AFY.
- SMUD has assigned 30,000 AFY of its CVP contract to SCWA under the terms of a three-party agreement with the City of Sacramento. The long-term average availability of this supply is 26,000 AFY.
- State Water Resources Control Board Permit 21209 allows for excess flows on the American River and Sacramento River to be diverted by SCWA from the Sacramento River. These flows, which would be available on an intermittent basis, could range up to 71,000 AFY. The long-term average availability of this supply is 22,400 AFY.
- City of Sacramento American River POU Water Rights and other water supplies which vary based on normal/wet years and dry years. The long-term average availability of this supply is 9,408 AFY.

The following supply and demand information (Table PU-1) was taken from the *Zone 40 Water Supply Master Plan Amendment for the NewBridge Specific Plan* prepared by the Sacramento County Water Agency, February 2016 (Appendix PU-1).

Table PU-1: Zone 40 Water Supply in Five-Year Increments

Water Year	Water Supply Sources	Zone 40 Water Supply (AFY)				
		2020	2025	2030	2035	2040
Normal Year	Surface Water	134,900	134,900	134,900	134,900	134,900
	Groundwater	48,900	48,900	48,900	48,900	48,900
	Recycled Water	1,700	1,700	1,700	1,700	1,700
	<i>TOTAL</i>	<i>185,500</i>	<i>185,500</i>	<i>185,500</i>	<i>185,500</i>	<i>185,500</i>
Single Dry Year	Surface Water	25,600	22,800	24,400	26,700	29,200
	Groundwater	78,900	78,900	78,900	78,900	78,900
	Recycled Water	1,700	1,700	1,700	1,700	1,700
	<i>TOTAL</i>	<i>106,200</i>	<i>103,400</i>	<i>105,000</i>	<i>107,300</i>	<i>109,800</i>
Multiple Dry Year (1)	Surface Water	134,900	134,900	134,900	134,900	134,900
	Groundwater	48,900	48,900	48,900	48,900	48,900
	Recycled Water	1,700	1,700	1,700	1,700	1,700
	<i>TOTAL</i>	<i>185,500</i>	<i>185,500</i>	<i>185,500</i>	<i>185,500</i>	<i>185,500</i>
Multiple Dry Year (2)	Surface Water	33,600	29,400	31,700	35,200	39,000
	Groundwater	78,900	78,900	78,900	78,900	78,900
	Recycled Water	1,700	1,700	1,700	1,700	1,700
	<i>TOTAL</i>	<i>114,200</i>	<i>110,000</i>	<i>112,300</i>	<i>115,800</i>	<i>119,600</i>
Multiple Dry Year (3)	Surface Water	25,600	22,800	24,400	26,700	29,200
	Groundwater	78,900	78,900	78,900	78,900	78,900
	Recycled Water	1,700	1,700	1,700	1,700	1,700
	<i>TOTAL</i>	<i>106,200</i>	<i>103,400</i>	<i>105,000</i>	<i>107,300</i>	<i>109,800</i>

SEWER SERVICE

Sewer service within the Project area is provided by Sacramento Regional County Sanitation District (SRCSD), which builds and operates the interceptor lines and regional wastewater treatment plant, and Sacramento Area Sewer District (SASD), which builds and maintains trunk lines. SRCSD was formed to provide a regional wastewater conveyance, treatment, and disposal system for the entire urbanized area of the County of Sacramento. SASD is responsible for day-to-day operations and maintenance of the lower lateral and mainline pumps within its district. SRCSD and SASD are governed by a Board of Directors, whose members include the County of Sacramento Board of Supervisors and the mayors or designees of the cities of

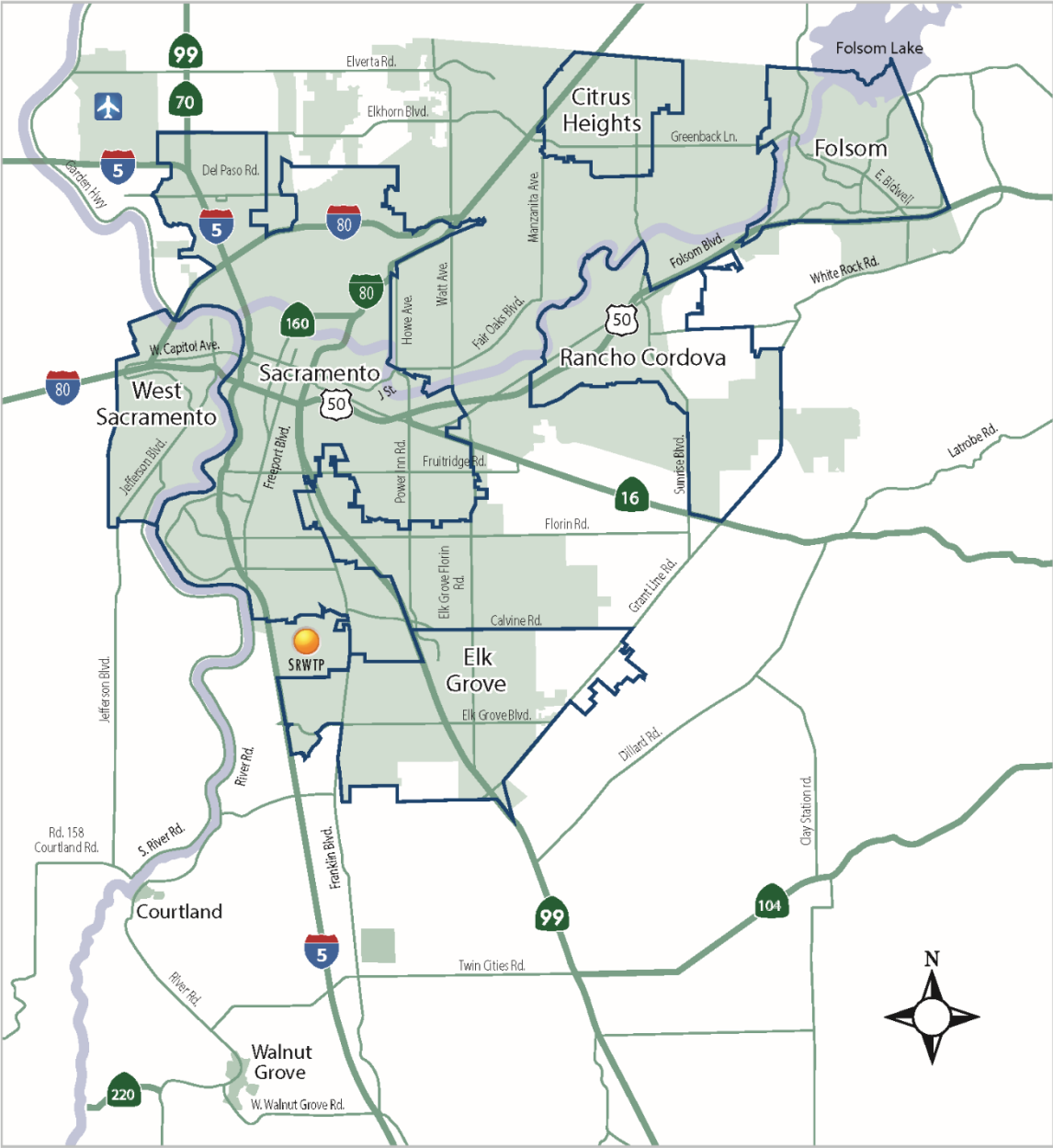
Sacramento, Citrus Heights, Elk Grove, Folsom, Rancho Cordova, West Sacramento (SRCSD only) and Yolo County (SRCSD only). SRCSD provides wastewater treatment for more than one million residents in a 435-square mile area within Sacramento and Yolo Counties, while SASD is responsible for the local collection system and maintenance in unincorporated Sacramento County as well as many of the incorporated cities (Plate PU-1).

SRCSD's and SASD's approved Sphere of Influence (SOI) in Sacramento County is the area officially designated for its future service planning effort. This area corresponds to the General Plan's Urban Services Boundary (USB), with the exception of the areas served by the Cities of Sacramento (portions), the Folsom sewer system, Rancho Murieta, Rio Cosumnes Correctional Center, the City of West Sacramento, and the Delta communities of Courtland and Walnut Grove. The Project resides within the SOI, but outside of the current service area. The Project will have to annex into their respective service areas.

Sewage is routed to the Sacramento Regional Wastewater Treatment Plant (SRWTP) by the collections systems owned by SRCSD, the City of Sacramento, and the City of Folsom. Currently, the SRWTP is a high-purity oxygen-activated sludge facility. After secondary treatment and disinfection, a portion of the effluent from the plant is further treated in SRCSD's Water Reclamation Facility and then used for non-potable purposes, such as landscape irrigation within select areas of Elk Grove and the SRWTP. The majority of the treated wastewater is dechlorinated and discharged into the Sacramento River. Pursuant to the 2010 National Pollutant Discharge Elimination System permit issued by the Central Valley Regional Water Quality Control Board, the plant is required to implement tertiary treatment of wastewater prior to discharge to the Sacramento River. Tertiary treatment will remove nearly all ammonia and most nitrates along with enhanced filtration and disinfection. SRCSD has named this major upgrade to the plant the "EchoWater Project". The EchoWater Project is currently under construction and is slated to be completed in 2023.

Plate PU-1: SRCSD Service Area

REGIONALSAN
SERVICE AREA



LEGEND

SRCSD Service Area	Sacramento Regional Wastewater Treatment Plant
City Boundaries	Highways
Rivers	Main Roads



The main SASD collection system includes over 2,800 miles of sewer pipelines ranging in size from four to 75 inches in diameter that deliver sewage to the interceptor system operated and maintained by SRCSD. SRCSD interceptors are a very large system of pipes (up to 10 feet in diameter), which carry wastewater directly to the SRWTP. At times of peak use, the interceptor system carries as much as 400 million gallons of wastewater per day. SRCSD currently has 123 miles of interceptor pipe including 30 miles of force mains and 9 major pumping stations. This does not include proposed interceptors or interceptors currently in construction. The SRWTP receives and treats approximately 141 mgd average dry weather flow (Seyfried, 2008). Previously, the wastewater flow at the SRWTP was about 150 mgd average dry weather flow, but appears to have been reduced due to water conservation efforts, dry weather and other factors. The SRWTP has a permitted average dry weather flow design capacity of 181 mgd and wet weather flow of 392 mgd. Wet water flows include groundwater infiltration and rainfall-dependent infiltration/inflow and are, therefore, greater than dry weather flows.

These systems are master planned for growth within the Urban Policy Area (UPA); however, the facilities are generally sized to accommodate the expected growth within the USB. The master plans discussed below are relevant to Project sewer service. The master plans described below are hereby incorporated by reference and can be viewed at County of Sacramento, Office of Planning and Environmental Review, 827 7th Street, Room 225, Sacramento, CA 95814; or the Sacramento Regional County Sanitation District, 10060 Goethe Road, Sacramento, CA 95827.

SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT MASTER PLAN 2020

The purpose of the SRWTP Master Plan is to identify wastewater treatment and facility needs for a 20-year planning period, which lasts through the year 2020. The SRWTP master plan's goal is to provide a phased program of recommended facilities to accommodate planned growth while at the same time maintaining treatment reliability, meeting future regulatory requirements, and optimizing costs. To meet this goal, a 2020 Master Plan was prepared that integrated overall strategies for wastewater treatment, effluent management, and biosolids disposal into an effective wastewater treatment management program. The 2020 Master Plan proposed that treatment facility expansion occur in stages or phases as the sewage generated by the population increases. The capacity of the plant would increase under this plan from 181 mgd to 218 mgd (dry weather). The treatment plant is not designed to accommodate wet weather flows. During wet weather events (2-year, 10-year, and 100-year storm events), effluent must be stored (either in emergency storage basins or within the interceptors) because SRWTP cannot discharge effluent into the river. The storage basins and interceptors are designed to provide adequate capacity to accommodate wet weather flows.

The SRCSD Board of Directors approved the SRWTP Master Plan 2020 in summer of 2004. A NPDES Discharge Permit was issued to Regional San by the Central Valley Regional Water Quality Control Board (Water Board) in December 2010. In adopting the new Discharge Permit, the Water Board required SRCSD to meet significantly more

restrictive treatment levels over its current levels. SRCSD believed that many of these new conditions go beyond what is reasonable and necessary to protect the environment, and appealed the permit decision to the State Water Resources Control Board (State Board). In December 2012, the State Board issued an Order that effectively upheld the Permit. As a result, SRCSD filed litigation in California Superior Court. SRCSD and the Water Board agreed to a partial settlement in October 2013 to address several issues and a final settlement on the remaining issues were heard by the Water Board in August 2014. SRCSD began the necessary activities, studies and projects to meet the permit conditions. The new treatment facilities to achieve the permit and settlement requirements must be completed by May 2021 for ammonia and nitrate and May 2023 for the pathogen requirements.

INTERCEPTOR MASTER PLAN 2000

The purpose of the Interceptor Master Plan 2000 is an update of the 1993 – 1994 Sacramento Sewerage Expansion Study to more accurately predict existing and future capacity needs in the regional interceptor system and provide a strategic approach to plan for these capacity needs. To update and refine the regional conveyance facilities, the master plan updates the service area, growth projections, existing system response to rainfall, provides dynamic modeling, estimates the cost of facilities, identifies right-of-way acquisition needs, and identifies near and long-term improvements required for regional wastewater conveyance. A master plan for the interceptor system accommodates approved developments and avoids interruption of service to developing areas. The Master Plan 2000 identifies land use and population projections based on SACOG Blueprint Criteria, and the land use plans of the member jurisdictions. The Plan also includes wastewater flow estimates, information on hydraulic modeling, interceptor design criteria, and identifies conveyance systems and policies to accommodate planned growth. The SRCSD Board of Directors approved the Interceptor Master Plan 2000 in March 2003.

The SRCSD completed the Interceptor Sequencing Study in 2013. The study evaluated the Interceptor Master Plan 2000 and determined the long term needs to provide sewer service based on completed projects and updates to the Sacramento Area Sewer District's Sewer System Capacity Plan (most recent update 2010).

SACRAMENTO AREA SEWER DISTRICT SEWERAGE FACILITIES EXPANSION MASTER PLAN

In order to effectively plan and budget for capital improvement needs, SASD adopted and periodically updates a facilities master plan. The master plan is broad based and addresses policy issues, improvements to the existing sewer system to alleviate deficiencies, and sewer trunk expansions to accommodate new development areas. This Master Plan was approved by the Board of Directors in May of 2004.

SASD SEWERAGE FACILITIES EXPANSION MASTER PLAN 2006 UPDATE

The 2006 SASD Sewerage Facilities Expansion Master Plan Update was approved by the Board of Directors in October, 2008. The Master Plan Update is a companion document to the previously approved Sewerage Facilities Expansion Master Plan. The

master plan update evaluates future areas of expansion and revises relief projects approved in the previous master plan. Many of the facilities previously approved in the SASD Sewerage Facilities Expansion Master Plan Update have been constructed. In addition, the Master Plan Update incorporates the Upper Deer Creek, Lower Deer Creek, and Upper Laguna Creek sewer sheds, which were not evaluated in the previous master plan. The service area is proposed to expand from 268 square miles to 281 square miles with the update. Consequently, the number of miles of pipeline and the number of customers served is anticipated to increase.

Projected unit wastewater flow rates for future development are based on land use categories and their respective densities. The Master Plan Update used 13 land use categories for developing wastewater flow estimates for potential build-out conditions. The land use categories were developed during stakeholder sessions with the County, various cities, developers, and interested parties. The wastewater generation estimate was expressed in the equivalent of single-family dwelling units (ESDs) per acre, where one ESD represents the wastewater generation equivalent of one single-family residence. Flow estimates for an ESD are 310 gallons per day. The ESD's for each of the 13 land uses are found below (Table PU-2).

Table PU-2: Land Use Categories, Design ESD Densities, and Flow Estimates

Land Use Code	Description	ESDs per acre	Flow Estimates (gpd)
AG	Agricultural	6	1,860
VLSRI	Agricultural Residential	6	1,860
VLDR2	Very Low Density Residential	6	1,860
LDR1	Low Density Residential	6	1,860
LDR2	Medium Low Density Residential	10	3,100
MDR1	Medium Density Residential	15	4,650
MDR2	Medium High Density Residential	22	6,820
HDR	High Density Residential	30	9,300
COM	Commercial/Office	6	1,860
IND	Industrial	6	1,860
PQP	Public/Quasi-Public/Schools	6	1,860
Mixed	Mixed/Special Planning Areas/Urban Reserve	6	1,860
Open	Open Space, Recreation, Parks, Cemeteries	6	1,860

Source: CSD-1 Sewerage Facilities Expansion Master Plan 2006 Update, pages 2-9 and 2-10 and SASD District Standards and Specifications (dated July 24, 2013, page 30, section 201)

WATER RECYCLING PROGRAM

SRCSO, in partnership with SCWA, has a small-scale non-potable water recycling program. SRCSD is responsible for producing and wholesaling recycled water to SCWA, while the SCWA is responsible for retailing the recycled water to selected customers. SRCSD's small-scale water recycling program began to serve communities in the City of Elk Grove in 2003. Recycled water is also used at the SRWTP. The existing Water Reclamation Facility Phase 1 at the wastewater treatment plant has a design capacity of 5 mgd of recycled water, which is used in-lieu of potable water for non-potable purposes such as landscape irrigation. This facility was constructed to be expanded as demand increased.

In January 2004, the SRCSD Board of Directors approved a Water Recycling Program that includes the following goals:

- Increase water recycling throughout the Sacramento region on the scale of 30 – 40 mgd over the next 20 years.
- Increase utilization of recycled water to expand SRCSD's effluent management options beyond continued discharge to the Sacramento River.
- Increase utilization of recycled water to meet growing non-potable demands, allowing Sacramento area water purveyors to reduce demands on their existing high quality water supplies and reduce the need for additional water supplies in the future.

To evaluate the feasibility of implementing a large-scale water recycling program, SRCSD began preparation of its Water Recycling Opportunities Study (WROS) in November 2004 and completed the WROS in February 2007. The WROS does the following:

- Studies areas throughout the Sacramento Region and SRCSD service area to identify potential water recycling opportunities,
- Engages potential water recycling partners and stakeholders,
- Develops, assesses, and prioritizes potential water recycling projects, and
- Provides a strategy to further develop and implement the projects selected to move forward in achieving the stated goals of the large-scale Water Recycling Program.

The WROS identifies goals and objectives, and evaluates potential water recycling opportunities at a high planning level. The actual implementation of any of these opportunities is yet to be determined and depends on many factors, such as participation of all key stakeholders, permitting requirements, and financial feasibility.

GAS AND ELECTRIC SERVICE

Electric service within the Project area is provided by the Sacramento Municipal Utility District (SMUD) and natural gas service in the Project area is provided by the Pacific Gas and Electric Company (PG&E). SMUD generates, transmits, and distributes electric power to a 900-square mile service area that includes Sacramento County and a small portion of Placer County. SMUD gets its electricity from diverse and competitively priced resources, including: hydro generation; cogeneration plants; advanced and renewable technologies such as wind, solar, and biomass/landfill gas power; and power purchased on the wholesale market. PG&E is one of the largest combination natural gas and electric utilities in the United States. PG&E delivers natural gas from three major sources – California, the southwestern U.S., and Canada.

REGULATORY SETTING

SACRAMENTO LOCAL AGENCY FORMATION COMMISSION

Local Agency Formation Commissions (LAFCos) are ~~countywide~~ **independent** commissions, required in each California County. LAFCos govern the formation of new agencies, incorporation of new cities and districts, consolidation or reorganization of special districts and/or cities, as well as municipal service reviews and sphere of influence updates, and annexations of cities and special districts. The broad goals of the Sacramento LAFCo's directive are to ensure the orderly formation of local governmental agencies, to preserve agricultural and open space lands, and to discourage urban sprawl. LAFCos must, by law, create Municipal Service Reviews and update, **as necessary**, Spheres of Influence for each independent local governmental jurisdiction within their countywide jurisdiction.

WATER SUPPLY

FEDERAL REGULATIONS

UNITED STATES BUREAU OF RECLAMATION

The Bureau of Reclamation is part of the United States Department of the Interior and is responsible for the development and conservation of much of the water resources in the western United States. The Bureau operates Folsom Dam, Nimbus Dam, and the Folsom South Canal. While the original purpose of the Bureau was to provide for the reclamation of arid and semiarid lands in the west, the agency's current mission covers a wider range of interrelated functions. These functions include providing municipal and industrial water supplies through the Central Valley Project; generating hydroelectric power; providing irrigation water for agriculture; improving water quality, flood control, and river navigation; providing river regulation and control and fish/wildlife enhancement; offering water-based recreation opportunities; and conducting research on a variety of water-related topics.

UNITED STATES GEOLOGICAL SURVEY

The United States Geological Survey (USGS) National Water Use Information Program is responsible for compiling and disseminating the nation's water use data. The USGS works in cooperation with federal, state, and local environmental agencies to collect water use information at the local level.

*STATE REGULATIONS***DEPARTMENT OF WATER RESOURCES**

The Department of Water Resources (DWR) is responsible for the preparation of the California Water Plan, management of the State Water Project, protection, and restoration of the Sacramento-San Joaquin River Delta, regulation of dams, provision of flood protection, and other functions related to surface water and groundwater resources. Other functions include helping water agencies prepare their Urban Water Management Plans and reviewing such plans to ensure that they comply with the related Urban Water Management Planning Act.

WATER RESOURCES CONTROL BOARD

The State Water Resources Control Board (State Water Resources) was established in 1967 to administer state water rights and water quality functions. State Water Resources and its nine regional water quality control boards administer water rights and enforce pollution control standards. State Water Resources is responsible for the granting of water right permits and licenses through an appropriation process following public hearings and appropriate environmental review by applicants and responsible agencies. In granting water right permits and licenses, State Water Resources must consider all beneficial uses, including water for downstream human and environmental uses.

CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD

The Central Valley Regional Water Quality Control Board (Regional Water Board) is responsible for the preparation and implementation of basin water quality plans consistent with the Clean Water Act and enforcement of those plans to ensure that local water quality is protected. The Regional Water Board may become involved in water supply programs as a responsible agency with respect to Project impacts on downstream beneficial uses.

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

The California Department of Fish and Wildlife (CDFW) is a responsible agency with respect to the review of water right applications and is responsible for issuing lake and streambed alteration permits for new water supply projects. CDFW often helps establish in-stream flows to maintain habitat below a project.

LOCAL REGULATIONS

The Sacramento County General Plan contains policies and implementation measures which pertain to the provision of water supply. The following policies are applicable to the proposed Project.

- AG-27. The County shall actively encourage groundwater recharge, water conservation and water recycling by both agricultural and urban water users.
- CO-1. Support conjunctive use water supply for development.
- CO-7. Support the Water Forum Agreement Groundwater Management Element. Prior to approving any new development water supply plan shall be approved that demonstrates consistency with an adopted groundwater management plan.
- CO-8. Applicants proposing developments in areas with significant groundwater recharge characteristics shall evaluate the impact of said development on groundwater recharge and quality. This evaluation should recognize criteria defined in any broader County-wide determination and/or evaluation of groundwater recharge areas.
- CO-9. Developments in areas with significant contamination shall utilize remediated groundwater as part of their water supply when feasible.
- CO-13. Support the WFA Conservation Element and the California Urban Water Conservation Council Best Management Practices for Water Conservation.
- CO-14. Support the use of recycled wastewater to meet non-potable water demands where financially feasible.
- CO-16. Ensure developments are consistent with the County Water Efficient Landscape Ordinance, which shall be updated as needed to conform to state law.
- CO-22. Support water management practices that are responsive to the impacts of Global Climate Change such as groundwater banking and other water storage projects.
- CO-23. Development approval shall be subject to a finding regarding its impact on valuable water-supported ecosystems.
- CO-34. Development applications shall be subject to compliance with applicable sections of the California Water Code and Government Code to determine the availability of an adequate and reliable water supply through the Water Supply Assessment and Written Verification processes.
- CO-35. New development that will generate additional water demand shall not be approved and building permits shall not be issued if sufficient water supply is not available, as demonstrated by Water Supply Assessment and Written Verification processes.

CO-36. Water supply entitlements will be granted on a first come first serve basis to optimize the use of available water supplies.

LU-73. Sewer and water treatment and delivery systems shall not provide for greater capacity than that authorized by the General Plan.

PF-4. Connector fees for new development shall cover the fair share of costs to acquire and distribute surface water to the urban area.

PF-5. New treatment facilities and all facility operations shall be funded by beneficiaries.

LEGISLATION

URBAN WATER MANAGEMENT PLANNING ACT

Pursuant to California Water Code Sections 10610-10657, as last amended by Senate Bill 318 in 2004, the Urban Water Management Planning Act requires all urban water suppliers with more than 3,000 service connections or water use of more than 3,000 AFA to submit an Urban Water Management Plan (UWMP) to the California Department of Water Resources every 5 years and update the plan on or before December 31 in years ending in 5 and 0. SB 318 is the 18th amendment to the original bill requiring a UWMP, which was initially enacted in 1983. Amendments to SB 318 have focused on ensuring that the UWMP emphasizes and addresses drought contingency planning, water demand management, reclamation, and groundwater resources.

SENATE BILL 610

SB 610 became effective January 1, 2002. The purpose of SB 610 is to strengthen the process by which local agencies determine the adequacy and sufficiency of current and future water supplies to meet current and future demands. SB 610 amended the California Public Resources Code to incorporate Water Code requirements within the CEQA process for certain types of projects (described below). SB 610 also amended the water code to broaden the types of information included in a UWMP. SB 610 consists of two primary components, the UWMP and the Water Supply Assessment (WSA) (Water Code Sections 10910-10915).

WATER CODE PART SECTION 10910

Water Code Section 10910 et seq. defines the projects for which the preparation of a Water Supply Assessment (WSA) is required as well as the lead agency's responsibilities related to the WSA. The Water Code also clarifies the roles and responsibilities of the lead agency under CEQA and of the water supplier with respect to describing current and future supplies compared to current and future demands. A WSA is required for:

- A proposed residential development of more than 500 dwelling units;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 250,000 square feet of floor space;

- A proposed hotel or motel, or both, having more than 500 rooms;
- A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- A mixed use development that includes one or more of the uses described above;
- A development that would demand a volume of water equivalent to or greater than the volume of water required by a 500-dwelling unit project; and
- For lead agencies with fewer than 5,000 water service connections, any new development that would increase the number of water service connections in the service area by 10% or more.

Under Section 10910 of the Water Code, the lead agency must identify the affected water supplier and ask the supplier whether the new demands associated with the project are included in the suppliers UWMP. If the UWMP includes the demands, it may be incorporated by reference in the WSA. If there is no public water system to serve the project, the lead agency must prepare the WSA.

SENATE BILL 221

SB 221 requires a city or county to include as a condition of approval of any tentative map, parcel map, or development agreement for certain residential subdivisions a requirement that a “sufficient water supply” be available. Proof of a sufficient water supply must be based on a written verification from the public water system that would serve the development.

SUSTAINABLE GROUNDWATER MANAGEMENT ACT

The Sustainable Groundwater Management Act (SGMA) was signed into law in 2014. SGMA tasks California DWR to draft a Strategic Plan for its Sustainable Groundwater Management (SGM) Program. DWR’s SGM Program will implement new and expanded responsibilities identified in the 2014 SGMA. Some of these expanded responsibilities include: (1) developing regulation to revise groundwater basin boundaries; (2) adopting regulations for evaluating and implementing Groundwater Sustainability Plans (GSPs) and coordination agreements; (3) identifying basins subject to critical conditions of overdraft; (4) identifying water available for groundwater replenishment; and (5) publishing best management practices for the sustainable management of groundwater.

It is too soon to understand how the objectives of a GSP will be implemented through land use practices, but it is known that January 1, 2015 will be used as a base line for sustainability in managing activities related to groundwater levels such that there is no adverse impact to identified beneficial uses, which includes chronic overdraft, reduction in groundwater, seawater intrusion, impacts to water equality, land subsidence, and impacts on beneficial use of surface water.

CALIFORNIA SAFE DRINKING WATER ACT

The California Safe Drinking Water Act (California Health and Safety Code 4010 – 4039.6) authorizes the California Department of Public Health (CDPH) to establish maximum contaminants levels that are at least as stringent as those required by the U.S. Environmental Protection Agency (EPA) under the SDWA. The CDPH has established maximum contaminants levels for contaminants that may occur in public water systems, including all the substances for which federal maximum contaminants levels exist, and may have adverse health effects. Operators of public water systems in California are required to meet federal and state drinking water standards.

SEWER SERVICE

*FEDERAL REGULATIONS***CLEAN WATER ACT**

Construction of wastewater infrastructure and facilities may have impacts (erosion and sedimentation) that would be regulated by the Clean Water Act. The 1972 amendments to the federal Clean Water Act prohibit the discharge of pollutants to navigable waters from a point source unless the discharge is authorized by a National Pollutant Discharge Elimination System (NPDES) permit. The Clean Water Act requires NPDES permits for stormwater discharges caused by general construction activity. The purpose of the NPDES program is to establish a comprehensive stormwater quality program to manage urban stormwater, reducing pollution of the environment as much as possible. The NPDES program involves characterizing the quality of receiving water, identifying harmful constituents, targeting potential sources of pollutants, and implementing a comprehensive stormwater management program. NPDES permits are issued by the Regional Water Quality Control Board.

SAFE DRINKING WATER ACT

The federal Safe Drinking Water Act established a national program to protect the quality of drinking water available from municipal and industrial water suppliers. The act establishes a program requiring compliance with national drinking water standards for contaminants that may have an adverse effect on human health. It also establishes programs to protect potable groundwater from contamination.

*STATE REGULATIONS***PORTER-COLOGNE WATER QUALITY CONTROL ACT**

The Porter-Cologne Act requires the California State Water Resources Control Board (State Water Resources) to adopt water quality control plans and set waste discharge requirements (WDRs) for dischargers into surface and groundwater. The Central Valley Regional Water Quality Control Board (Regional Water Board) is responsible for administering and enforcing WRDs, permits, and water quality control plans.

WATER QUALITY CONTROL PLANS

NPDES permits and Erosion Control Programs are required for the construction of infrastructure and pumping facilities. The Clean Water Act requires that water resources be protected from degradation caused by waste discharges and requires that identified beneficial uses be maintained. The Regional Water Board’s Water Quality Control Plan for the Central Valley Region identifies the designated beneficial uses of groundwater and surface water bodies and contains water quality objectives and standards established to protect those uses.

The County of Sacramento received a municipal NPDES permit for stormwater discharges from the Central Valley Regional Water Quality Control Board. Under this permit, permittees are required to develop, administer, implement, and enforce a Comprehensive Stormwater Management Program (CSWMP) in order to reduce pollutants in urban runoff to the maximum extent practicable. The CSWMP implemented by the city county is a multi-faceted, dynamic program which is designed to reduce stormwater pollution to the maximum extent practicable. The CSWMP emphasizes all aspects of pollution control including but not limited to public awareness and participation, source control, regulatory restrictions, water quality monitoring, and treatment control.

The Sacramento Stormwater Management Program has developed the 2017 Stormwater Quality Design Manual for the Sacramento and South Placer Regions. The Manual provides general conditional language used to require development projects to incorporate erosion and sediment controls and on-site stormwater quality control measures. For public and quasi-public projects, mitigation requiring the Project to comply with the County’s Land Grading and Erosion Control Ordinance is required.

STATE WATER RESOURCES RESOLUTION NO. 68-16

The goal of State Water Resources Resolution No. 68-16 (Statement of Policy With Respect to Maintaining High Quality Waters in California”) is to maintain high quality waters where they exist in the State. State Board Resolution No. 68-16 States, in part:

- “Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies.
- Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.”

The State Water Resources has interpreted Resolution No. 68-16 to incorporate the federal anti-degradation policy, which is applicable if a discharge that began after November 28, 1975 will lower existing surface water quality.

WATER RECLAMATION REGULATIONS

Wastewater reclamation in California is regulated under Title 22, Division 4, of the California Code of Regulations. The intent of these regulations is to ensure protection of public health associated with the use of reclaimed water. The regulations establish acceptable levels of constituents in reclaimed water for a range of uses and prescribe means for assurance of reliability in the production of reclaimed water. The California Department of Health Services has jurisdiction over the distribution of reclaimed wastewater and the enforcement of Title 22 regulations. The Regional Water Board is responsible for issuing waste discharge requirements (including discharge prohibitions, monitoring, and reporting programs).

LOCAL REGULATIONS

The Sacramento County General Plan contains policies and implementation measures which pertain to the provision of wastewater collection and treatment. The Public Facilities Element policies PF-6 through PF-19 pertain to sewer services, but not all of these are applicable to the Project. There is also one policy from the Land Use Element which is applicable to the Project.

- LU-73. Sewer and water treatment and delivery systems shall not provide for greater capacity than that authorized by the General Plan.
- PF-6. Interceptor, trunk lines, and flow attenuation facilities shall operate within their capacity limits without overflowing.
- PF-7. Although sewer infrastructure will be planned for full urbanization consistent with the Land Use Element, an actual commitment of additional sewer system capacity will be made only when the land use jurisdiction approves development to connect and use the system.
- PF-8. Do not permit development which would cause sewage flows into the trunk or interceptor system to exceed their capacity.
- PF-9. Design trunk and interceptor systems to accommodate flows generated by full urban development at urban densities within the ultimate service area. System design may take into consideration land that cannot be developed for urban uses due to long-term circumstances including but not limited to conservation easements, floodplains, public recreation areas etc. This could include phased construction where deferred capital costs are appropriate.
- PF-10. Development along corridors identified by the Sanitation Districts in their Master Plans as locations of future sewerage conveyance facilities shall incorporate appropriate easements as a condition of approval.
- PF-13. Public sewer systems shall not extend service into agricultural-residential areas outside the urban policy area unless the Environmental Health Department

determines that there exists significant environmental or health risks created by private disposal systems serving existing development and no feasible alternatives exist to public sewer service.

- PF-14. Independent community sewer systems shall not be established for new development.
- PF-15. Support CSD-1 and SRCSD policies to fund new trunk and interceptor capital costs through connection fees for new development.
- PF-16. Support SRCSD policy to fully fund treatment plant operation through monthly service charges to system users. Fund treatment plant expansion and upgrades and existing trunk and interceptor replacements or improvements through connection fees or other revenue sources.
- PF-18. New development projects which require extension or modification of the trunk or interceptor sewer systems shall be consistent with sewer facility plans and shall participate in established funding mechanisms. The County should discourage development projects that are not consistent with sewer master plans or that rely upon interim sewer facilities, particularly if the costs of those interim facilities may fall on ratepayers. Prior to approval of a specific Commercial Corridor redevelopment project which requires extension or modification of the trunk or interceptor sewer systems, a sewer study and financing mechanism shall be prepared and considered along with the proposed Corridor redevelopment project, in consultation with the Sacramento Area Sewer District.
- PF-19. Extension or modification of trunk or interceptor sewer systems that are required for new developments shall be consistent with sewer facility plans and shall participate in an established funding mechanism. New development that will generate wastewater for treatment at the SRWTP shall not be approved if treatment capacity at the SRWTP is not sufficient to allow treatment and disposal of wastewater in compliance with the SRWTP's NPDES Permit.

ENERGY SERVICES

FEDERAL REGULATIONS

FEDERAL ENERGY REGULATORY COMMISSION

The Federal Energy Regulatory Commission is an independent agency that regulates the transmission and sale of electricity, natural gas, and oil; licenses and inspects hydropower projects; reviews proposals to build liquefied natural gas terminals; and oversees related environmental matters (FERC, 2016).

STATE REGULATIONS

CALIFORNIA PUBLIC UTILITIES COMMISSION

The California Public Utilities Commission (CPUC) regulates the design, installation, and management of California’s public utilities, including electric, natural gas, water, transportation, and telecommunications. The CPUC also provides consumer programs and information, such as energy efficiency, low income programs, demand response, and California solar initiative for California’s energy consumers.

CALIFORNIA CODE OF REGULATIONS

New buildings constructed in California must comply with the standards contained in Title 20, Energy Building Regulations, and Title 24, California Building Standards Code. Part 6 of Title 24 contains California’s Energy Efficiency Standards for Residential and Nonresidential Buildings. These regulations were established in 1978 in response to legislative mandate to reduce California’s energy consumption. The standards are updated periodically to incorporate new energy efficiency technologies and methods (CEC, 2016).

WARREN-ALQUIST STATE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT ACT

The Warren-Alquist Act of the Public Resources Code gives statutory authority to the California Energy Commission. Under the Warren-Alquist Act, there will be state policies for responsibility for energy resources, reduction in uses of energy, conservation of energy, and establishment of statewide goals for energy conservation. (Warren-Alquist Energy Resources Conservation and Development Act, Government Code Section 25000 *et seq.*).

CALIFORNIA ENERGY COMMISSION

On May 9, 2018, the California Energy Commission adopted new building standards requiring all new homes to have solar photovoltaic systems starting in 2020. The new standards aim to reduce energy uses in new homes by more than 50 percent. Other key areas the new standards address include updated thermal envelope standards (prevention of heat transfer), residential and nonresidential ventilation requirements, and nonresidential lighting requirements.

LOCAL REGULATIONS

The County General Plan Public Facilities Element contains numerous policies (PF-67 through PF-119), including policies related to energy facilities include the location of facilities to minimize visual intrusion, biological impacts, and land use incompatibilities for solar facilities as well as conventional electric facilities, policies for the identification of non-potable water availability, and the policies related to the location of transmission infrastructure.

PF-67. Cooperate with the serving utility in the location and design of production and distribution facilities so as to minimize visual intrusion problems in urban areas and areas of scenic and/or cultural value including the following:

- Recreation and historic areas.
 - Scenic highways.
 - Landscape corridors.
 - State or federal designated wild and scenic rivers.
 - Visually prominent locations such as ridges, designated scenic corridors, and open viewsheds.
 - Native American sacred sites
- PF-68. Cooperate with the serving utility in the location and design of energy production and distribution facilities in a manner that is compatible with surrounding land uses by employing the following methods when appropriate to the site:
- Visually screen facilities with topography and existing vegetation and install landscaping consistent with surrounding land use zone development standards where appropriate, except where it would adversely affect photovoltaic performance or interfere with power generating capability.
 - Provide site-compatible landscaping.
 - Minimize glare through siting, facility design, nonreflective coatings, etc.
 - Site facilities in a manner to equitably distribute their visual impacts in the immediate vicinity.
- PF-69. Cooperate with the serving utility to minimize the potential adverse impacts of energy production and distribution facilities to environmentally sensitive areas by, when possible, avoiding siting in the following areas:
- Wetlands
 - Permanent marshes
 - Riparian habitat
 - Vernal pools
 - Oak woodlands
 - Historic and/or archaeological sites and/or districts
- PF-70. Cooperate with the serving utility so that energy production and distribution facilities shall be designed and sited in a manner so as to protect the residents of Sacramento County from the effects of a hazardous materials incident.
- PF-76. The County supports the generation and use of energy produced from renewable resources.
- PF- 77. The County supports a variety of solar and other renewable energy sources, including:
- A dispersed system that feeds into the electric delivery system,

- On-site facilities that primarily supply energy for on-site uses, and
 - Properly sited large, centralized facilities consistent with Policy PF-78.
- PF-82. The County supports the placement of large multi-megawatt solar facilities on rooftops and over parking lots to minimize land use impacts associated with these systems.
- PF-83. New transmission corridors should be identified in all master plans created for new growth areas.
- PF-99. Minimize overhead wire congestion using techniques such as combining lines on poles or undergrounding.
- PF-101. Route new overhead subtransmission lines within existing transmission line corridors, along railroad tracks, or major roadways. In an effort to reduce the visual impact of new lines combine circuits on existing 69 kV power poles, wherever feasible.
- PF-102. The preferred route when installing overhead subtransmission lines through residential neighborhoods should be the landscape corridors located within arterial roadways. The County will include a map in all master plan documents that identifies the location of transmission, sub-transmission and substation facilities necessary to serve the new development.
- PF-104. Subtransmission lines within landscape corridors shall be situated street-side of the corridor's center line to minimize the visual impact to adjacent residences, but at a distance that will not affect traffic safety.
- PF-105. Landscaping shall be included in corridor design which meets the standards of the surrounding land use zone and is compatible with the overhead line design.
- PF-106. To help reduce visual intrusion landscape corridors with planned power lines along major streets in residential areas should be no less than 30 feet in width.
- PF-107. New sub-transmission lines should be routed along road rights-of-way in dedicated private or public utility easements. When necessary, sub-transmission lines can be routed along rear property lines in dedicated easements that provide adequate access for maintenance by the utility provider. Easements shall be granted as a condition of project approval. Lines near schools shall comply with California Codes and Regulations. Disclosure of future substations, transmission, and sub-transmission lines by developers is required before property sales are made.
- PF-108. To the maximum extent possible locate distribution substations serving residential areas in adjacent commercial properties. When not feasible, these facilities should be designed in a manner to harmonize visually with the surrounding development, including the use of landscaped buffers.

PF-111. It is the policy of Sacramento County not to locate public schools or grant entitlements for private schools within, or directly adjacent to power line corridors as specified below:

Power Line Capacity	Setback from the Corridor (measured from edge of easement)
○ 100 – 133kV	100 feet
○ 220 – 230 kV	150 feet
○ 500 – 550 kV	350 feet

The construction of transmission lines proximate to an existing and/or planned public or private school site and subject to the County Siting Process (100 kV or greater) should also comply with the distance criteria listed above unless compliance with these setbacks would result in a greater EMF impact on other adjacent uses.

PF-113. Route new high pressure gas mains within railway and electric transmission corridors, along collector roads, and wherever possible, within existing easements. If not feasible these gas mains shall be placed as close to the easement as possible.

PF-116. Community Plan land use designations and policies should be consistent with the policies of this Energy Facilities Siting section of the Public Facilities Element.

PF-117. All Community Plans shall include an Energy Facility Siting Element which indicates the location of existing and planned energy facilities. Community Plan Siting Elements and SMUD's Electric Study Plans for the corresponding area shall be consistent.

PF-118. All tentative subdivision maps should identify the location of all utility easements sufficient to accommodate existing and future needs as determined by SMUD and PG&E.

There are also multiple General Plan policies which are relevant to the efficient use of energy:

EN-16. Promote the use of passive and active solar systems in new and existing residential, commercial, and institutional buildings as well as the installation of solar swimming pool heaters and solar water and space heating systems.

LU-28. Encourage the development of energy-efficient buildings and communities.

LU-29. Promote voluntary participation in incentive programs to increase the use of solar photovoltaic systems in new and existing residential, commercial, institutional, and public buildings.

LU-30. Whenever feasible, incorporate energy-efficient site design, such as proper orientation to benefit from passive solar heating and cooling, into master planning efforts.

LU-70. Enact cost effective energy conservation performance standards consistent with USEPA Energy Star standards for new construction.

LU-71. Reduce the energy impacts from new residential and commercial projects through investigation and implementation of energy efficiency measures during all phases of design and development.

SIGNIFICANCE CRITERIA

Impacts are significant if the Project would:

1. Require the construction of new or the expansion of existing utility facilities that could potentially cause significant construction-related environmental effects.
2. Result in a project water demand from proposed land uses that cannot be met by water purveyors' existing or future projected normal, single dry, and multiple dry year supplies.
3. Result in a service demand that cannot be met by existing or reasonably foreseeable future service capacity.
4. Contribute to groundwater pumping to serve project growth such that the average annual sustainable yield of 273,000 acre-feet for the Sacramento Central Groundwater Basin is exceeded.
5. Interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.
6. Result in inefficient, wasteful, and unnecessary consumption of energy.

IMPACTS AND ANALYSIS

IMPACT: CONSTRUCTION OF INFRASTRUCTURE COULD RESULT IN ADVERSE PHYSICAL EFFECTS

In order to deliver utility service to the Project site, regional and on-site infrastructure improvements will be required. Most of this construction has either already been contemplated as part of other infrastructure projects, or is within the boundaries of the Project site, and thus will not cause any new, previously unstudied impacts. There are a few facilities, however, which may involve construction in off-site locations that were not previously considered, or which involve construction of "interim" facilities within the alignments of previously studied projects. The sections below describe the infrastructure improvements, and describe the probable impacts. Note that as it relates to significance criteria one, an impact is only considered attributable to project-related infrastructure if infrastructure construction is the primary cause of the impact. As an example, utility lines constructed on-site that will be within Project roadway alignments do not cause utility-specific impacts; the impacts are due to the Project as a whole.

POTABLE WATER SUPPLY

The Project is located within the service boundary of SCWA Zone 40, but is not currently supplied potable water. All water supporting the site is served by private wells. In order to determine the needed infrastructure to supply the site with potable water, SCWA has prepared a *Zone 40 Water Supply Master Plan Amendment for NewBridge, February 2016*, and has updated the *Zone 40 Water System Infrastructure Plan, September 2016*. On-site infrastructure has been designed and sized based on the land use types and estimated population and connections. The Project proposes a mix of uses which include low to high-density single-family residential units, multi-family residential units, retail, mixed-use, schools, parks, and open spaces. The SCWA preferred methodology for determining water demand is to apply a water demand factor to each proposed land use category. The unit water demand factors as defined in the *Zone 40 Water Supply Master Plan Amendment for NewBridge Table 3-5, February 2016*, were applied to the Project land uses in order to estimate the water demands for the Project. A Water Supply Assessment (*Water Supply Assessment for NewBridge Specific Plan, August 2016; Appendix PU-2*) was prepared by Sacramento County Water Agency for the Project to determine the water demands of the Project and to determine the off-site infrastructure necessary for Project development.

REGIONAL INFRASTRUCTURE

Project water demands will ultimately be met by a combination of groundwater and surface water delivered by SCWA through their water system. SCWA has existing and planned facilities that will support the delivery of water to the Project site. There are two major projects relevant to the discussion which have already been contemplated: the Vineyard Surface Water Treatment Plant and the North Service Area Pipeline.

VINEYARD SURFACE WATER TREATMENT PLAN

The Vineyard Surface Water Treatment Plant and associated water supply facilities are in operation. The Vineyard Surface Water Treatment Plant provides potable water to existing and approved future development within the SCWA Zone 40 service area. The Vineyard Surface Water Treatment Plant currently has a capacity to treat 50 mgd with an ultimate capacity of 100 mgd of raw surface water. The raw river water is diverted from the Sacramento River via the Freeport Regional Water Project facilities and conveyed to the Vineyard Surface Water Treatment Plant for treatment and delivery to the SCWA Zone 40 service area.

NORTH SERVICE AREA PIPELINE

SCWA, in cooperation with East Bay Municipal Utility District (EBMUD), has completed construction of the Freeport Regional Water Project (FRWP). SCWA's portion of the Project consists of 85 million gallons per day of diversion and conveyance capacity. Surface water from the FRWP facility will be treated at SCWA's Vineyard Surface Water Treatment Plant, located at the northeast corner of the intersection of Florin Road and Knox Road, prior to delivery to SCWA's customers.

The NSA Pipeline Project includes construction of a transmission main and booster tank station that will serve the Mather Specific Plan area and SCWA's North Service Area

(NSA). The pipeline will begin at the Vineyard Surface Water Treatment Plant and convey water to the North Service Area Plate PU-2). SCWA completed and approved an Initial Study/Mitigated Negative Declaration (*NSA Pipeline Project*, Sacramento County Control Number 2007-70373) for construction of this pipeline in September 2010. In 2014, a supplemental Initial Study/Mitigated Negative Declaration was prepared and adopted for an interim pipeline project constructing a 66-inch pipe to the Excelsior Well Field and converting the raw water pipe line to treated water to the existing Anatolia Water Treatment Plant. The interim pipeline (**Phase A**) was constructed in 2016. The timing of construction of the remaining portion of NSA pipeline (Phase B) cannot be precisely predicted at this time, as it is dependent on growth demand in the NSA.

SCWA has developed a water system infrastructure plan, which is a staff-level document that describes the projected water supply infrastructure needs to meet the built-out water demands in Zone 40, including the Project demands (SCWA 2016c). As described above, SCWA is currently implementing a series of capital improvement projects that would meet the demands projected for the entire NSA and serve the Project (Plate PU-2). With the Phase A NSA Project, surface water can be delivered to the NSA from the Vineyard SWTP up to 11,000 gallons per minute (gpm) (or 15.8 mgd), which is enough to supply surface water to the NSA for several years. Once the demand for surface water in the NSA exceeds the capacity of the 30-inch Excelsior pipeline, a new pipeline would be constructed. This new pipeline would be part of the Phase B NSA Project, which would also include the NSA terminal storage and pumping facility. The Phase B NSA Pipeline (54-inch in diameter) starts from Florin Road at Excelsior Road, extending east on Florin Road and then turning north in Eagles Nest Road, Kiefer Boulevard, and the west bank of Folsom South Canal, and ultimately ending at the NSA terminal tanks (10 MG) located in the Mather South Plan Area (SCWA 2016c).

The Newbridge project will need to connect to the NSA system once the NSA terminal tank is operational and ready to serve water, as shown in the WSIP. In other words, (1) the 30-inch and 36-inch line will need to be installed, connected to the terminal tank, and ready to serve water to the Newbridge development when SCWA is complete with their portion of the project, NSA phase B, or (2) the 30-inch and 36-inch pipeline shall be constructed before roadways are installed along the pipeline alignment, whichever occurs first.

CONCLUSION

The Project will utilize the existing 16-inch water line on the east side of Sunrise and Kiefer Boulevards. **This infrastructure would be required for the project and is located off-site.** As described above, none of the regional infrastructure options would result in new, significant adverse impacts, because all of the infrastructure would be located in areas where pipelines and facilities already exist or have already been approved (and thus any impacts are not attributable to the Project); impacts are *less than significant*.

ON-SITE INFRASTRUCTURE

On-site infrastructure consists of a combination of a variety of pipe sizes traversing the Project site as shown in (Plate PU-3). In the ultimate condition, three of the four boundaries of the Project will have water available. The on-site system will consist of a series of looped 10-inch diameter distribution mains connecting to one of the transmission mains on Kiefer Boulevard, Eagles Nest Road, or Jackson Road.

On-site construction activities will take place within the Project boundaries in areas designated for developed uses, consistent with the provisions of the NSP. The relevant topical chapters of this EIR disclose the physical impacts of full development of the proposed Project and provide mitigation as appropriate. Construction of on-site lines will not result in any utility-specific adverse impacts; impacts are *less than significant*.

MITIGATION MEASURES:

Mitigation for physical impacts has already been included in the various topical chapters. Relevant measures include AQ-1, BR-1, BR-3, BR-4, BR-5, BR-7, BR-8, and CR-1.

Plate PU-2: SCWA Water Facility Plan

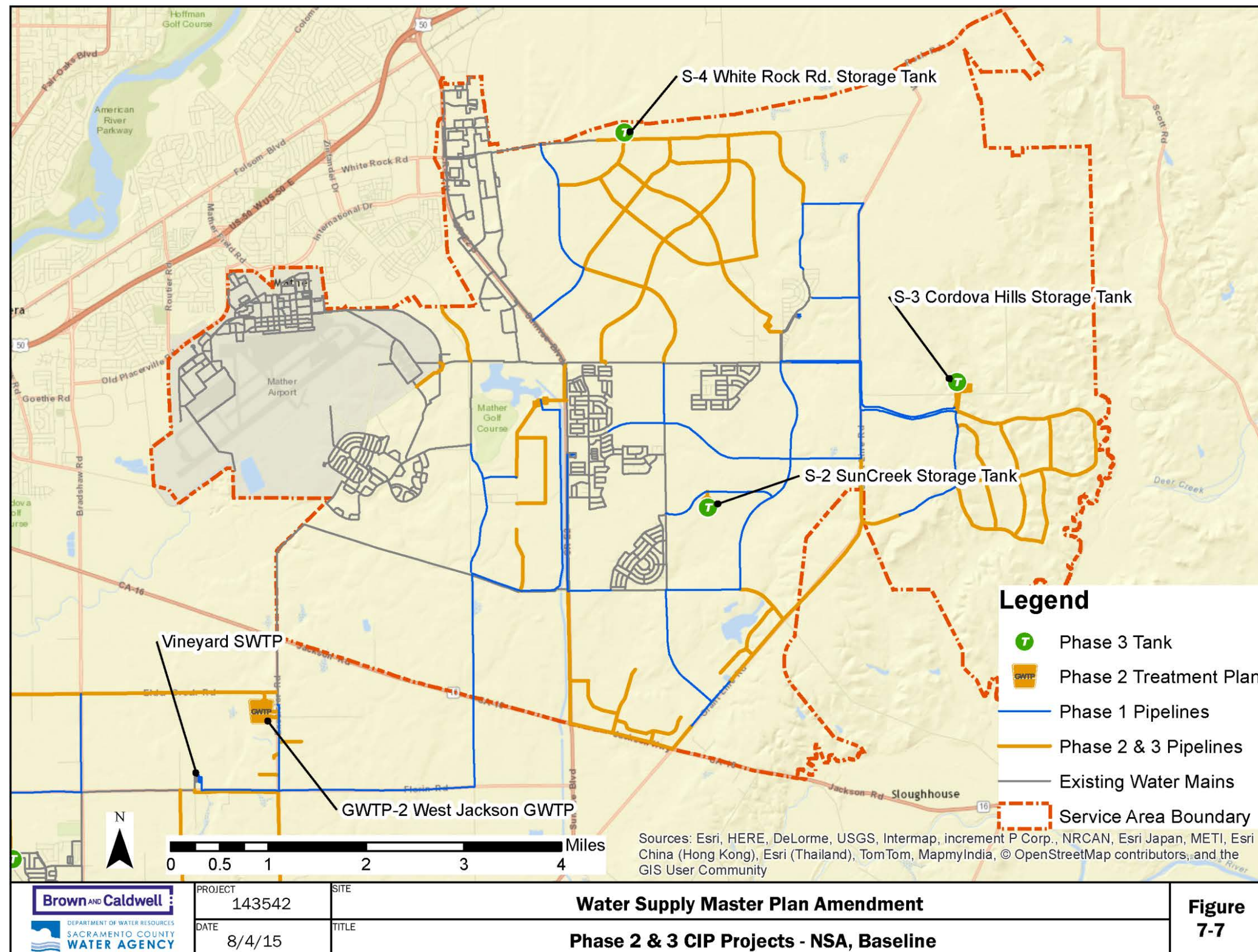
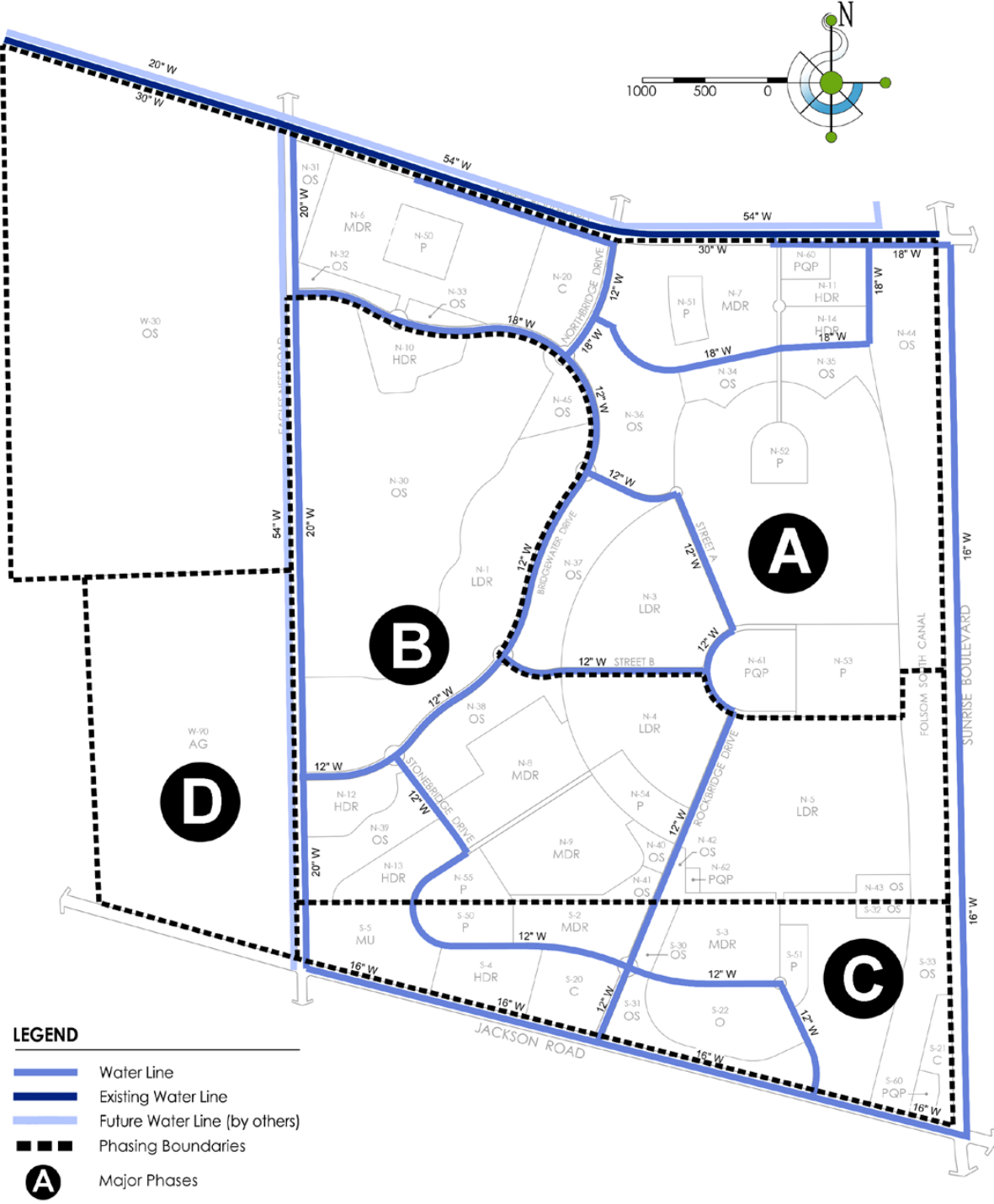


Plate PU-3: NewBridge Water Distribution Plan



SEWER SYSTEM

A Sewer Study was prepared for the Project (*Level 1 Sanitary Sewer Study for NewBridge Specific Plan*, August, 2013, MacKay and Soms Civil Engineers, Inc, Appendix PU-3) in order to satisfy the Sacramento County Sewer District's (SASD) Level One Minimum Sewer Study Requirements and determine if sufficient sewer service is available for the Project. The Project proposes construction of 3,075 residential units and 500,000 square feet of commercial and office uses. It is important to note that the study was prepared prior to the final land use diagram. Since the change to the land plan was minor and there was no change to the number of dwelling units or commercial and office uses, SASD is not requiring an update to the study.

Sewer service to NewBridge will be phased as follows (Plate PU-4):

Phase A: In the event that the BR Mather East Trunk has not been constructed by others, the NSP would be required to construct it from North Mather to Kiefer Boulevards. On-site improvements include construction of a sewer force main on Eagles Nest Road between Kiefer Boulevard and Bridgewater Drive and on Bridgewater Drive from Eagles Nest Road to the south limit of Phase A development. Eight and ten inch sewer collection pipes would be constructed within the streets. A 3.23 million gallons per day pump station located within Phase B would be constructed as part of Phase A.

Phase B: On-site improvements include the construction of a sewer force main from Bridgewater Drive south to the pump station and construction of 8-inch and 10-inch sewer collection pipes within streets.

Phase C: On-site improvements include the construction of 8-inch and 10-inch sewer collection pipes within streets.

REGIONAL INFRASTRUCTURE

The Project is located within the Laguna Creek trunk shed. Currently, there is no sewer infrastructure serving the Project area. The closest regional infrastructure is the Bradshaw Interceptor. According to the SRCSD Interceptor Sequencing Study (Feb. 2013), the Laguna Creek Interceptor can be eliminated and new interceptor projects were identified along Florin and Elder Creek Roads to serve this region. However, based on current trends, those interceptors are not planned until 2035 or later. The applicant has requested an interim shed shift from the Laguna Creek Eagles Nest trunk shed to the Mather Kiefer trunk shed. The interim shed shift requires a pump station and force main facilities to transport wastewater north. The request was approved by the sewer districts. The Project would add sewer flows to the Mather East Trunk which may require the upsizing of the pipes to handle the flows.

As stated in the description of service for Phase A, it is unknown at this time if the Mather East Trunk line will be constructed before the NewBridge development. The approved Mather Field Specific Plan/Special Planning Area project (PLNP2013-00044)

EIR included a project-specific analysis of the Mather East Trunk line along Zinfandel Drive from North Mather Boulevard to 2,100 feet south of Woodring Drive. The proposed Mather South Community Master Plan project (PLNP2013-00065) will extend the line down to Kiefer Boulevard. If the sewer line is not constructed by the time the Project is ready for development, the Project will have to construct the Mather East Trunk line. Physical impacts associated with the construction of the Mather East Trunk line have been identified in the Mather Field Specific Plan/Special Planning Area FEIR. All of the regional off-site infrastructure shown is already contemplated in SASD or SRCSD master planning documents.

If the regional infrastructure is not in place by the time the Project begins construction, the Project will have to construct the necessary regional sewer infrastructure to serve the Project. Mitigation adopted for the Mather Field Specific Plan/Special Planning Area will be applied and is included as recommended mitigation for this Project. Construction of regional infrastructure will not result in utility-specific adverse physical impacts; impacts are *less than significant*.

LOCAL ON-SITE INFRASTRUCTURE

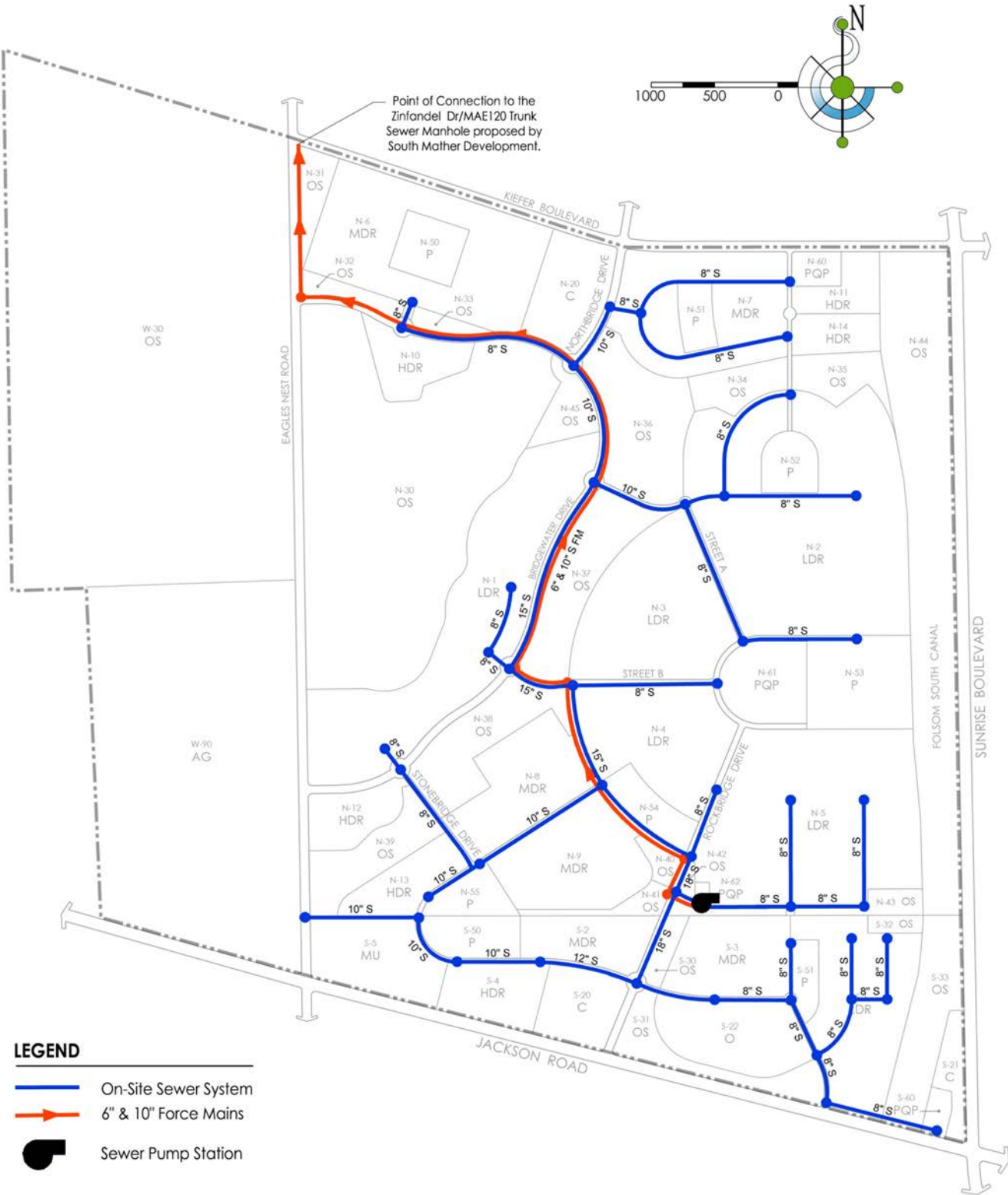
The Project will include the construction of an interim pump station, interim 10-inch sewer force main, as well as lines throughout the site. All of these facilities will be located within the Project boundary within areas already proposed for development of roads and urban uses. However, crossing Frye Creek will require compliance with the SSHCP avoidance and minimization measures or individual permit requirements. Construction of on-site local infrastructure will not result in utility-specific adverse physical impacts; impacts are *less than significant*.

MITIGATION MEASURES:

Mitigation for physical impacts has already been included in the various topical chapters. Relevant measures include AQ-1, BR-1, BR-3, BR-4, BR-7, BR-8, BR-10, BR-11, BR-14 and CR-1.

PU-1: This mitigation measure only applies if Mather East Trunk HAS NOT been built by others. Comply fully with adopted mitigation measures for Mather Field Specific Plan/Special Planning Area (Control Number PLNP2013-00044): AQ-3, BR-1, BR-3, BR-4, BR-5, BR-6, BR-7, BR-10, BR-11, BR-12, BR-13, BR-14, BR-15, BR-16, BR-18, BR-22, CR-1, HM-1, HM-2, PS-1, and PS-2.

Plate PU-4: Sewer Infrastructure Plan



ENERGY SERVICES AND DRY UTILITIES

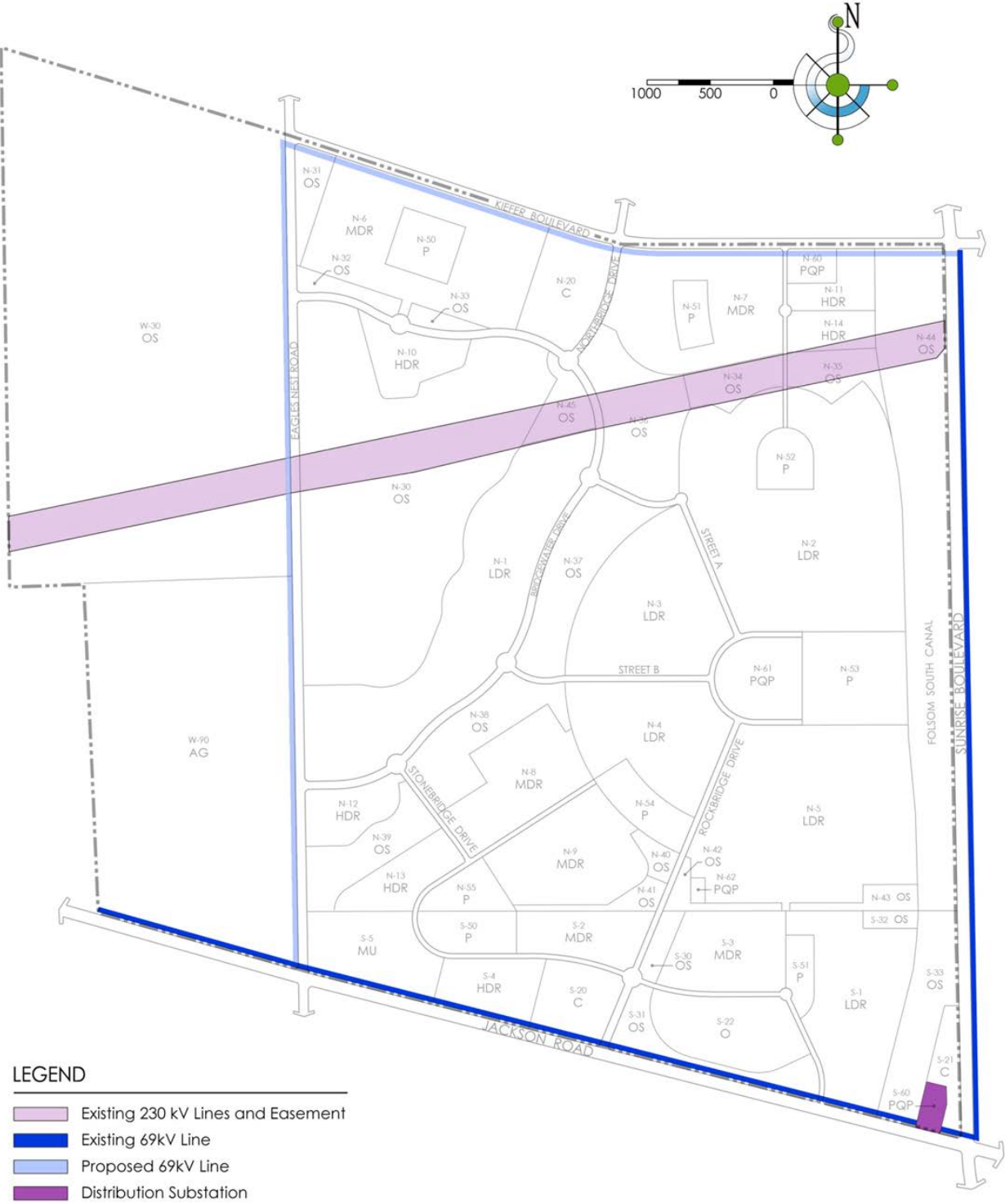
Sacramento Municipal Utility District (SMUD) and Pacific Gas & Electric Company (PG&E) will serve the electricity and natural gas needs of the Project. The natural gas and electric lines to the site may be within joint trenches along major roads. The joint trenches will be placed in franchise or public utility easements (PUEs) adjacent to the road right-of-ways. All the new distribution facilities will be underground, with the exception of transformers, switches, telephone cabinets, and other pedestals and pad-mounted equipment. This analysis focuses on electrical and natural gas infrastructure, as the other dry utilities are usually parallel to these facilities (either strung along the electrical poles or in a joint trench with gas lines).

SACRAMENTO MUNICIPAL UTILITY DISTRICT

The locations of existing and proposed dry utilities are shown on Plate PU-5. There are existing **overhead electrical** sub-transmission lines (69kV) ~~overhead electrical distribution lines~~ along Jackson Road and Sunrise Boulevard; only those lines along Jackson Highway are located within the Project area. There is a SMUD distribution substation at the northwest corner of Jackson Road and Sunrise Boulevard. **The existing SMUD distribution substation will need to be expanded or replaced by a new distribution substation located west of the Folsom South Canal, depending on construction constraints at the time of development. If a new distribution substation is constructed, the existing distribution substation will be removed after the new location is in service.** There are also four 230kV overhead lines that traverse through the northern portion of the Project area. Two of the lines are owned by SMUD and two lines are owned by PG&E. In order to serve the electricity needs of the Project, SMUD will need to install new 69kV sub-transmission lines along Eagles Nest Road and Kiefer Boulevard.

The new **69kV** sub-transmission lines along Eagles Nest and Kiefer Boulevard will be aboveground lines. The placement of the poles that are located adjacent to the West Zinfandel Preserve (parcel W-30) will be coordinated with regulatory agencies to avoid sensitive habitat. The new line along Kiefer Boulevard will be incorporated into the landscape easement. A detailed analysis cannot be provided at this time, as construction-level designs have not been developed at this time. SMUD would act as lead agency on the utility upgrades, and would prepare an environmental analysis consistent with CEQA. Electrical distribution **lines (12kV)** within the NSP will be placed underground in conjunction with roadway development and project phasing **if the proposed new distribution substation is situated next to or close to existing or new 69kV sub-transmission lines.** All of the on-site electrical line construction would be within areas already assumed to be impacted by the overall Project; however, if electrical lines need to cross Frye Creek, construction methods would have to comply with SSHCP avoidance and minimization measures or individual permits from regulatory agencies.

Plate PU-5: Existing and Proposed Dry Utilities



PACIFIC GAS AND ELECTRIC COMPANY

Pacific Gas & Electric Company (PG&E) will supply natural gas service to the Project in accordance with the rules and tariffs on file with the California Public Utilities Commission (CPUC). PG&E has existing natural gas facilities adjacent to the site in Sunrise Boulevard.

Service will be extended to the Project area from the existing gas main on Sunrise Boulevard. Distribution mains will distribute natural gas throughout the Project area via the major internal roads. Distribution lines and services will extend off the mains and will be sized based on anticipated gas loads to the various parcels.

Impacts related to natural gas service are not expected to be significant, as trenched utility lines would be placed either within the existing paved margins of the roadway or in the area assumed to be impacted by the overall Project. If natural gas lines need to cross Frye Creek construction methods would have to comply with SSHCP avoidance and minimization measures or individual permits from regulatory agencies. With application of recommended mitigation measures AQ-1, BR-1, BR-3, BR-4, BR-7, BR-8, BR-10, BR-11, BR-14 and CR-1; natural gas construction impacts are *less than significant*.

MITIGATION MEASURES:

Mitigation for on-site physical impacts has already been included in the various topical chapters. Relevant measures include AQ-1, BR-1, BR-3, BR-4, BR-7, BR-8, BR-10, BR-11, BR-14 and CR-1.

Off-site impacts would be analyzed and appropriate mitigation would need to be provided by the lead agency (SMUD or PG&E) when the specific utility project is proposed. Sacramento County cannot impose mitigation requirements on SMUD or PG&E.

IMPACT: RESULT IN A PROJECT WATER DEMAND THAT CANNOT BE MET BY SUPPLY

The Project lies within the boundaries of SCWA's Zone 40 service area, but outside of the 2030 Study Area of the Water Supply Master Plan. The water demands associated with implementation of the Project were included in the *Zone 40 Water Supply Master Plan Amendment for NewBridge* (WSMP Amendment, Appendix PU-1). An amendment is necessary because the water demand associated with the Project was not included and addressed in the 2005 WSMP or the WSMP Amendment for Cordova Hills in 2011. The WSMP Amendment was prepared in order to add the water demand associated with the Project to the broader Zone 40 service area and to update information in the 2005 WSMP due to changes in water demands, growth rate and water supplies. The adjusted Zone 40 demands for normal, single-dry, and multiple-dry years in 5-year increments over a 20-year projection (2020-2040) are very close to the demands identified in the WSA and range from 45,500 acre feet per year in 2020, to 80,900 acre feet per year in 2040.

A Water Supply Assessment was prepared for the Project to determine availability of water for the Project. The Water Supply Assessment was prepared utilizing the Urban Water Management Plan. It is important to note that the 2015 Urban Water Management Plan includes the most recent multiple year drought conditions (2013 – 2015). Surface water allocations during this time were the lowest recorded (100%, 75%, and 25% respectively) and mandated water reductions were in place. While there was a significant reduction in water demand during this event, the analysis utilizes normal/wet year water demands for all dry year scenarios to provide the most conservative results.

The projected annual water demand for the entire Project is 1,380.7 acre feet per year (AFY), including system losses. The Project's projected water demand by land use is detailed in Table PU-3. The Project's water demand projection over the next 20 years in five-year increments is shown in Table PU-4.

At build out, the Project is expected to add 1,380.7 AFY to the overall Zone 40 water demand. This demand has been accounted for in the WSMP Amendment for NewBridge, the Water Supply Assessment and the 2015 Urban Water Management Plan. Table PU-5 shows the projected supply and demand for Zone 40. The Project will add to the overall demand for water within the Zone 40 service area, but not beyond the service area's projected supplies which were analyzed as part of the original Zone 40 Water Supply Master Plan. The Project will not contribute any previously-unanalyzed or undisclosed impacts to river flows, which is the issue at the heart of General Plan Policy CO-23. Zone 40 has sufficient supply to provide water service to the Project; therefore, impacts are *less than significant*.

MITIGATION MEASURES:

None required.

Table PU-3: Proposed NewBridge Land Use and Projected Water Demands

Land Use Category ¹	Corresponding Land Use Classification in WSMP	Proposed Water Demands		
		Area (Acres)	Unit Water Demands ² (AFY/acre)	Annual Water Demands (AFY)
Low Density Residential (LDR)	Single Family	224.2	2.13	477.5
Medium Density Residential (MDR)	Multi-Family Low Density	106.5	2.44	259.9
High Density Residential	Multi-Family High Density	37.3	3.33	124.2
Commercial	Commercial	20.3	2.02	27.9
Commercial Mixed Use	Mixed Land Use	11.4	2.15	24.5
Office	Commercial	13.8	2.02	27.9
Park	Public Recreation	41.3	2.80	115.6
Community Garden	Public Recreation	0.0	2.80	0.0
Open Space (Canal)	Non-irrigated	58.9	0.00	0.0
Open Space (Multi-Use Area)	Public Recreation ³	39.3	1.73	68.0
Open Space (Landscape Parkway)	Public Recreation	38.7	2.80	108.4
Open Space (Preserve)	Vacant	336.5	0.00	0.0
Elementary School	Public Recreation	9.4	2.80	26.3
Sewer Lift Station	Public	0.5	0.81	0.4
Electric Facility Site	Utility ³	1.4	0.00	0.0
Fire Station	Public	2.5	0.81	2.0
Major Roads	Right-of-Way	47.9	0.18	8.6
Agriculture (AG)		105.4	0.00	0.0
Sub-Total				1,284.4
+System Loss @ 7.5%		n/a		96.3
TOTAL		1,095.3		1,380.7
	<p>Note(s):</p> <p>¹ The land use classification and acreage information are provided by the Project proponent in March 2017. This differs slightly from the WSA and WSMP Prepared in 2016. As determined by SCWA, the change in land use acreages results in lower demands and is within 2% of the WSA demand calculated, and therefore, do not significantly change the results.</p> <p>² The unit water demands provided in this table are consistent with the <i>Zone 40 WSMP Amendment for NewBridge (SCWA, 2016)</i>.</p> <p>³ Exceptions to the Unit Water Demand Factor as requested by the applicant.</p>			

**Table PU-4: NewBridge Water Demand Growth Projection
in Five-Year Increments**

Year	2020	2025	2030	2035	2040
Water Demand (AF/Year)	700	1,380.7	1,380.7	1,380.7	1,380.7

Source: NewBridge Specific Plan Water Supply Assessment, 2016 and March 2017 calculations

Table PU-5: SCWA Zone 40 Water Supply and Demands in Five-Year Increments

Year		Zone 40 Water Demand (AF/Year)				
		2020	2025	2030	2035	2040
Normal Year	Supply	82,900	82,900	87,900	97,900	97,900
	Demand	48,121	55,490	63,288	71,143	79,278
	Difference	35,34,779	27,4140	24,612	26,7557	18,622
Single Dry Year	Supply	70,200	70,500	74,600	83,600	83,800
	Demand	48,121	55,490	63,288	71,143	79,278
	Difference	22,079	15,0140	11,312	12,4557	4,522
Multiple Dry Year (1)	Supply	82,900	82,900	87,900	97,900	97,900
	Demand	48,121	55,490	63,288	71,143	79,278
	Difference	35,34,779	27,4140	24,612	26,7557	18,622
Multiple Dry Year (2)	Supply	77,900	77,900	81,900	90,900	90,900
	Demand	48,121	55,490	63,288	71,143	79,278
	Difference	29,779	22,410	18,612	19,757	11,622
Multiple Dry Year (3)	Supply	70,200	70,500	74,600	83,600	83,800
	Demand	48,121	55,490	63,288	71,143	79,278
	Difference	22,079	15,0140	11,312	12,4557	4,522

Source: NewBridge Specific Plan Water Supply Assessment, 2016 and 2015 Urban Water Management Plan

IMPACT: RESULT IN A PROJECT SEWER DISPOSAL DEMAND THAT CANNOT BE MET BY DISPOSAL OR CONVEYANCE CAPACITY

Flow estimates and ultimate buildout wastewater demands for conveyance facilities are calculated using ESDs, with one ESD representing the effluent generated by one single family residence. The ESD projections are based on gross acreage and used to determine the location and capacity of future wastewater conveyance facilities and trunk sheds. The Sewer Study prepared for the Project (*Level 1 Sanitary Sewer Study for NewBridge Specific Plan*, August, 2013, MacKay and Soms Civil Engineers, Inc and an updated NewBridge Sewer Demand Table, March 2017) indicates that buildout of the Project will result in 649.8 sewered acres resulting in 4,384 ESDs and an average dry weather flow (ADWF) of 1.35 mgd. The peak wet weather flow for Project buildout

is 1.67 mgd based on 4,384 ESDs. This buildout scenario included assigning dwelling units to the south West Planning Area to ensure that sufficient capacity and pipe sizes are identified if this area ever develops.

The SRWTP has a permitted ADWF design capacity of 181 mgd and wet weather flow (AWWF) of 392 mgd. The plant receives and treats approximately 141 mgd ADWF (Seyfried, 2008). The Project disposal demand can be met by this existing capacity. SASD and SRCSD have indicated that adequate capacity is available to serve the Project. SASD and SRCSD did not identify any facility constraints to service. Connection to the system is dependent on available capacity at the time of connection and is on a first come first served basis.

The Project will follow the SASD/SRCSD regional strategic plan to utilize, on a permanent basis, available capacity in nearby trunk and interceptor sewers. Pipes are sized to accommodate dry weather base wastewater flow, rain-dependent inflow/infiltration, and gravity flow requirements. The SRCSD and SASD design criteria for pipe size is intended to guide design specifications for future construction. The size of the SRCSD interceptors is based on full buildout of the USB and is not related to any specific land use or designation. The actual size of the trunk lines is determined by the specific proposed land use.

Sacramento County Code regulates public sewage systems within the County. The Code includes requirements related to connection, design, and operation in order to ensure public safety and to lessen environmental impacts. Wastewater service for proposed development is subject to regulatory review and compliance with applicable wastewater Master Plans. The proposed extension of service is consistent with the SRCSD and SASD Master Plans, thus conveyance facilities will be adequately sized for Project development. The Project will not exceed existing or planned disposal and conveyance capacity; impacts are *less than significant*.

MITIGATION MEASURES:

None required.

IMPACT: RESULT IN AN ENERGY DEMAND THAT CANNOT BE MET BY ENERGY SERVICE PROVIDERS

Appendix F of the State CEQA Guidelines requires the consideration of the energy implications of a project. CEQA requires mitigation measures to reduce “wasteful, inefficient and unnecessary” energy usage (Public Resources Code Section 21100, subdivision (b)(3)). Neither the law nor the State CEQA Guidelines establish criteria that define wasteful, inefficient, or unnecessary use. Compliance with California Code of Regulations Title 24 Energy Efficiency Standards would result in the design and development of new buildings which would increase energy-efficiency compared to buildings built previously under past Title 24 Energy Efficiency Standards. However, these increases in energy efficiency and general compliance with the building code do not address all

energy demand during construction and operation of a project. For instance, energy use associated with new commute trips, the transportation of goods to commercial land uses, or fuel use during Project construction are not under the purview of the State’s building code. The additional anticipated energy use by use type is discussed below.

CONSTRUCTION ENERGY USE

The construction of buildings, facilities, and infrastructure would result in fuel use associated with off-road construction equipment, transport of construction-related goods, and construction workers commuting to and from the Project site. Table PU-6 summarizes energy consumption from construction. Project construction would take place over an 11-year period, with the final construction phase ending in 2031. An estimated 2,756,340 gallons of gasoline and 239,103 gallons of diesel fuel would be needed. Over the Project’s buildout period, the average annual fuel use for construction would be 250,576 gallons of gasoline and 21,737 gallons of diesel. Energy use resulting from construction worker commute trips and construction equipment activity would be typical of that associated with construction of the new land uses included in the Project.

Table PU-6: Construction Energy Use

<u>Construction Phase</u>	<u>Diesel Off-road Equipment (gallons)</u>	<u>Gasoline On-road (gallons)</u>	<u>Diesel On-road (gallons)</u>	<u>Diesel Total (gallons)</u>
<u>A</u>	<u>63,168</u>	<u>688,719</u>	<u>805</u>	<u>63,973</u>
<u>B</u>	<u>73,140</u>	<u>826,981</u>	<u>805</u>	<u>73,945</u>
<u>C</u>	<u>100,379</u>	<u>1,240,640</u>	<u>805</u>	<u>101,185</u>
<u>TOTAL</u>	<u>236,688</u>	<u>2,756,340</u>	<u>2,416</u>	<u>239,103</u>
<u>Source: Calculations by Ascent Environmental in 2020</u>				

OPERATIONAL BUILDING ENERGY AND STATIONARY SOURCES

During operation, energy demand would be associated with natural gas and electricity for use in appliances (e.g., water heating, building heating and cooling, clothes washers, dishwashers), illumination of buildings and streets, and use in stationary equipment (e.g., generators, landscaping equipment). Transportation-related energy consumption would include the use of fuels and electricity to power cars and trucks. This analysis estimates the energy use associated with the Project as proposed before any mitigation measures would be applied that would reduce the Project’s overall energy use.

All buildings to be developed as part of Project implementation would be required to comply with the Title 24 Building Energy Efficiency Standards. As the Project is developed through 2030, the Title 24 Building Energy Efficiency Standards are

anticipated to be updated with increasingly stringent energy efficiency requirements. This would result in increased building energy efficiency over time, as buildings continue to be developed as part of the Project. Although buildings to be developed as part of Project would be subject Title 24 Building Energy Efficiency Standards, Project implementation would still result in an increase in overall energy use. Table PU-7 summarizes the levels of energy consumption associated with the operation of the Project. For all Project land uses anticipated to result in energy consumption, an estimated 33,560 megawatt-hours per year of electricity and 64,330 million British thermal units per year of natural gas would be consumed. Operational energy use is anticipated to be typical of the residential, commercial, educational, and light industrial land uses included in the Project.

Table PU-7: Operational Energy Use

<u>New Land Uses</u>	<u>Energy Use</u>	<u>Units</u>
<u>Residential</u>		
<u>Electricity</u>	<u>21,305</u>	<u>MWh/year</u>
<u>Natural Gas</u>	<u>52,025</u>	<u>MMBtu/year</u>
<u>Commercial & Office</u>		
<u>Electricity</u>	<u>5,865</u>	<u>MWh/year</u>
<u>Natural Gas</u>	<u>3,266</u>	<u>MMBtu/year</u>
<u>Public/Quasi-Public</u>		
<u>Electricity</u>	<u>6,389</u>	<u>MWh/year</u>
<u>Natural Gas</u>	<u>9,039</u>	<u>MMBtu/year</u>
<u>Total</u>		
<u>Electricity</u>	<u>33,560</u>	<u>MWh/year</u>
<u>Natural Gas</u>	<u>64,330</u>	<u>MMBtu/year</u>
<u>Notes: MWh/year = megawatt-hours per year; MMBtu/year = million British thermal units per year.</u>		
<u>Source: Calculations by Ascent Environmental in 2019</u>		

Section 7.3, Energy Conservation, in the NewBridge Specific Plan includes various policies regarding building energy conservation which would serve to reduce energy use. The first policy encourages the incorporation of photovoltaic solar energy systems for multi-family, commercial/ industrial, and institutional uses in the Project area. The second policy requires that buildings are designed to accommodate electric vehicles, photovoltaic systems and battery storage. The third policy encourages the use of Energy Star rated appliances. These policies would help to reduce overall building energy demand and reduce the Project's overall energy use. In addition, Mitigation Measures AQ-4 and CC-1 prohibit the

use of natural gas, which would reduce the usage totals in Table PU-7. Although the electricity usage would increase due to elimination of natural gas, Title 24 requirements for rooftop photovoltaic systems would offset some or all of the increased electricity usage.

OPERATIONAL TRANSPORTATION ENERGY USE

Project implementation would involve the development of new land uses over the buildout period of the Project with project construction ending in 2030.

Development of these new land uses would result in new vehicle trips, discussed in detail in Chapter 16, “Traffic and Circulation.” New vehicle trips associated with the Project would result in energy use in the form of gasoline, diesel, compressed natural gas (CNG), and electricity. As shown in Table PU-8, below, Project implementation is estimated to result in the annual consumption of 2,240,051 gallons of gasoline, 475,135 gallons of diesel, 38,360 diesel equivalent gallons of natural gas, and 8,614 megawatt hours per year of electricity for transportation.

The Air Quality Mitigation Plan (AQMP), which has been developed as part of mitigation for this Project, includes a series of mitigation measures that would result in increased energy efficiency for both transportation and building operations energy use as part of the Project. Transportation energy considerations include pedestrian amenities and neighborhood design features that promote walking. The NewBridge Specific Plan also includes policies that reduce energy use in buildings and facilities as part of the Project, as well as policies for reductions in transportation energy use.

Table PU-8: Annual Operational Transportation Energy Use

<u>Vehicle Type</u>	<u>Gasoline (gal/year)</u>	<u>Diesel (gal/year)</u>	<u>Natural Gas (DEG/year)</u>	<u>Electricity (MWh/year)</u>
<u>Passenger Vehicles</u>	<u>1,829,129</u>	<u>11,496</u>	<u>=</u>	<u>8,614</u>
<u>Trucks</u>	<u>372,276</u>	<u>448,891</u>	<u>10,474</u>	<u>=</u>
<u>Buses</u>	<u>38,646</u>	<u>14,749</u>	<u>27,886</u>	<u>=</u>
<u>Total</u>	<u>2,240,051</u>	<u>475,135</u>	<u>38,360</u>	<u>8,614</u>
<u>Notes: gal/year = gallons per year, DEG/year = diesel equivalent gallons per year, MWh/year = megawatt hours per year</u>				
<u>Source: Calculations by Ascent Environmental in 2019</u>				

Section 5 of the NewBridge Specific Plan includes a Circulation Plan (see Appendix PD-1), including various policies that discourages automobile use as the primary mode of transportation through community design features that promote walking, biking, and public transit use. Increased use of active transportation modes, including biking and walking, as well as increased public transit, would result in reductions in VMT and subsequent energy use.

Energy usage data for the Project, derived from the *NewBridge Specific Plan Greenhouse Gas Plan*, ~~March 2018~~ **July 2020**, indicates that the estimated annual residential and commercial electricity demand for the Project will be 28,000,000 kilowatt hours and that the estimated annual residential and commercial natural gas demand for the Project will be 691,000 therms. The California Energy Commission’s Energy Consumption Data Management System reports that 10,850.2 million kilowatt hours of energy and 286.9 million therms were consumed within Sacramento County in the year 2016.

Further, CEQA Guidelines Section 21100(b)(3)) indicates that an EIR should consider whether mitigation is needed due to “wasteful, inefficient, and unnecessary consumption of energy”. Title 24 of the California Building Code ensures that new construction meets specific energy calculations, demonstrating energy efficiency. In addition, the Development Standards for the NewBridge Specific Plan include specifications for solar-ready homes and the use of Energy Star rated electric appliances.

The estimated energy usage of the Project is substantially less than the annual energy production for either SMUD or PG&E. Project compliance with Title 24 along with measures taken to reduce GHG, will not result in the wasteful, inefficient, and unnecessary consumption of energy. Energy service providers have sufficient capacity to serve the Project; impacts are *less than significant*.

MITIGATION MEASURES:

None required.

IMPACT: EXCEED THE SUSTAINABLE YIELD OF THE SACRAMENTO CENTRAL GROUNDWATER BASIN

The ultimate water demands associated with the Project will be met by a combination of groundwater and surface water provided by SCWA. The conjunctive use program allows SCWA the ability to maximize the use of surface water in wet and average years and minimize the use of surface water in dry years. It is noted that the total supply capacity exceeds the maximum day demand for each phase, but that neither the groundwater nor surface water supply alone can meet this demand.

SCWA currently exercises, and will continue to exercise, its rights as a groundwater appropriator to extract groundwater from the Central Groundwater Basin underlying Zone 40 for delivery to its customers. A long-term average annual yield of 40,900 AFY of groundwater has been identified in both the Water Forum Agreement (WFA) and WSMP for SCWA in the Central Basin. Additionally, as a signatory to the WFA and a member of the Sacramento Central Groundwater Authority (Groundwater Authority), SCWA recognizes the Water Forum-defined long-term sustainable average annual yield of the underlying groundwater basin of 273,000 AFY.

The additional groundwater draw caused from implementation of the proposed Project will not result in exceedance of the agreed-upon sustainable yield of 273,000 AFY. Impacts are *less than significant*.

MITIGATION MEASURE

None required.

IMPACT: ADVERSELY AFFECT GROUNDWATER RECHARGE

The majority of the County is considered a poor area for groundwater recharge due to clay or hardpan soils, which hinders infiltration. Areas of high groundwater recharge are typically found along stream channels, with the larger rivers (the American River, Sacramento River, and the Cosumnes River) containing the broadest recharge areas. There are some areas not associated with stream systems that also have good groundwater recharge capability, such as in some areas just south of the American River, where mining has been conducted. Areas of groundwater recharge capability have been mapped within Sacramento County, and given a rating of either high, medium, or low based on the presence of porous soils that allow surface water to infiltrate to recharge the groundwater body. Development introduces impervious surfaces that prevent or hinder groundwater recharge. In areas of hardpan soils where infiltration is already very low, development has negligible effect on recharge. In areas of porous soils with good groundwater recharge potential, the placement of impervious surfaces can have measureable negative effects on that recharge ability.

The ability to replenish our groundwater supplies is very important to the availability of water, especially during dry years. Since the majority of the County has poor groundwater recharge capability due to clay or hardpan soils, it is imperative that the areas of high, medium, or even low groundwater recharge capabilities be maintained. Figure 5 of the Background Section of Conservation Element of the General Plan indicates that there are no areas of groundwater recharge on the project site. The Project will not interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level; impacts are *less than significant*.

MITIGATION MEASURES:

None required.

16 TRAFFIC AND CIRCULATION

INTRODUCTION

The chapter summarizes the key analysis points of the NewBridge Traffic Analysis Technical Report (September 2015) prepared by DKS Associates Transportation Solutions, hereinafter called the Traffic Study. The Traffic Study is included as Appendix TR-1.

TRANSPORTATION SETTING

Information on the existing transportation system was assembled from field observations, surveys (including traffic counts), previous environmental impact reports, and available information from the Sacramento County Department of Transportation (SacDOT), California Department of Transportation (Caltrans), the Sacramento Area Council of Governments (SACOG), and Regional Transit.

NEWBRIDGE PROJECT

The NewBridge project is located in unincorporated Sacramento County, generally east of the City of Sacramento and south of the City of Rancho Cordova and Mather Airport (Plate TC-1). It is bounded on the south by Jackson Road (SR 16), on the east by Sunrise Boulevard, and on the north by Kiefer Boulevard. The western boundary is located west of Eagles Nest Road.

JACKSON CORRIDOR PROJECTS

The Traffic Study discusses existing and cumulative transportation and circulation conditions associated with the implementation of the NewBridge Specific Plan development. In addition, the Traffic Study discusses the combined effects of implementing the following four master plans in the Jackson Corridor, collectively referred to as the Jackson Corridor Projects:

- West Jackson Highway Master Plan (West Jackson)
- Jackson Township Specific Plan (Jackson Township)
- NewBridge Specific Plan (NewBridge)
- Mather South Community Master Plan (Mather South)

The Jackson Corridor Projects are located adjacent to each other along the Jackson Road corridor. Because of this proximity and the relatively concurrent entitlement process, County staff and the applicants collaborated on having a single traffic analysis conducted that would evaluate the transportation related impacts of each individual project as stand-alone projects as well as the transportation impacts of all four projects combined. Substantial coordination with the applicants and adjacent jurisdictions, including the Cities of Sacramento, Rancho Cordova, Elk Grove, and Folsom in addition to Caltrans and the Capital Southeast Connector Joint Powers Authority, led to

agreement on the area to be studied for transportation impacts. The resulting study area includes 261 roadway segments and 164 intersections within an area bounded by US 50 on the north, Calvine Road on the south, Power Inn Road on the west and Grant Line Road on the east. The Traffic Study addresses the combined potential effects of the Jackson Corridor Projects on existing and cumulative transportation and circulation conditions.

Utilizing a joint traffic analysis in this case results in a common baseline for existing conditions between all four Jackson Corridor Projects, provides a better understanding of the travel demand associated with all Jackson Corridor Projects combined, and determines the number of vehicles each project contributes towards the total traffic flow as a fair share percentage on each study roadway segment and intersection. Although a joint traffic analysis was conducted, a project-specific report was prepared for each master plan project to identify project-specific impacts and mitigation measures.

ANALYSIS OF SCENARIOS

Quantitative transportation analyses have been conducted for the following scenarios, summarized in Table TC-1:

- Existing (without Jackson Corridor Projects)
- Existing Plus NewBridge Project
- Existing Plus Jackson Corridor Projects (West Jackson, Jackson Township, NewBridge, and Mather South developments)
- MTP Cumulative (without Jackson Corridor Projects)
- MTP Cumulative Plus Jackson Corridor Projects
- CEQA Cumulative (without Jackson Corridor Projects)
- CEQA Cumulative Plus Jackson Corridor Projects
- CEQA Cumulative Plus NewBridge Project

The scenarios followed by the notation “(without Jackson Corridor Projects)” contain no development, beyond existing levels, within the boundaries of the West Jackson, Jackson Township, NewBridge, and Mather South projects. It should be noted that the Traffic Study commonly refers to the Jackson Corridor Projects as “Four Projects”; this terminology is synonymous with the use of “Jackson Corridor Projects” in this chapter.

This chapter summarizes the Traffic Study analysis of the Existing Plus NewBridge Project and CEQA Cumulative Plus NewBridge Project scenarios. The remaining scenarios were analyzed in the Traffic Study to gather necessary technical information to develop the Jackson Highway Corridor Transportation Mitigation Strategy.

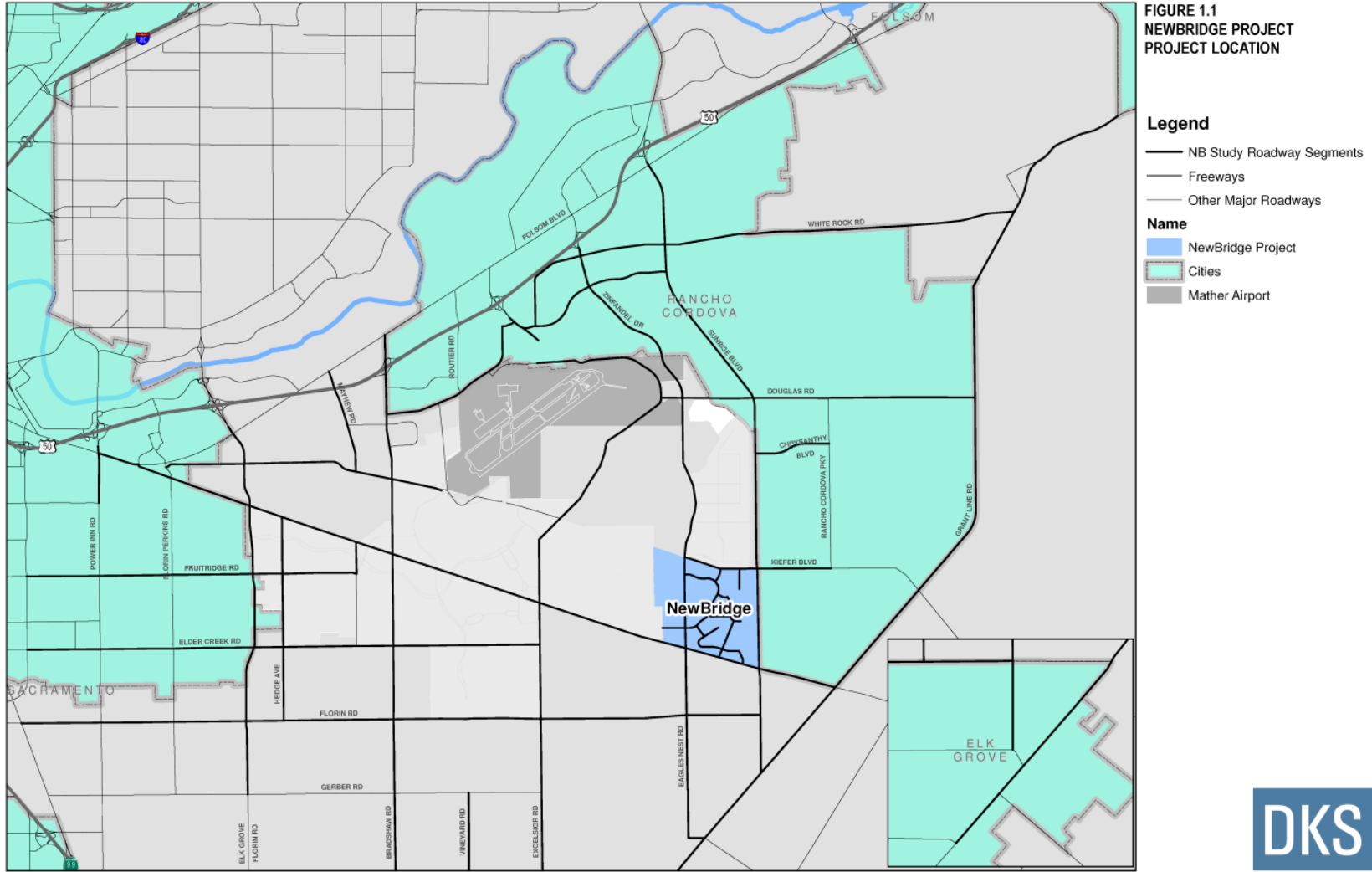
Table TC-1: Analysis Scenarios

Scenario	Land Use	Base Transportation Network	Project Improvements
Existing	Existing	Existing	None
Existing Plus NewBridge	Existing Plus NewBridge	Existing	NewBridge Project
Existing Plus Jackson Corridor Projects	Existing Plus West Jackson, Jackson Township, New Bridge, and Mather South	Existing	West Jackson Project Jackson Township Project NewBridge Project Mather South Project
MTP Cumulative	2035 Development Levels without Jackson Corridor Projects	Year 2035 (Based on 2012 MTP)	None
MTP Cumulative Plus Jackson Corridor Projects	2035 Development Levels plus West Jackson, Jackson Township, New Bridge, and Mather South	Year 2035 (Based on 2012 MTP)	West Jackson Project Jackson Township Project NewBridge Project Mather South Project
CEQA Cumulative	2035 Development Levels (SACOG Projections), Build Out of Additional Readily Foreseeable Projects in Study Area, without Jackson Corridor Projects	Year 2035 (Based on 2012 MTP) Plus Improvements Fully Funded by Additional Readily Foreseeable Projects in Study Area	None
CEQA Cumulative Plus Jackson Corridor Projects	2035 Development Levels (SACOG Projections), Build Out of Additional Readily Foreseeable Projects in Study Area, plus West Jackson, Jackson Township, New Bridge, and Mather South	Year 2035 (Based on 2012 MTP) Plus Improvements Fully Funded by Additional Readily Foreseeable Projects in Study Area	West Jackson Project Jackson Township Project NewBridge Project Mather South Project
CEQA Cumulative Plus NewBridge Project	Estimation of NewBridge Project Impacts based upon CEQA Cumulative Plus Jackson Corridor Projects scenario		
<i>Source: DKS Associates, 2014.</i>			

STUDY AREA

For transportation analysis purposes, a set of existing, proposed, and future intersections, roadway segments, and freeway facilities were selected based upon the anticipated volume of additional traffic, the distributional patterns of traffic, and known locations of operational difficulty. The Sacramento County Department of Transportation, Caltrans, City of Sacramento, City of Rancho Cordova, City of Elk Grove, City of Folsom, and Capital Southeast Corridor Joint Powers Authority were consulted. Plate TC-1 through Plate TC-4 illustrate the study area, which was agreed to by all of the above jurisdictions and agencies. The study area includes 261 roadway segments and 164 intersections within an area bounded by US 50 on the north, Calvine Road on the south, Power Inn Road on the west and Grant Line Road on the east.

Plate TC-1: Project Location



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Plate TC-2: Study Area Roadway Segments

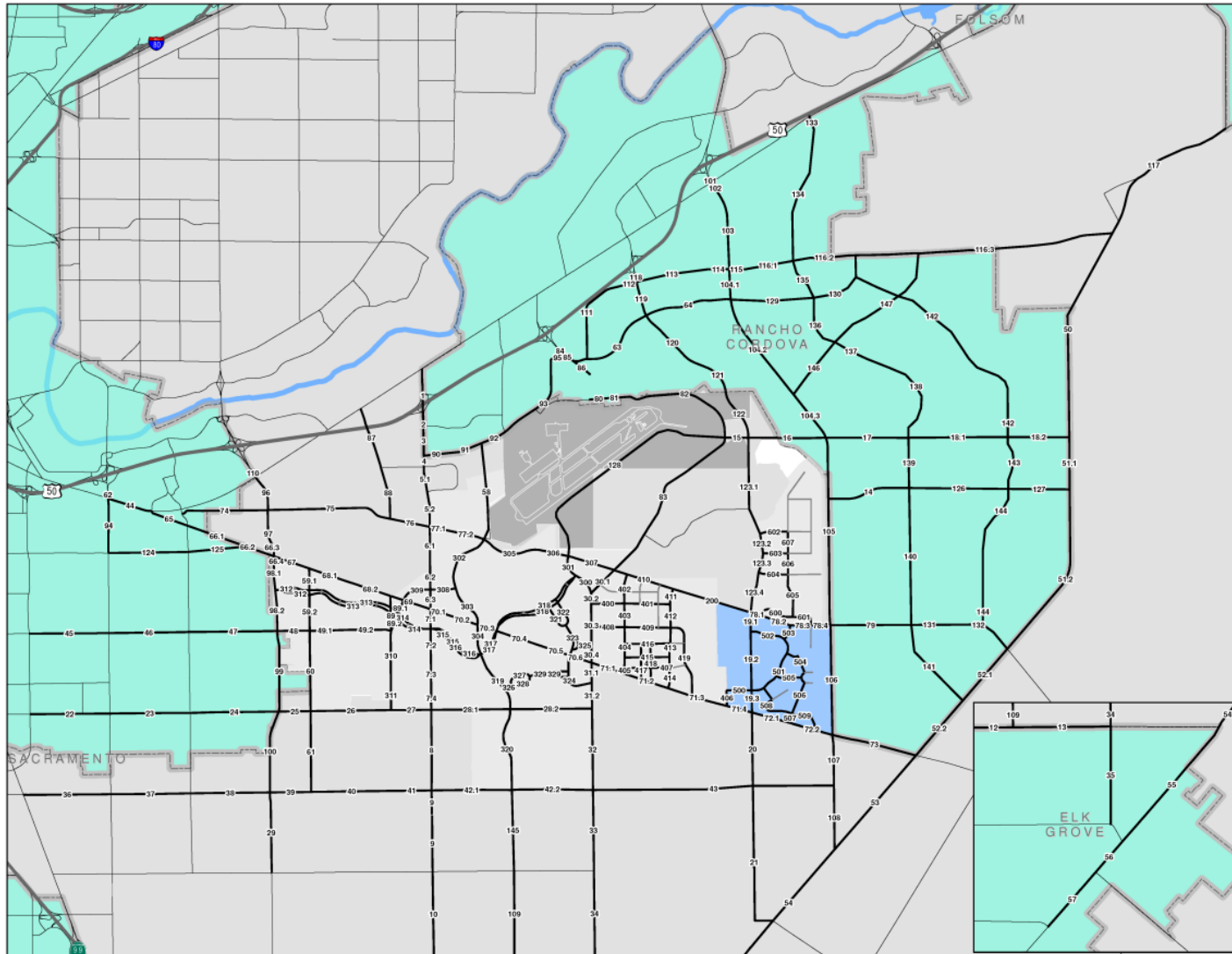


FIGURE 1.2
STUDY AREA MAP
ROADWAY SEGMENTS

Legend

- Study Roadway Segments
- Other Project Roadways
- Freeways
- Other Major Roadways
- NewBridge Project
- Cities
- Mather Airport



Plate TC-3: Study Area Freeway Segments

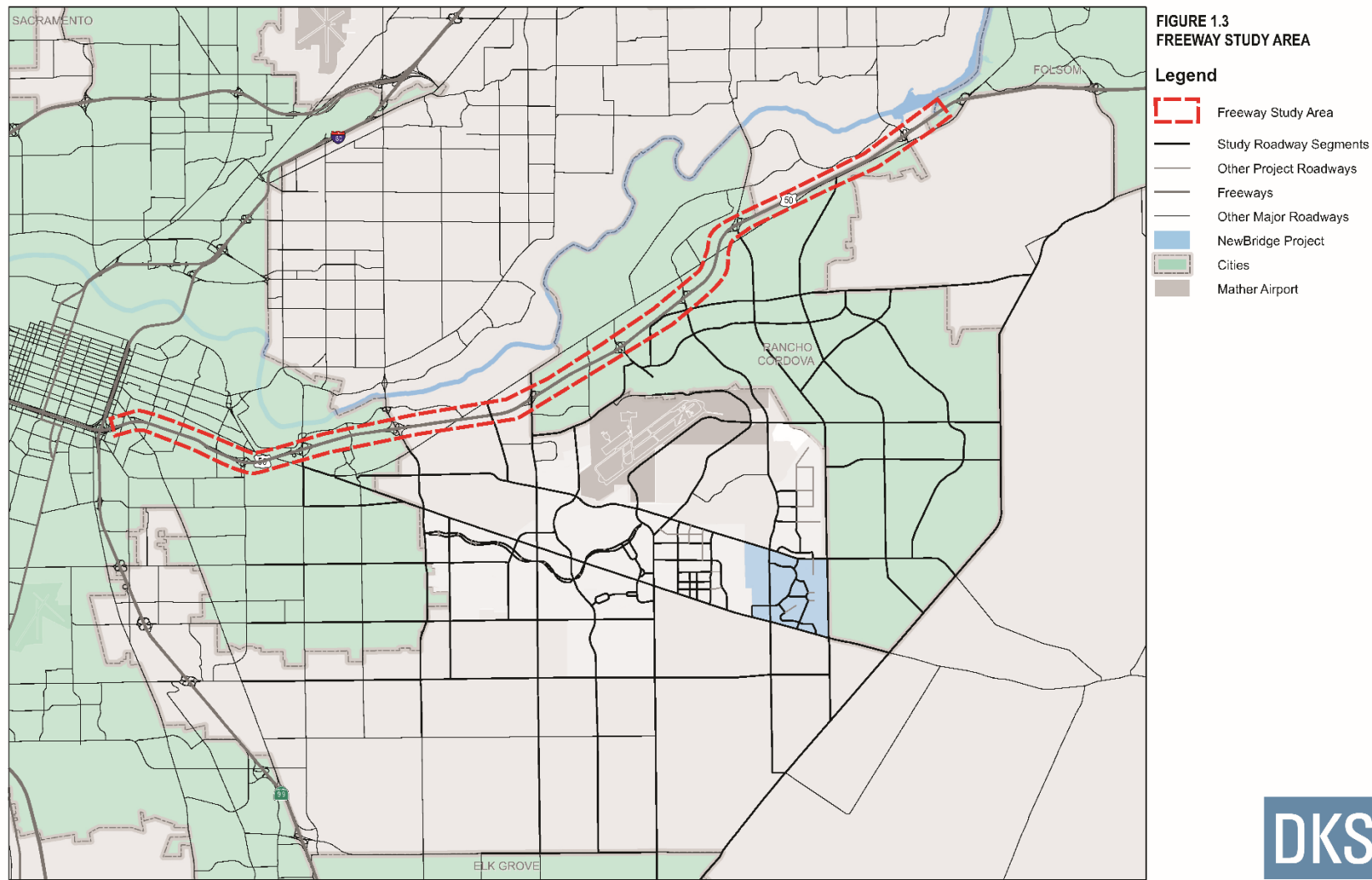
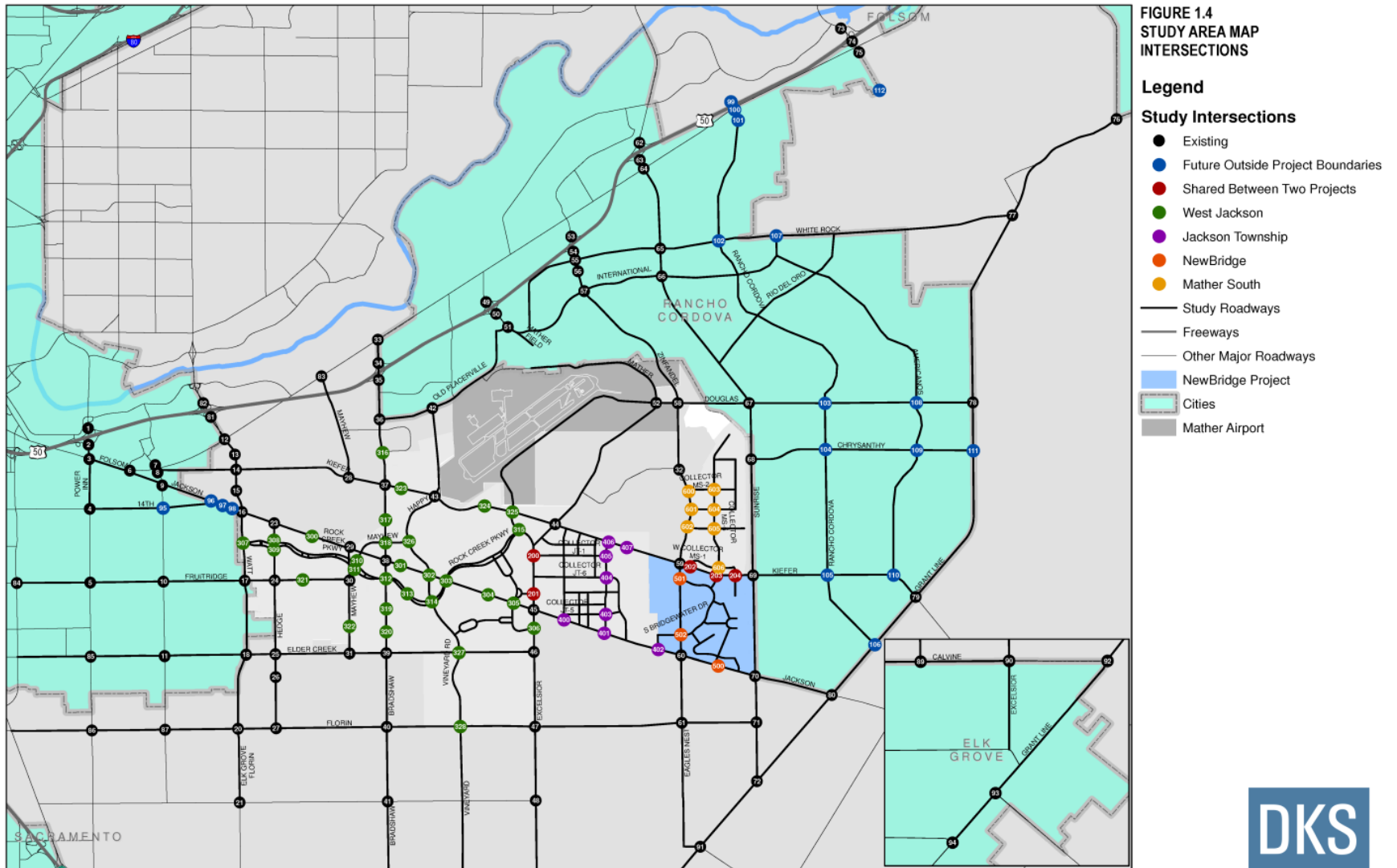


Plate TC-4: Study Area Intersections



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EXISTING ROADWAY SYSTEM

Plate TC-5 illustrates the existing roadway network.

REGIONAL ACCESS

Regional automobile access to the site is provided by the freeway system and by State Route 16.

U.S. Highway 50 (US 50) is an east-west freeway that extends from the Interstate 80 (I-80) junction in West Sacramento to Canal Street in the City of Placerville, where it continues as a highway across the Sierra Nevada to South Lake Tahoe and Nevada. Primary access to US 50 is via a series of interchanges, including (from west to east) Howe Avenue, Watt Avenue, Bradshaw Road, Mather Field Road, and Sunrise Boulevard. To the west, US 50 provides access to the City of Sacramento, SR 99, I-5, and I-80. To the east, US 50 provides access to eastern Sacramento County, the cities of Rancho Cordova and Folsom, and El Dorado County.

State Route 16 (SR 16) is a Caltrans facility. In the vicinity of the site, SR 16 is located on **Jackson Road**, which is the southern boundary of the NewBridge project site. The roadway generally travels from west-northwest to east-southeast from Folsom Boulevard to the west into Amador County to the east. It is generally a two-lane roadway with some widening at intersections. To the west, SR 16 continues to US 50 via Folsom Boulevard and Howe Avenue in the City of Sacramento.

LOCAL ACCESS

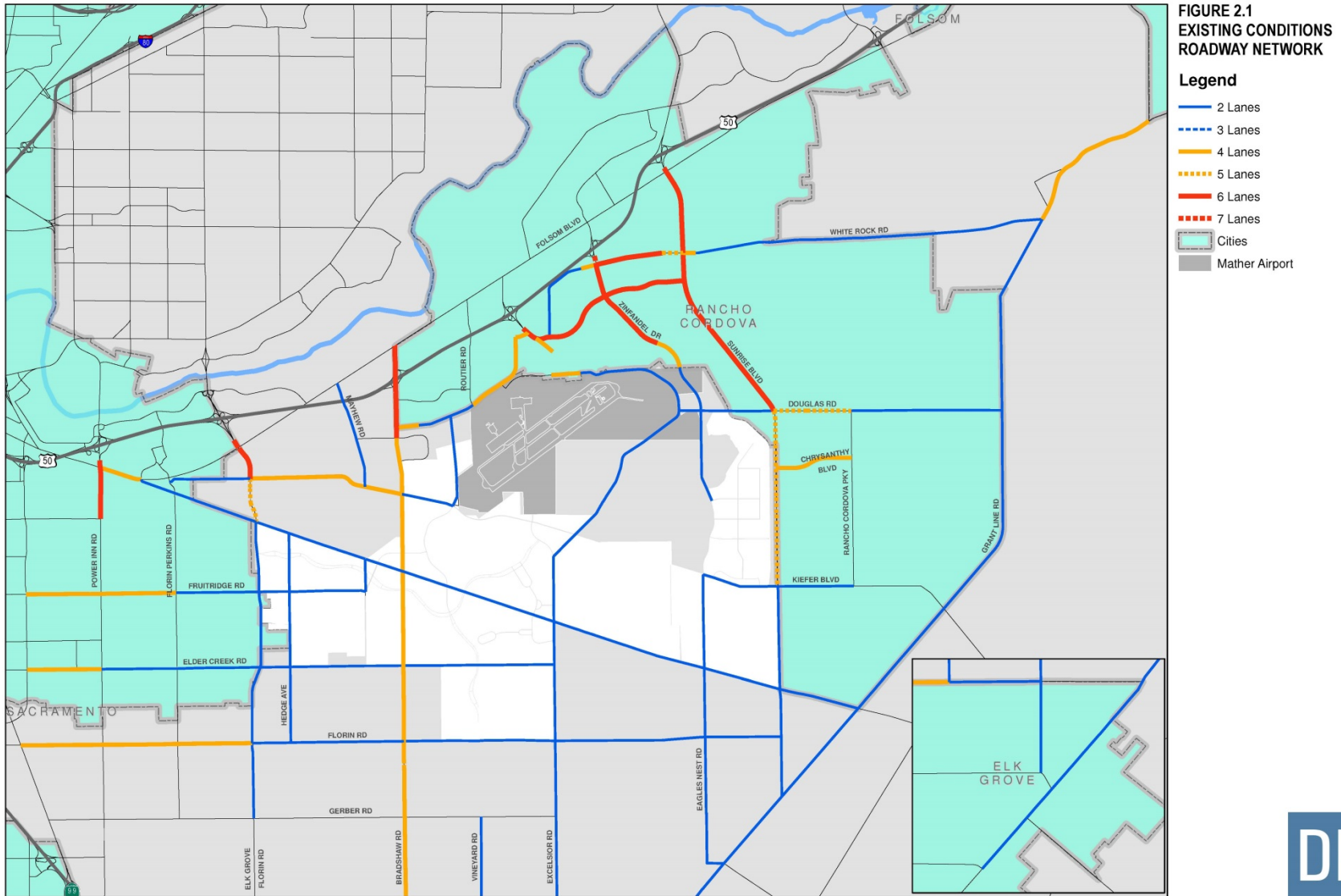
Direct access to the site is provided primarily via Eagles Nest Road, Kiefer Boulevard, and Sunrise Boulevard.

Eagles Nest Road is a north-south roadway that crosses the NewBridge project site. The roadway begins at Kiefer Boulevard, and extends southerly to Grant Line Road. It is a two-lane roadway.

Kiefer Boulevard is an east-west roadway that forms the northern boundary of the NewBridge project site. The roadway consists of two segments, divided by Mather Field. The western segment extends from Florin-Perkins Road in the City of Sacramento through the Rosemont community to Happy Lane. This segment has two to four through lanes. East of Mather Field, the roadway begins at Eagles Nest Road and continues easterly through the City of Rancho Cordova to Jackson Road as a two-lane roadway.

Sunrise Boulevard is a north-south roadway that forms the eastern boundary of the NewBridge project site. As the Folsom South Canal parallels Sunrise Boulevard within the NewBridge project site, direct site access is limited to a proposed commercial parcel at Jackson Road, in the southeast corner of the Plan area. .

Plate TC-5: Existing Conditions Roadway Network



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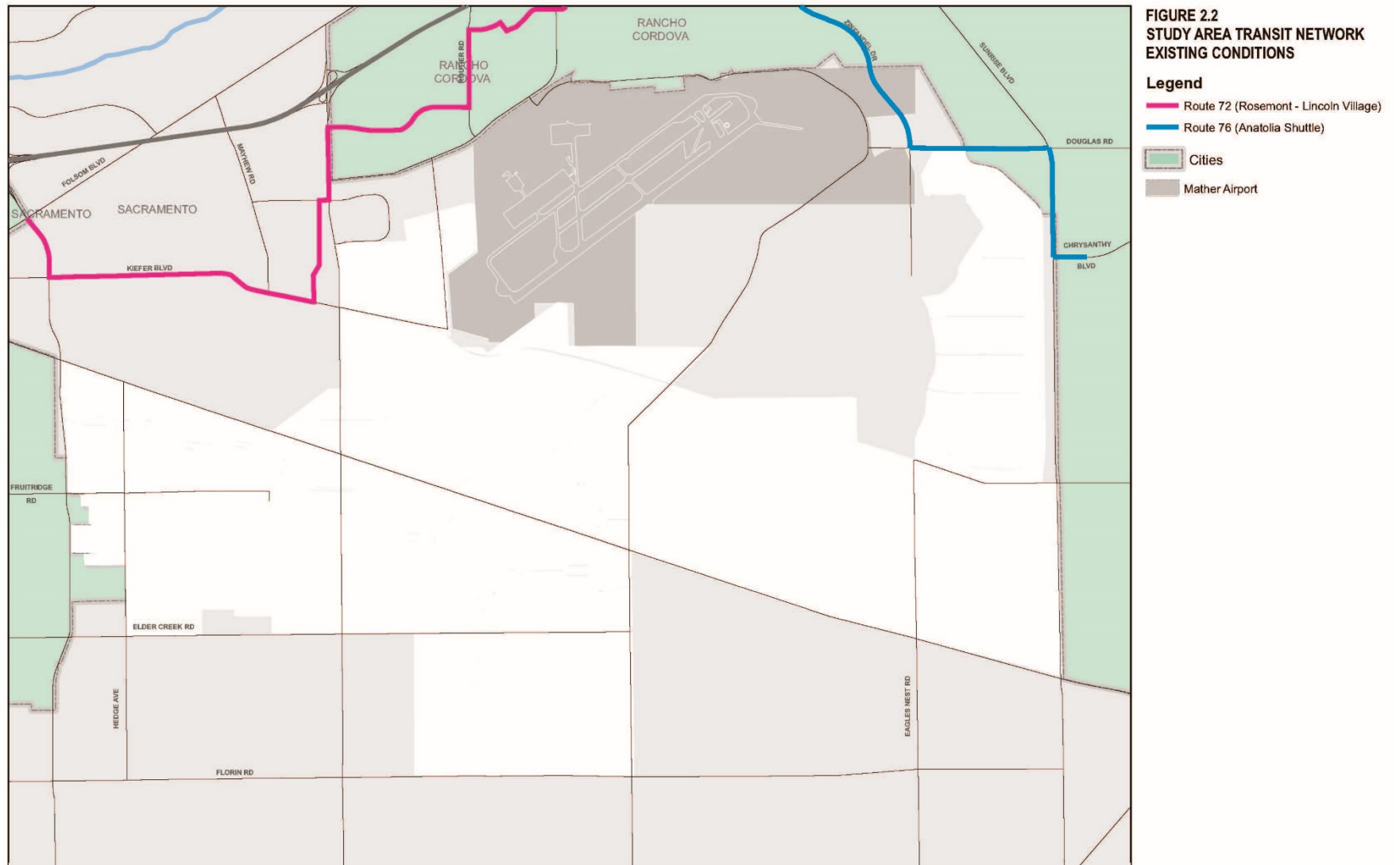
EXISTING TRANSIT SYSTEM

Plate TC-6 illustrates selected RT service near the NewBridge project site. The RT Gold Line light rail service is located parallel to Folsom Boulevard north of the NewBridge project site. Nearby stations include (from west to east) Watt/Manlove, Starfire, Tiber, Butterfield, Mather Field/Mills, Zinfandel, Cordova Town Center, and Sunrise. No RT bus routes operate in the vicinity of the Plan area. In the City of Rancho Cordova, the Rancho CordoVan currently operates three routes that serve the Villages of Zinfandel (commonly known as Stone Creek), Anatolia neighborhoods, Kavala Ranch and Sunridge Park. These routes operate Monday through Friday in the mornings and evenings to provide access to light rail at the Zinfandel Regional Transit Light Rail Station.

EXISTING PEDESTRIAN AND BICYCLE FACILITIES

Plate TC-7 illustrates the Sacramento County Bikeway Master Plan in the vicinity of the NewBridge project site, depicting existing and planned bikeways. An existing Class I Bikeway on the west side of the Folsom South Canal traverses the Plan area.

Plate TC-6: Transit Network Existing Conditions



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Plate TC-7: Existing Bicycle Network

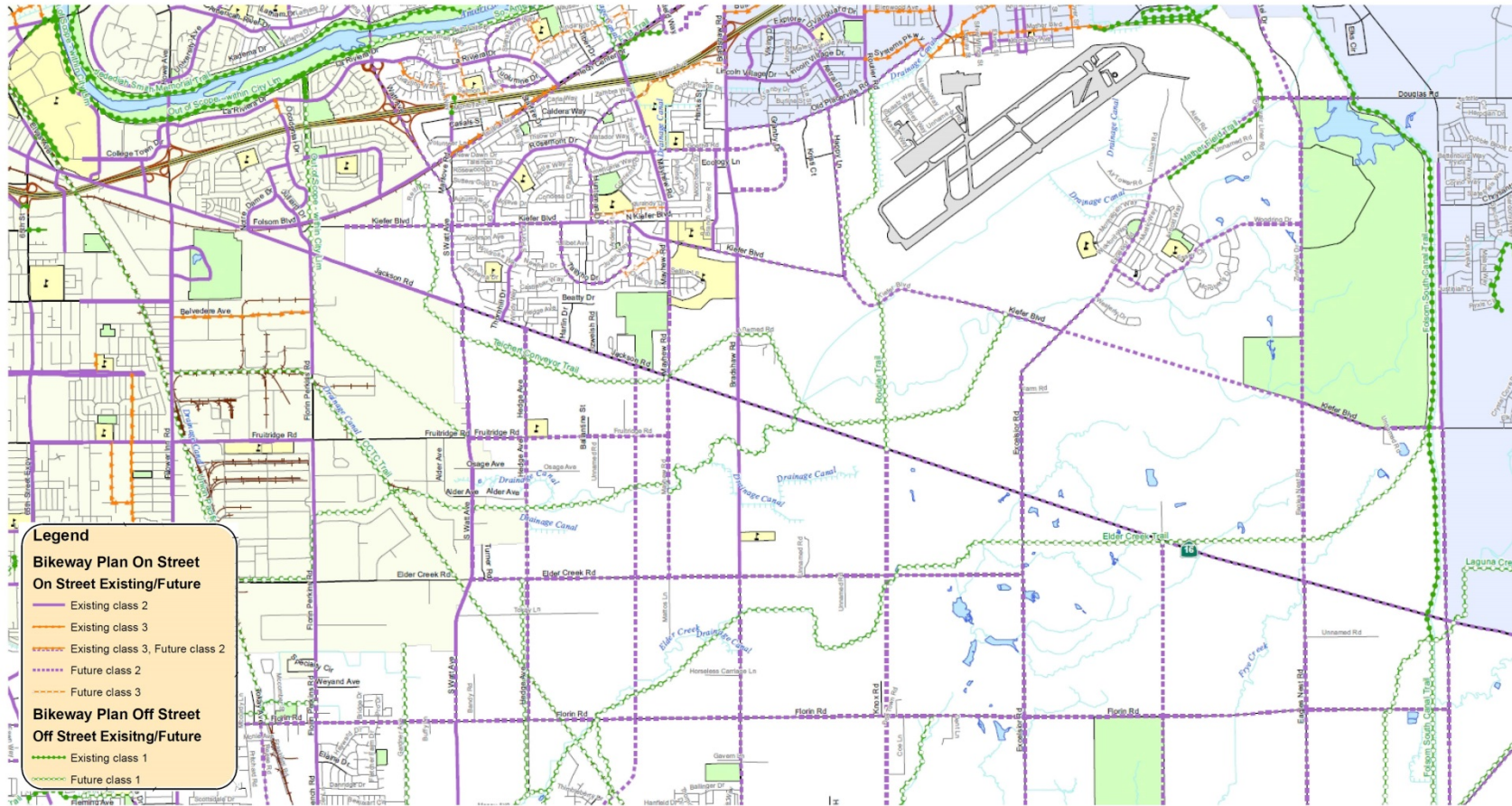


FIGURE 2.3
EXISTING BICYCLE NETWORK



REGULATORY SETTING

STATE PLANS, POLICIES, REGULATIONS AND LAWS

The *Guide for the Preparation of Traffic Impact Studies* published by Caltrans (2002) identifies circumstances under which Caltrans believes that a traffic impact study would be required, information that Caltrans believes should be included in the study, analysis, scenarios, and guidance on acceptable analysis methodologies. The Traffic Impact Study prepared for the Project complies with Caltrans guidelines.

The standards for Caltrans' facilities in the study area are detailed in the U.S. 50 Corridor System Management Plan (CSMP). The 20-Year Concept Level of Service (LOS) for U.S. 50 in the study area is LOS F, because improvements necessary to improve the LOS to E are not feasible due to environmental, right-of-way, financial, and other constraints. For SR 16, the minimum acceptable operating condition is based on the local jurisdictional thresholds (i.e. City of Rancho Cordova or Sacramento County).

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS AND LAWS

METROPOLITAN TRANSPORTATION PLAN FOR 2035 (MTP)

The MTP 2035 is a long range planning document for identifying and programming roadway improvements throughout the Sacramento region, which was adopted in 2008. The MTP has a history of being able to fund and deliver identified Tier 1 projects through State and local funding. The Sacramento Area Council of Governments periodically updates the MTP, and published an updated Draft MTP in November 2011¹. A review of this draft indicates that there are no changes to the list of funded facilities which would impact the traffic analysis for this Project.

SACRAMENTO COUNTY DEPARTMENT OF TRANSPORTATION

The Sacramento County Department of Transportation's (SacDOT) Traffic Impact Guidelines (July 2004) defines the methodologies to use in determining significant impacts, while the Sacramento County General Plan defines acceptable operating conditions. Sacramento County defines the minimum acceptable operation level for its roadways and intersections to be LOS D for rural areas and LOS E for urban areas. The urban areas are those areas within the Urban Service Boundary (USB) as shown in the Land Use Element of the County General Plan. The areas outside the USB are considered rural.

SACRAMENTO COUNTY GENERAL PLAN

The Sacramento County General Plan Circulation Element focuses on providing roadways for growing automobile demands and alternative modes of transportation.

¹ The 2011 draft MTP reference was the most up-to-date information at the time of preparing the traffic analysis. The current adopted MTP is 2016.

This requires improving those alternatives through regional coordination, improved funding, better land use and design, and fair pricing. The overarching goals of the element seeks a balanced transportation system that moves people and goods in a safe and efficient way that minimizes environmental impacts, supports urban land uses, and serves rural needs. Supporting General Plan policies include conducting planning for roads, parking, clean alternative fuel and low emission vehicles, and other methods consistent with achieving air quality goals; conducting land use and transportation planning with a regional perspective; and mitigating new development traffic impacts.

Included within the Circulation Element is the Transportation Plan, which emphasizes four major themes: air quality, balance, transportation-land use coordination, and transportation funding. Air quality is an important aspect of this element because the major air quality problems in the County are related to automobile traffic. As a result, transportation planning in the County is to be conducted in a manner that promotes air quality. A balance of opportunities offers an efficient transportation system to citizens of the County by increasing the emphasis on transit, walking, and bicycling.

Goals and policies of the Sacramento County General Plan relating to traffic, circulation and transportation applicable to the Project are listed below:

- CI-1. Provide complete streets to provide safe and efficient access to a diversity of travel modes for all urban, suburban and rural land uses within Sacramento County except within certain established neighborhoods where particular amenities (such as sidewalks) are not desired. Within rural areas of the County, a complete street may be accommodated through roadway shoulders of sufficient width or other means to accommodate all modes of travel.
- CI-3. Travel modes shall be interconnected to form an integrated, coordinated and balanced multi-modal transportation system, planned and developed consistent with the land uses to be served.
- CI-4. Provide multiple transportation choices to link housing, recreational, employment, commercial, educational, and social services.
- CI-5. Land use and transportation planning and development should be cohesive, mutually supportive, and complement the objective of reducing per capita vehicle miles travelled (VMT).
- CI-9. Plan and design the roadway system in a manner that meets Level of Service (LOS) D on rural roadways and LOS E on urban roadways, unless it is infeasible to implement project alternatives or mitigation measures that would achieve LOS D on rural roadways or LOS E on urban roadways. The urban areas are those areas within the Urban Service Boundary as shown in the Land Use Element of the Sacramento County General Plan. The areas outside the Urban Service Boundary are considered rural.
- CI-10. Land development projects shall be responsible to mitigate the project's adverse impacts to local and regional roadways.

- CI-12. To preserve public safety and local quality of life on collector and local roadways, land development projects shall incorporate appropriate treatments of the Neighborhood Traffic Management Program.
- CI-16. The County supports creating communities that promote access and mobility for all modes of travel through the development of roadway networks based on a grid or modified grid layout.
- CI-27. Public Facilities Financing Plans shall incorporate capital costs for transit. Infrastructure Master Plans shall include transit planning.
- CI-29. The County shall work with transit service providers to establish and implement development guidelines to maximize the ability of new development and redevelopment to support planned transit services. New development and redevelopment shall have an orientation to travel patterns that are conducive to transit service. This will include concentration of development in centers and along linear corridors such that trip origins and destinations are concentrated near transit services.
- CI-35. The applicant/developer of land development projects shall be responsible to install bicycle and pedestrian facilities in accordance with Sacramento County Improvement Standards and may be responsible to participate in the fair share funding of regional multi-use trails identified in the Sacramento County Bicycle Master Plan.
- CI-37. Pursue all available sources of funding for the development, improvement, and maintenance of bikeways, pedestrian facilities and multi-use trails, and to support bicycle and pedestrian safety, education, encouragement and enforcement programs.
- LU-37. Provide and support development of pedestrian and bicycle connections between transit stations and nearby residential, commercial, employment or civic uses by eliminating physical barriers and providing linking facilities, such as pedestrian overcrossings, trails, wide sidewalks and safe street crossings.
- LU-39. Support implementation of the ADA Transitional Plan and the Pedestrian Master Plan to create a network of safe, accessible and appealing pedestrian facilities and environments.
- LU-40. Employ appropriate traffic calming measures in areas where pedestrian travel is desirable but made unsafe by a high volume or excessive speed of automobile traffic. Preference shall be given to measures that slow traffic and improve pedestrian safety while creating the least amount of conflict with emergency responders.
- LU-42. Master planning efforts for new growth areas shall provide for separated sidewalks along all arterials and thoroughfares to make walking a safer and more attractive transportation option.

CITY OF RANCHO CORDOVA GENERAL PLAN

Goals and policies of the City of Rancho Cordova General Plan relating to traffic and transportation found applicable to the Project are listed below:

- C.1.2 Seek to maintain operations on all roadways and intersections at Level of Service D or better at all times, including peak travel times, unless maintaining this Level of Service would, in the City’s judgment, be infeasible and/or conflict with the achievement of other goals. Congestion in excess of Level of Service D may be accepted in these cases, provided that provisions are made to improve traffic flow and/or promote non-vehicular transportation as part of a development project or a City-initiated project.
- C.1.11 As part of major individual roadway enhancement project (e.g., intersection redesign, signalization of previously un-signalized intersection), enhance and upgrade pedestrian and bicycle facilities within one-quarter mile of the project.
- C.2.6 Provide on-street bike lanes along all connector roadways and on local and major roadways when necessary to provide for interconnected routes. On-street bike routes may be provided on local, connector, and major roadways as deemed necessary by the City.

Because the City of Rancho Cordova formally adopted the County’s traffic-impact study guidelines upon incorporation, plans and policies from the County Guidelines were used in this analysis, except where the Circulation Element/Plan of the City of Rancho Cordova General Plan supersedes County thresholds and requirements. The City of Rancho Cordova has adopted a Level of Service D policy.

CITY OF FOLSOM GENERAL PLAN

Goals and policies of the City General Plan relating to traffic and transportation applicable to the Project are listed below:

- Policy 17.17 The City should strive to achieve at least a traffic Level of Service “C” throughout the City. During the course of the Plan buildout it may occur that temporary higher Level of Service results where roadway improvements have not been adequately phased as development proceeds. However, this situation will be minimized based on annual traffic studies as approved by the City of Folsom and Monitoring programs. Resolution No. 3798.

As part of the Folsom South of U.S. Highway 50 Specific Plan, the level of service policy for the portion of the City of Folsom to be located south of US 50 was amended as follows:

The City should strive to achieve at least a traffic Level of Service “C” within the Folsom South of US 50 Specific Plan. For roadways and

intersection within the Specific Plan, LOS “D” conditions may be considered on a case by case basis if improvement required to meet LOS “C” exceeds the “normally accepted maximum” improvements established the City. (Folsom South of U.S. Highway 50 Specific Plan FEIR/EIS, May 2011)

CITY OF ELK GROVE GENERAL PLAN

Goals and policies of the City of Elk Grove General Plan relating to traffic and transportation found applicable to the Project are listed below:

- CI-13 The City shall require that all roadways and intersections in Elk Grove operate at a minimum Level of Service D at all times.
- CI-14 The City recognizes that Level of Service D may not be achieved on some roadway segments, and may also not be achieved at some intersections. Roadways on which LOS D is projected to be exceeded are shown in the General Plan Background Report, based on the latest traffic modeling conducted by the City. On these roadways, the City shall ensure that improvements to construct the ultimate roadway system as shown in this Circulation Element are completed, with the recognition that maintenance of the desired level of service may not be achievable.

SENATE BILL 743 AND VEHICLE MILES TRAVELED (VMT)

Governor Brown signed Senate Bill (SB) 743 (Steinberg, 2013), which creates a process to change the way that transportation impacts are analyzed under CEQA. Specifically, SB 743 requires the Governor’s Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to LOS for evaluating transportation impacts. Particularly within areas served by transit, those alternative criteria must “promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.” (Public Resources Code Section 21099(b)(1)). Measurements of transportation impacts may include “vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated.” (Ibid.) Once the CEQA Guidelines are amended to include those alternative criteria, auto delay will no longer be considered a significant impact under CEQA. (Id. at subd. (b)(2).)

OPR published its proposal for the comprehensive updates to the CEQA Guidelines in November 2017. Among other things, this package includes proposed updates related to analyzing transportation impacts pursuant to Senate Bill 743. OPR’s **latest** Technical Advisory on Evaluating Transportation Impacts (~~November 2017~~ **December 2018**) provides guidance for VMT analysis that recommends lead agencies should analyze VMT outcomes of land use plans over the full area over which the plan may substantively affect travel patterns, including beyond the boundary of the plan or the jurisdiction’s geography. Analysis of specific plans may employ the same significance thresholds used for smaller, individual projects described in the Technical Advisory. **In**

December 2018, OPR and the State Natural Resources Agency submitted the updated CEQA Guidelines to the Office of Administrative Law for final approval to implement SB 743. The Office of Administrative Law subsequently approved the updated CEQA Guidelines, and local agencies had an opt-in period until July 1, 2020 to implement the updated guidelines.

METHODOLOGY

LEVEL OF SERVICE METHODOLOGY

Determination of roadway operating conditions is based upon comparison of traffic volumes to roadway capacity. “Levels of service” describe roadway operating conditions. Level of service is a qualitative measure of the effect of a number of factors, which include speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operating costs. Levels of service are designated "A" through "F" from best to worst, which cover the entire range of traffic operations that might occur. Levels of Service (LOS) "A" through "E" generally represent traffic volumes at less than roadway capacity, while LOS "F" represents over capacity and/or forced conditions. Table TC-2 presents the Level of Service definitions.

Sacramento County utilizes a LOS “E” standard for urban areas, and a LOS “D” standard for rural areas. The cities of Elk Grove and Rancho Cordova utilize a LOS “D” standard for their roadways. The City of Folsom utilizes a LOS “C” standard for their intersections. In Sacramento County, Caltrans has a route concept LOS “F” for US 50. In this analysis, a LOS “E” standard is used for all Caltrans facilities along US 50 to be conservative. For SR 16, the LOS "D" standard is used for segments within City of Rancho Cordova and LOS "E" standard for segments within Sacramento County.

In this traffic assessment, capacity analyses were conducted for intersections and roadway segments in accordance with Sacramento County, City of Rancho Cordova, City of Folsom, City of Elk Grove, and Caltrans practice. The following summarizes the analysis types:

- Intersection-based capacity analyses are conducted utilizing a.m. and p.m. peak commuter hour traffic volumes. These analyses evaluate the ability of intersections to accommodate traffic volumes during peak travel periods.
- Roadway segment-based capacity analyses are conducted utilizing daily traffic volumes for Sacramento County and the cities of Elk Grove and Rancho Cordova. These analyses evaluate the adequacy of the number of roadway lanes between major intersections.
- Freeway segment-based capacity analyses are conducted utilizing a.m. and p.m. peak hour volumes for Caltrans facilities. These analyses evaluate the adequacy of the number of freeway lanes between interchanges.

- Freeway merge, diverge, and weave analyses are conducted utilizing a.m. and p.m. peak hour volumes for Caltrans facilities. These analyses evaluate the adequacy of the freeway system to accommodate entering and exiting traffic volumes.

Table TC-2: Level of Service (LOS) Definitions

LOS A	LOS A describes primarily free-flow operations at average travel speeds, usually 90 percent of the free-flow speed for the given street class. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control delay at signalized intersections is minimal.
LOS B	LOS B describes reasonably free-flow operations at average travel speeds, usually 70 percent of the free-flow speed for the given street class. The ability to maneuver within the traffic stream is only slightly restricted and control delay at signalized intersections are not significant.
LOS C	LOS C describes stable operations; however, ability to maneuver and change lanes in midblock locations may be more restricted than at LOS B and longer queues, adverse signal coordination, or both may contribute to lower average travel speeds of about 50 percent of the free-flow speed for the street class.
LOS D	LOS D borders on a range in which small increases in flow may cause substantial increases in delay and decreases in travel speed. LOS D may be due to adverse signal progression, inappropriate signal timing, high volumes, or a combination of these factors. Average travel speeds are about 40 percent of the free-flow speed.
LOS E	LOS E is characterized by significant delays and average travel speeds of 33 percent or less of the free-flow speed. Such operations are caused by a combination of adverse progression, high signal delay, high volumes, extensive delays at critical intersections and inappropriate signal timing.
LOS F	LOS F is characterized by urban street flow at extremely low speeds, typically one-third to one-fourth of the free-flow speed. Intersection congestion is likely at critical signalized locations, with high delays, high volumes and extensive queuing.
Source: <i>Highway Capacity Manual</i> , Transportation Research Board, Special Report No. 209, Washington, D.C., 2000.	

INTERSECTION ANALYSIS

For signalized and unsignalized intersections, operational analyses were conducted using a methodology outlined in the Transportation Research Board's *Highway Capacity Manual, 2000* (HCM 2000) and *Highway Capacity Manual, 2010* (HCM 2010). The HCM 2010 methodology was used in all locations except where signalized intersection characteristics deemed the methodology inappropriate. These locations include

intersections with unconventional signal phasing, and locations adjacent to light rail tracks where additional delay occurs due to light rail operations. In the selected locations, the HCM 2000 methodology was employed.

The methodology utilized is known as an “operational analysis”. This procedure calculates an average control delay per vehicle for each movement at an intersection, and assigns a level of service designation based upon the average delay per vehicle. Table TC-3 presents the level of service criteria for signalized and unsignalized intersections based on the HCM methodology.

TRAFFIC SIGNAL WARRANT ANALYSIS

Traffic signals are valuable devices for the control of motor vehicle, pedestrian, and bicycle traffic. However, because they assign the right-of-way to the various traffic movements, signals exert a profound influence on traffic flow. Properly located and operated control signals may provide for the orderly movement of traffic (motor vehicle, pedestrian, and bicycle), increase the traffic-handling capacity of an intersection, and reduce the frequency of certain types of crashes. After extensive study and analysis, the Federal Highway Administration and Caltrans developed traffic signal warrants. These warrants define minimum conditions under which signal installations may be justified. Traffic control signals should not be installed unless one or more of the signal warrants are met. However, the satisfaction of a warrant or warrants is not in itself justification for a signal. Every situation is unique and warrant guidelines must be supplemented by the review of specific site conditions and the application of good engineering judgment. Installation of a traffic signal should improve the overall safety and/or operation of an intersection and should be considered only when deemed necessary by careful traffic analysis and after less restrictive solutions have been attempted.

Table TC-3: Intersection Level of Service Criteria

Level of Service (LOS)	Total Delay Per Vehicle (seconds)	
	Signalized Intersections	Unsignalized Intersections
A	≤ 10	≤ 10
B	> 10 and ≤ 20	> 10 and ≤ 15
C	> 20 and ≤ 35	> 15 and ≤ 25
D	> 35 and ≤ 55	> 25 and ≤ 35
E	> 55 and ≤ 80	> 35 and ≤ 50
F	> 80	> 50

Source: HCM 2010 Highway Capacity Manual, Transportation Research Board, Washington, D.C., 2010.

ROADWAY SEGMENT ANALYSIS

Level of service analyses were conducted for roadway segments in the study area based upon daily traffic volumes, number of traffic lanes between intersections, and roadway characteristics. In this methodology, study area roadways are stratified into “capacity class” categories for level of service determination, Table TC-4 and Table TC-5, for Sacramento County and the City of Sacramento, respectively. The Sacramento County criteria were also utilized for segments in the City of Rancho Cordova and City of Elk Grove, as these jurisdictions utilize the same roadway segment level of service criteria.

The capacity class categories are based upon the nature of traffic flow along the facility, including number of interruptions due to intersection control and “side-friction” due to driveways and local streets. For each capacity class, relationships were developed between daily traffic volumes and roadway level of service.

Table TC-4 and Table TC-5 summarize the maximum daily traffic volumes associated with each level of service designation and capacity class combination. Although the segment-based level of service calculations are based upon daily traffic volumes, the resultant levels of service are representative of peak hour conditions. While a roadway segment’s daily capacity could theoretically be very high if traffic were spread evenly throughout the 24-hour period, this is clearly not a realistic condition. The daily roadway segment capacity methodology takes into account typical peak hour volume profiles, as well as the effects of signalized intersections in reducing the roadway’s carrying capacity. With good signal timing, spacing, and additional intersection capacity improvements (e.g. additional turn lanes, overlap phasing), a segment would be able to carry more vehicles than one having less-than-ideal intersection conditions.

Table TC-4: Roadway Segment Level of Service Criteria for Sacramento County

Roadway Capacity Class	Number of Lanes	Daily Volume Threshold (Level of Service)				
		LOS A	LOS B	LOS C	LOS D	LOS E
Residential	2	600	1,200	2,000	3,000	4,500
Residential Collector with Frontage	2	1,600	3,200	4,800	6,400	8,000
Residential Collector without Frontage	2	6,000	7,000	8,000	9,000	10,000
Arterial, Low Access Control	2	9,000	10,500	12,000	13,500	15,000
	4	18,000	21,000	24,000	27,000	30,000
	6	27,000	31,500	36,000	40,500	45,000
Arterial, Moderate Access Control	2	10,800	12,600	14,400	16,200	18,000
	4	21,600	25,200	28,800	32,400	36,000
	6	32,400	37,800	43,200	48,600	54,000
Arterial, High Access Control	2	12,000	14,000	16,000	18,000	20,000
	4	24,000	28,000	32,000	36,000	40,000
	6	36,000	43,000	48,000	54,000	60,000
Rural, 2-lane Highway	2	2,400	4,800	7,900	13,500	22,900
Rural, 2-lane Road, 24' - 36' of pavement, Paved Shoulders	2	2,200	4,300	7,100	12,200	20,000
Rural, 2-lane Road, 24' - 36' of pavement, No Shoulders	2	1,800	3,600	5,900	10,100	17,000
Roadway Capacity Class	Stops per Mile	Driveways		Speed		
Arterial, Low Access Control	4 +	Frequent		25 – 35 mph		
Arterial, Moderate Access Control	2 – 4	Limited		35 – 45 mph		
Arterial, High Access Control	1 - 2	None		45 – 55 mph		
Note:	LOS = level of service					
Source:	Traffic Impact Analysis Guidelines, County of Sacramento Department of Transportation, July 2004.					

Table TC-5: Roadway Segment Level of Service for the City of Sacramento

Roadway Capacity Class	Number of Lanes	Daily Volume Threshold (Level of Service)				
		LOS A	LOS B	LOS C	LOS D	LOS E
Arterial, Low Access Control	2	9,000	10,500	12,000	13,500	15,000
	4	18,000	21,000	24,000	27,000	30,000
	6	27,000	31,500	36,000	40,500	45,000
Arterial, Moderate Access Control	2	10,800	12,600	14,400	16,200	18,000
	4	21,600	25,200	28,800	32,400	36,000
	6	32,400	37,800	43,200	48,600	54,000
Arterial, High Access Control	2	12,000	14,000	16,000	18,000	20,000
	4	24,000	28,000	32,000	36,000	40,000
	6	36,000	43,000	48,000	54,000	60,000
Collector, minor	2	5,250	6,125	7,000	7,875	8,750
Residential	2	3,000	3,500	4,000	4,500	5,000
Roadway Capacity Class	Stops per Mile	Driveways		Speed		
Arterial, Low Access Control	4 +	Frequent		25 – 35 mph		
Arterial, Moderate Access Control	2 – 4	Limited		35 – 45 mph		
Arterial, High Access Control	1 - 2	None		45 – 55 mph		
Note:	LOS = level of service					
Source:	City of Sacramento Traffic Impact Analysis Guidelines, 1996; City of Sacramento, Department of Transportation Staff, 2007.					

FREEWAY SEGMENT ANALYSIS

Freeway mainline segments, ramp junctions, and weaving segments were analyzed utilizing methodologies outlined in the HCM 2010. Table TC-6 presents the level of service criteria for the freeway mainline, freeway ramp junctions, and freeway weaving segments.

Table TC-6: Level of Service Criteria (Freeway)

Level of Service (LOS)	Maximum Density (Passenger Cars Per Mile Per Lane)		
	Mainline	Ramp Junctions	Weaving Segments
A	≤ 11	≤ 10	≤ 10
B	> 11 and ≤ 18	> 10 and ≤ 20	> 10 and ≤ 20
C	> 18 and ≤ 26	> 20 and ≤ 28	> 20 and ≤ 28
D	> 26 and ≤ 35	> 28 and ≤ 35	> 28 and ≤ 35
E	> 35 and ≤ 45	> 35	> 35
F	> 45	Demand Exceeds Capacity	Demand Exceeds Capacity

Source: HCM 2010 Highway Capacity Manual, Transportation Research Board, Washington, D.C., 2010.

SIGNAL WARRANTS

Traffic signals are valuable devices for the control of motor vehicle, pedestrian, and bicycle traffic. However, because they assign the right-of-way to the various traffic movements, signals exert a profound influence on traffic flow. Properly located and operated control signals may provide for the orderly movement of traffic (motor vehicle, pedestrian, and bicycle), increase the traffic-handling capacity of an intersection, and reduce the frequency of certain types of crashes. After extensive study and analysis, the Federal Highway Administration and Caltrans developed traffic signal warrants. These warrants define minimum conditions under which signal installations may be justified. Traffic control signals should not be installed unless one or more of the signal warrants are met. However, the satisfaction of a warrant or warrants is not in itself justification for a signal. Every situation is unique and warrant guidelines must be supplemented by the review of specific site conditions and the application of good engineering judgment. Installation of a traffic signal should improve the overall safety and/or operation of an intersection and should be considered only when deemed necessary by careful traffic analysis and after less restrictive solutions have been attempted.

SIGNIFICANCE CRITERIA

ROADWAYS AND INTERSECTIONS

This analysis was conducted using a combination of policies and guidelines based on whether the impacted facility is a State, county, or city facility. Each roadway facility was analyzed in accordance with the policies and guidelines of its jurisdiction. Sacramento County identifies LOS “E” as the minimum acceptable standard for intersection and roadway operations within the Urban Service Boundary, and LOS “D” outside. The Cities of Elk Grove and Rancho Cordova identify LOS “D” as its minimum standard for intersection and roadway operations. The City of Folsom identifies LOS “C” as its minimum standard for intersection operations. In cases where transportation elements are located on a jurisdictional boundary, the more conservative (e.g., LOS D rather than LOS E) policy was utilized.

Table TC-7 presents the roadway standards of significance for each facility type in each jurisdiction. For each facility type in each jurisdiction, an impact is deemed significant if:

1. The facility is operating at an acceptable level of service (better than or equal to the standard) without the Project, and the addition of traffic associated with the Project degrades the level of service to worse than the standard.
2. The facility is operating at an unacceptable level of service (worse than the standard) without the Project, and the addition of traffic associated with the Project causes operations to exceed the stated impact threshold.

Table TC-7: Level of Service Standards and Thresholds of Significance

Jurisdiction	Area	LOS Policy	Thresholds of Significance			Notes
			Signalized Intersection	Unsignalized Intersection	Roadway Segment	
County of Sacramento	Inside Urban Service Boundary	E	> 5 seconds (intersection average)	> 5 seconds (movement / approach) and meet traffic signal warrant	> .05 V/C	
	Outside Urban Service Boundary	D				
City of Sacramento	Base	D	≥ 5 seconds (intersection average)		≥ .02 V/C	Deficient LOS may be accepted provided provisions are made to improve the overall system and / or promote non-vehicular transportation
	Exempt Areas	E / F				
City of Elk Grove	All	D	≥ 5 seconds (intersection average)		≥ .05 V/C	
City of Folsom	Base	C	≥ 5 seconds (intersection average)		Not Applicable	
	South of US 50 Specific Plan	D				
City of Rancho Cordova	All	D	> 5 seconds (intersection average)	> 5 seconds (movement / approach) and meet traffic signal warrant	> .05 V/C	

Sources: Traffic Impact Analysis Guidelines, County of Sacramento, July 2004; Sacramento 2030 General Plan, Master Environmental Impact Report, Certified March 3, 2009; Elk Grove General Plan Circulation Element, Adopted November 19, 2003, Reflects Amendments through July 22, 2009; City of Folsom General Plan, 1993; Folsom South of U.S. Highway 50 Specific Plan DEIR/DEIS, June 2010; City of Rancho Cordova General Plan Circulation Element, June 26, 2006.

Note: V/C refers to volume-to-capacity ratio.

FREEWAY FACILITIES

Caltrans considers the following to be significant impacts:

- Off-ramps with vehicle queues that extend into the ramp's deceleration area or onto the freeway.
- Project traffic increases that cause any ramp's merge / diverge level of service to be worse than the freeway's level of service.
- Project traffic increases that cause the freeway level of service to deteriorate beyond level of service threshold defined in the Caltrans Route Concept Report for the facility.
- The expected ramp queue is greater than the storage capacity.

BICYCLE AND PEDESTRIAN FACILITIES

Bicycle facilities include Class I (off-street facilities), Class II (on-street bicycle lanes identified with signage and markings), and Class III (on-street bicycle routes identified by signage). Pedestrian facilities are composed of paths, sidewalks, and pedestrian crossings. A bicycle or pedestrian impact is considered significant if the proposed Project would:

- Eliminate or adversely affect an existing bikeway or pedestrian facility in a way that would discourage its use;
- Interfere with the implementation of a planned bikeway as shown in the Bicycle Master Plan, or be in conflict with the Pedestrian Master Plan; or
- Result in unsafe conditions for bicyclists or pedestrians, including unsafe bicycle/ pedestrian, bicycle/ motor vehicle or pedestrian / motor vehicle conflict.

TRANSIT FACILITIES

Transit facilities include shuttle services, bus service, bus rapid transit (BRT), and light-rail facilities. A project is considered to have a significant impact on the public transit system if the project would generate ridership which, when added to existing or future ridership, exceeds available or planned system capacity. An impact may also be significant if a project would conflict with or obstruct implementation of a transit plan.

RURAL ROADWAY FUNCTIONALITY

Of specific concern in the study area of this project is the functionality of substandard rural roadways. The County's current rural roadway standard consists of two-twelve foot wide travel lanes and six-foot wide paved shoulders. Therefore, any rural roadway not fitting this definition can be considered substandard.

Many of the existing rural roadways in the study area have travel lanes as narrow as 10 feet wide with no roadside shoulders. These roadways were constructed many years ago and tended to serve as roadway connections between small towns and communities and to serve as farm to market roadways. While these narrow roadways have adequately served the travel demand of the historical past, they are not intended to serve the greater travel demands that nearby residential and commercial development may impose.

The County expects that the functionality of these roadways will change with nearby development, the increase in population, the introduction of various modes of travel in the study area, and the addition of project traffic on these substandard roadways. No longer will these roadways only serve farm to market and small communities. With these changes in functionality of the roadway comes the possibility of increased interactions between varying modes of travel (i.e. pedestrians, bicyclists, etc.) as well as the increased interaction between a greater number of vehicles on substandard roads.

General Plan Policy CI-1 states: Provide complete streets to provide safe and efficient access to a diversity of travel modes for all urban, suburban and rural land uses within Sacramento County. Within rural areas of the County, a complete street may be accommodated through roadway shoulders of sufficient width or other means to accommodate all modes of travel.

General Plan Policy CI-7 states: Plan and construct transportation facilities as delineated on the Transportation Plan of the Sacramento County General Plan. Transportation facilities shall be consistent with the Sacramento County, Municipal Services Agency Improvement Standards.

General Plan Policy CI-10 states Land development projects shall be responsible to mitigate the project's adverse impacts to local and regional roadways.

Therefore, the County has applied an impact standard to these substandard roadways as follows:

Impacts to substandard rural roadway functionality are considered significant if the proposed project would:

- Cause the substandard rural roadway to exceed an average daily traffic volume of 6,000 daily vehicles; or
- Add 600 or more new daily vehicle trips to a substandard rural roadway that already carries 6,000 or more daily vehicles.

Significant impacts shall be mitigated by requiring reconstruction of the substandard rural roadway to the County standard of 12-foot vehicle lanes with 6-foot paved shoulders.

VEHICLE MILES TRAVELED (VMT)

OPR and the State Natural Resources Agency submitted updated CEQA Guidelines to the Office of Administrative Law for final approval to implement SB 743. Under SB 743, VMT is the primary metric of transportation impacts. At the time of writing this Final EIR, Sacramento County has not formally adopted VMT significance thresholds, but policy language containing the significance thresholds has been drafted consistent with OPR’s Technical Advisory and was presented to the County Planning Commission on June 11, 2020. The Planning Commission unanimously recommended approval of the draft VMT significance thresholds to the Board of Supervisors. A Board hearing date for adoption of the VMT significance thresholds is pending. This section describes the VMT analysis that was prepared for the project in a manner consistent with the County’s proposed VMT significance thresholds.

Starting on July 1, 2020, VMT analysis in CEQA documents is required statewide. If an environmental document has not yet been sent out for public review before July 1, 2020, the agency’s environmental document must use VMT for analyzing transportation impacts using VMT as of July 1, 2020. CEQA Guidelines Section 15007(c) states that CEQA documents that meet requirements in effect when the document is released for public review do not need to be revised to include new requirements taking effect before the document is fully approved. (CEQA Guidelines, § 15007(c).) Because the effective date for statewide implementation of the VMT metric is July 1, 2020, agencies that have published CEQA documents for public review prior to July 1 using an LOS metric do not need to revise these documents to include a VMT analysis (<https://opr.ca.gov/ceqa/updates/sb-743/faq.html>). The Project Draft EIR was released for public review on July 27, 2018; therefore, VMT analysis is not required. However, the VMT analysis was voluntarily included in the Draft EIR based on the draft OPR VMT guidance available at that time. No significance determination was made in the Draft EIR because the OPR guidance was still draft and the CEQA Guidelines had not been amended.

At the time of this writing, ~~the updates to the CEQA Guidelines have not been formally adopted, and~~ Sacramento County has not yet adopted a VMT significance threshold. In lieu of an adopted significance threshold, OPR’s Technical Advisory recommends a threshold of 15 percent below the per capita VMT of existing development. In the Sacramento region, the regional average per capita VMT is calculated in the analysis done for SACOG’s Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS). **At the time the Joint Transportation Impact Study began in 2013, the current available regional average is 18.2 VMT per capita, which uses the 2012 MTP/SCS as a baseline for modeling the transportation network and land uses within the study area.** A 15 percent reduction translates to a significance threshold of 15.5 VMT per capita.

VMT analysis of the Project **in the Draft EIR** was conducted based on SACSIM model runs using land use datasets and networks from Jackson Highway Corridor TIS

“Cumulative + all projects” scenario. These results include the assumption of a higher auto operating cost for 2035 forecasts, which is consistent with SACOG’s modeling of the MTP/SCS for 2035. Fehr & Peers studied the potential for claiming additional VMT reductions to account for factors not included in the SACSIM model, such as the effects of employer-based Transportation Demand Management programs and Intelligent Transportation Systems programs. Similar off-model reductions for GHG generation were reviewed by California Air Resources Board as part of the technical review of SACOG’s SCS. Fehr & Peers determined that “off model” VMT adjustments of 1.5 to 3.2 percent were reasonable. For this analysis, the VMT calculation is based on mid-point, 2.4 percent off-model reduction. The travel demand model and analysis reports the Project’s household-generated VMT per capita as 17.5, or a 3.8 percent reduction from the regional average.

After publication of the Draft EIR in July 2018, OPR’s final Technical Advisory on Evaluating Transportation Impacts was published in December 2018. The final Technical Advisory provides more detailed guidance for larger projects such as Specific Plans, including separating residential VMT per capita from VMT per employee. Sacramento County also prepared a local methodology consistent with OPR’s Technical Advisory. DKS provided a technical memorandum (Appendix TR-3) with updated VMT calculations based on Sacramento County’s methodology. The updated VMT calculations are summarized below in Table TC-8.

Table TC-8: Estimated VMT per Capita and VMT per Employee

Modeled Scenario	Area	VMT/capita	VMT/employee
County	100%	17.6	16.4
Significance Threshold	85%	15.0	13.9
Region		17.6	16.3
Existing Conditions - No Project	Region	17.9	19.1
	County	17.2	20.0
Existing plus NewBridge Project	Region	17.9	19.2
	County	17.3	20.0
	NewBridge	22.0	25.2
Cumulative plus NewBridge Project	Region	17.2	17.3
	County	16.6	16.7
	NewBridge	18.5	22.2

The NewBridge project’s VMT per capita and VMT per employee exceed the County’s draft significance threshold in both the Existing Plus Project and Cumulative Plus Project scenarios. The Project includes the following VMT

reduction measures and CAPCOA Mitigation Measures (numbering is presented for informational purposes²):

- **Implementation of Transportation System Management (TSM) Plan projects (TRT-1);**
- **Consistency with County General Plan Policy LU-120;**
- **Provides 1,110 multi-family units (36.1 percent of housing stock) in densities greater than 23 units per acre (LUT-1);**
- **Overall density of 9.6 dwelling units per acre (LUT-1);**
- **Bicycle and pedestrian connections throughout site and with surrounding developments (LUT-8 and SDT-1);**
- **Designed consistent with SACOG Blueprint principles and the sustainability and transportation principles of the MTP/SCS;**
- **Transit facilities complementary to the bus rapid transit routes planned on Jackson Road and Sunrise Boulevard, including transit routes and stops (LUT-5, TST-1, TST-2, TST-3, and TST-5);**
- **All residential units are planned within one mile of three amenity categories (public elementary school, parks, and commercial center) (LUT-3);**
- **93 percent of the residential units would be within one mile of a fourth amenity category (community garden) (LUT-3);**
- **81 percent of the residential units would be within one mile of the office/office employment center (LUT-3);**
- **Increased diversity via mix of uses (LUT-1);**
- **96 percent of the residential units would be within one-half mile walk of a planned transit stop (LUT-5 and TST-2); and**
- **Project site is within five miles of approximately 62,276 existing jobs in the area, as well as proposed employment uses within project area.**

In addition to these Project components, Mitigation Measures TC-3 and TC-4 require construction of the proposed bicycle and pedestrian network and transit service consisting of 15-minute peak hour headways and 30-minute off-peak headways that is phased in concurrent with buildout over time. The project's Development Agreement (Section 2.3.6) also requires implementation of Trip Reduction Services for residents and non-residential uses within the Project area to be phased as development occurs such that services are available to establish trip reduction behavior within NSP phases. Trip Reduction Services may include, but shall not be limited to, including membership in a transportation management association, commute trip reduction, transit services, transit improvements, rideshare matching and vanpool coordination, commuter financial incentives, telework and/or flextime support, guaranteed ride home programs, parking management, shared parking coordination, special event transport management, transportation access guides, wayfinding, and multi-modal navigation tools.

² CAPCOA. *Quantifying Greenhouse Gas Mitigation Measures*. August 2010.

EXISTING CONDITIONS

Peak period (7:00 to 9:00 a.m. and 4:00 to 6:00 p.m.) intersection turning movement counts were collected on Tuesdays, Wednesdays, and Thursdays in April and early May, 2013 for the existing intersections in the study area. Peak hour counts (a.m. and p.m.), traffic volumes and lane geometry are illustrated in the technical appendix.

Daily (24-hour) segment counts were collected on Tuesdays, Wednesdays, and Thursdays in April and Early May, 2013 for the existing segments in the study area. The existing daily traffic volumes are summarized in Table TC-10.

Peak period traffic volumes on the US 50 freeway system (mainline and ramps) were obtained from the California Freeway Performance Measurement System (PeMS). Data recorded on April 16 through 18, 2013, and April 23 through 25, 2013 were utilized in these analyses. Peak hour volumes are summarized in the technical appendix.

Since the traffic counts were collected, there has not been a significant amount of development in the study area that would warrant collection of new traffic counts.

INTERSECTION ANALYSIS

Existing intersection geometry (number of approach lanes and traffic control) is illustrated in the Traffic Study.

Table TC-9 summarizes the existing a.m. and p.m. peak hour operating conditions at the study area intersections, and the performance of the segment compared to the level of service policies of the assigned jurisdiction. At two-way stop unsignalized intersections, Sacramento County determines conformity with the level of service policy on an approach / movement basis, while the City of Sacramento utilizes a calculation of the average intersection level of service (similar to signalized intersections and all-way stop intersections). Details of the intersection operating condition calculations are included in the Traffic Study.

The following intersections do not meet the level of service policies in the existing conditions:

- South Watt Avenue and Elder Creek Road - a.m. and p.m. peak hours
- Bradshaw Road and Folsom Boulevard - a.m. peak hour
- Happy Lane and Old Placerville Road - northbound left turn - a.m. and p.m. peak hours
- Mather Field Road and Rockingham Drive - a.m. peak hour
- Zinfandel Drive and US 50 Eastbound Ramps / Gold Center Drive - p.m. peak hour
- Sunrise Boulevard and Jackson Road - a.m. peak hour
- Grant Line Road and Jackson Road - a.m. and p.m. peak hours
- Grant Line Road and Wilton Road - a.m. and p.m. peak hours

Table TC-9: Existing Intersection Levels of Service

Intersection	Jurisdiction	Governing Jurisdiction / Area ¹	LOS Policy Criteria	AM Peak Hour			PM Peak Hour			
				Existing			Existing			
				Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
1	Howe Ave & College Town Dr/US 50 WB Ramps	City of Sacramento	City Exempt Roadway	E	Signal	D	36.6	Signal	D	44.4
2	Howe Ave & US 50 EB Ramps	City of Sacramento	City Exempt Roadway	E	Signal	B	16.9	Signal	C	20.5
3	Power Inn Rd/Howe Ave & Folsom Blvd	City of Sacramento	City Exempt Roadway	E	Signal	D	39.1	Signal	D	55.0
4	Power Inn Rd & 14th Ave	City of Sacramento	City Default	D	Signal	C	31.5	Signal	D	39.6
5	Power Inn Rd & Fruitridge Rd	City of Sacramento	City Default	D	Signal	D	43.4	Signal	C	33.5
6	Jackson Rd/Notre Dame Dr. & Folsom Blvd.	City of Sacramento	City Exempt Roadway	E	Signal	D	36.8	Signal	C	32.1
7	Florin Perkins Rd/Julliard Dr. & Folsom Blvd	City of Sacramento	City Exempt Roadway	E	Signal	D	39.0	Signal	E	55.6
8	Florin Perkins Rd & Kiefer Blvd.	City of Sacramento	City Exempt Light Rail	E	Two-way stop	A	2.8	Two-way stop	A	3.2
	<i>Westbound Left Turn</i>					<i>C</i>	<i>20.1</i>		<i>C</i>	<i>23.3</i>
	<i>Westbound Right Turn</i>					<i>B</i>	<i>13.3</i>		<i>B</i>	<i>12.6</i>
	<i>Southbound Left Turn</i>					<i>A</i>	<i>10.0</i>		<i>B</i>	<i>10.9</i>

Intersection	Jurisdiction	Governing Jurisdiction / Area ¹	LOS Policy Criteria	AM Peak Hour			PM Peak Hour			
				Existing			Existing			
				Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
9	Florin Perkins Rd & Jackson Rd	City of Sacramento	City Exempt Light Rail	E	Signal	D	51.5	Signal	D	54.1
10	Florin Perkins Rd & Fruitridge Rd	City of Sacramento	City Exempt Roadway	E	Signal	C	25.1	Signal	C	25.4
11	Florin Perkins Rd & Elder Creek Rd	City of Sacramento	City Exempt Roadway	E	Signal	C	25.7	Signal	C	26.2
12	Watt Ave & Folsom Blvd.	County	County Urban	E	Signal	E	66.2	Signal	E	71.9
13	S. Watt Ave. & Reith Ct/Manlove Rd	County	County Urban	E	Signal	B	19.6	Signal	D	54.1
14	S. Watt Ave & Kiefer Blvd.	County	County Urban	E	Signal	E	56.0	Signal	E	75.9
15	S. Watt Ave & Canberra Dr.	County	County Urban	E	Signal	B	11.5	Signal	A	9.7
16	S. Watt Ave & Jackson Rd	County	County Urban	E	Signal	E	62.5	Signal	E	66.4
17	S. Watt Ave & Fruitridge Rd	City of Sacramento / County	City Default	D	Signal	D	38.1	Signal	D	41.7
18	S. Watt Ave & Elder Creek Rd	City of Sacramento / County	City Default	D	Signal	E	62.7	Signal	E	68.8

Intersection		Jurisdiction	Governing Jurisdiction / Area ¹	LOS Policy Criteria	AM Peak Hour			PM Peak Hour		
					Existing			Existing		
					Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)
20	Elk Grove Florin Rd/S. Watt Ave. & Florin Rd	County	County Urban	E	Signal	D	54.7	Signal	D	51.8
21	Elk Grove Florin Rd & Gerber Rd	County	County Urban	E	Signal	D	49.1	Signal	E	64.6
23	Hedge Ave & Jackson Rd	County	County Urban	E	Signal	D	35.1	Signal	D	37.3
24	Hedge Ave & Fruitridge Rd	County	County Urban	E	All-way stop	B	13.6	All-way stop	A	9.4
25	Hedge Ave & Elder Creek Rd	County	County Urban	E	All-way stop	C	15.9	All-way stop	B	11.6
26	Hedge Ave & Tokay Lane	County	County Urban	E	Two-way stop	A	0.4	Two-way stop	A	0.2
	<i>Northbound Left Turn</i>			<i>E</i>		<i>A</i>	<i>0.0</i>		<i>A</i>	<i>0.0</i>
	<i>Southbound Left Turn</i>			<i>E</i>		<i>A</i>	<i>8.0</i>		<i>A</i>	<i>7.3</i>
	<i>Eastbound</i>			<i>E</i>		<i>B</i>	<i>12.2</i>		<i>B</i>	<i>10.2</i>
	<i>Westbound</i>			<i>E</i>		<i>B</i>	<i>11.1</i>		<i>A</i>	<i>9.6</i>
27	Hedge Ave & Florin Rd	County	County Urban	E	All-way stop	B	12.9	All-way stop	B	11.1
28	Mayhew Rd & Kiefer Blvd	County	County Urban	E	Signal	D	48.6	Signal	D	51.1

Intersection	Jurisdiction	Governing Jurisdiction / Area ¹	LOS Policy Criteria	AM Peak Hour			PM Peak Hour		
				Existing			Existing		
				Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)
29 Mayhew Rd & Jackson Rd	County	County Urban	E	Two-way stop	A	1.8	Two-way stop	A	1.9
	<i>Northbound Through - Left Turn</i>		<i>E</i>		<i>D</i>	<i>27.6</i>		<i>D</i>	<i>34.0</i>
	<i>Northbound Right Turn</i>		<i>E</i>		<i>B</i>	<i>11.8</i>		<i>C</i>	<i>15.0</i>
	<i>Southbound</i>		<i>E</i>		<i>C</i>	<i>18.3</i>		<i>C</i>	<i>24.9</i>
	<i>Eastbound Left Turn</i>		<i>E</i>		<i>A</i>	<i>8.9</i>		<i>A</i>	<i>8.4</i>
	<i>Westbound Left Turn</i>		<i>E</i>		<i>A</i>	<i>8.3</i>		<i>A</i>	<i>9.3</i>
30 Mayhew Rd & Fruitridge Rd	County	County Urban	E	Two-way stop	A	6.2	Two-way stop	A	5.1
	<i>Northbound Left Turn</i>		<i>E</i>		<i>A</i>	<i>0.0</i>		<i>A</i>	<i>7.4</i>
	<i>Eastbound</i>		<i>E</i>		<i>A</i>	<i>9.2</i>		<i>A</i>	<i>9.2</i>

Intersection	Jurisdiction	Governing Jurisdiction / Area ¹	LOS Policy Criteria	AM Peak Hour			PM Peak Hour			
				Existing			Existing			
				Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
31	Mayhew Rd & Elder Creek Rd	County	County Urban	E	Two-way stop	A	0.2	Two-way stop	A	0.3
	<i>Northbound</i>			<i>E</i>		<i>B</i>	<i>11.9</i>		<i>B</i>	<i>10.9</i>
	<i>Southbound</i>			<i>E</i>		<i>B</i>	<i>11.1</i>		<i>A</i>	<i>9.8</i>
	<i>Eastbound Left Turn</i>			<i>E</i>		<i>A</i>	<i>8.3</i>		<i>A</i>	<i>7.6</i>
	<i>Westbound Left Turn</i>			<i>E</i>		<i>A</i>	<i>7.5</i>		<i>A</i>	<i>0.0</i>
32	Woodring Dr & Zinfandel Dr				Two-way stop	A	5.9	Two-way stop	A	3.0
	<i>Eastbound</i>					<i>A</i>	<i>9.3</i>		<i>A</i>	<i>9.3</i>
	<i>Northbound Left Turn</i>					<i>A</i>	<i>0.0</i>		<i>A</i>	<i>0.0</i>
33	Bradshaw Rd & Folsom Blvd.	City of Rancho Cordova / County	Rancho Cordova	D	Signal	E	56.7	Signal	D	49.9
34	Bradshaw Rd & US 50 WB Ramps	City of Rancho Cordova / County	Rancho Cordova	D	Signal	B	15.9	Signal	B	15.2
35	Bradshaw Rd & US 50 EB Ramps	City of Rancho Cordova / County	Rancho Cordova	D	Signal	C	24.4	Signal	B	16.0
36	Bradshaw Rd & Old Placerville Rd	City of Rancho Cordova / County	Rancho Cordova	D	Signal	D	45.9	Signal	D	52.0
37	Bradshaw Rd & Kiefer Blvd	County	County Urban	E	Signal	D	45.7	Signal	E	66.2

Intersection	Jurisdiction	Governing Jurisdiction / Area ¹	LOS Policy Criteria	AM Peak Hour			PM Peak Hour			
				Existing			Existing			
				Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
38	Bradshaw Rd & Jackson Rd	County	County Urban	E	Signal	E	73.1	Signal	E	59.4
39	Bradshaw Rd & Elder Creek Rd	County	County Urban	E	Signal	D	36.8	Signal	D	36.1
40	Bradshaw Rd & Florin Rd	County	County Urban	E	Signal	D	38.1	Signal	D	53.6
41	Bradshaw Rd & Gerber Rd	County	County Urban	E	Signal	E	72.2	Signal	D	49.9
42	Happy Lane & Old Placerville Rd	City of Rancho Cordova / County	Rancho Cordova	D	Two-way stop	A	7.3	Two-way stop	A	4.7
	<i>Northbound Left Turn</i>			<i>D</i>		<i>F</i>	<i>64.8</i>		<i>F</i>	<i>95.9</i>
	<i>Northbound Right Turn</i>			<i>D</i>		<i>D</i>	<i>30.6</i>		<i>C</i>	<i>15.4</i>
	<i>Westbound Left Turn</i>			<i>D</i>		<i>B</i>	<i>10.2</i>		<i>B</i>	<i>10.1</i>
45	Excelsior Rd & Jackson Rd	County	County Urban	E	Signal	D	36.7	Signal	D	40.3
46	Excelsior Rd & Elder Creek Rd	County	County Urban	E	Two-way stop	A	3.5	Two-way stop	A	2.7
	<i>Northbound Left Turn</i>			<i>E</i>		<i>A</i>	<i>7.5</i>		<i>A</i>	<i>8.0</i>
	<i>Eastbound</i>			<i>E</i>		<i>C</i>	<i>18.6</i>		<i>B</i>	<i>12.3</i>

Intersection	Jurisdiction	Governing Jurisdiction / Area ¹	LOS Policy Criteria	AM Peak Hour			PM Peak Hour			
				Existing			Existing			
				Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
47	Excelsior Rd & Florin Rd	County	County Urban	E	All-way stop	C	24.9	All-way stop	B	12.5
48	Excelsior Rd & Gerber Rd/Birch Ranch Dr	County	County Urban	E	All-way stop	B	14.0	All-way stop	B	10.6
49	Mather Field Rd & US 50 WB Ramps	City of Rancho Cordova	Rancho Cordova	D	Signal	C	24.7	Signal	A	9.4
50	Mather Field Rd & US 50 EB Ramps	City of Rancho Cordova	Rancho Cordova	D	Signal	C	27.7	Signal	B	13.4
51	Mather Field Rd & Rockingham Dr	City of Rancho Cordova	Rancho Cordova	D	Signal	E	56.4	Signal	D	54.7
52	Mather Blvd & Douglas Rd	County	County Urban	E	All-way stop	E	39.3	All-way stop	C	15.5
53	Zinfandel Dr & US 50 WB Ramps	City of Rancho Cordova	Rancho Cordova	D	Signal	B	16.4	Signal	D	51.7
54	Zinfandel Dr & US 50 EB Ramps/Gold Center Dr	City of Rancho Cordova	Rancho Cordova	D	Signal	D	40.0	Signal	E	60.1
55	Zinfandel Dr & White Rock Rd	City of Rancho Cordova	Rancho Cordova	D	Signal	D	47.7	Signal	D	54.7
56	Zinfandel Dr & Data Dr	City of Rancho Cordova	Rancho Cordova	D	Signal	D	49.3	Signal	D	52.9

Intersection	Jurisdiction	Governing Jurisdiction / Area ¹	LOS Policy Criteria	AM Peak Hour			PM Peak Hour			
				Existing			Existing			
				Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
57	Zinfandel Dr & International Dr	City of Rancho Cordova	Rancho Cordova	D	Signal	C	34.0	Signal	D	48.5
58	Zinfandel Dr & Douglas Rd	County	County Urban	E	Signal	E	55.5	Signal	D	54.2
60	Eagles Nest Rd & Jackson Rd	County	County Urban	E	Two-way stop	A	2.3	Two-way stop	A	3.6
	<i>Northbound</i>			<i>E</i>		<i>C</i>	<i>22.0</i>		<i>C</i>	<i>23.8</i>
	<i>Southbound</i>			<i>E</i>		<i>B</i>	<i>13.9</i>		<i>C</i>	<i>22.0</i>
	<i>Eastbound Left Turn</i>			<i>E</i>		<i>A</i>	<i>8.8</i>		<i>A</i>	<i>7.9</i>
	<i>Westbound Left Turn</i>			<i>E</i>		<i>A</i>	<i>7.9</i>		<i>A</i>	<i>8.7</i>
61	Eagles Nest Rd & Florin Rd	County	County Urban	E	Two-way stop	A	2.3	Two-way stop	A	2.6
	<i>Northbound</i>			<i>E</i>		<i>B</i>	<i>12.7</i>		<i>B</i>	<i>12.1</i>
	<i>Southbound</i>			<i>E</i>		<i>B</i>	<i>10.0</i>		<i>B</i>	<i>10.5</i>
	<i>Eastbound Left Turn</i>			<i>E</i>		<i>A</i>	<i>7.7</i>		<i>A</i>	<i>7.7</i>
	<i>Westbound Left Turn</i>			<i>E</i>		<i>A</i>	<i>0.0</i>		<i>A</i>	<i>7.6</i>
62	Sunrise Blvd & US 50 WB Ramps	City of Rancho Cordova	Rancho Cordova	D	Signal	D	44.7	Signal	B	19.7
63	Sunrise Blvd & US 50 EB Ramps	City of Rancho Cordova	Rancho Cordova	D	Signal	B	16.9	Signal	B	17.6

Intersection		Jurisdiction	Governing Jurisdiction / Area ¹	LOS Policy Criteria	AM Peak Hour			PM Peak Hour		
					Existing			Existing		
					Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)
64	Sunrise Blvd & Folsom Blvd	City of Rancho Cordova	Rancho Cordova	D	Signal	D	54.4	Signal	D	48.6
65	Sunrise Blvd & White Rock Rd	City of Rancho Cordova	Rancho Cordova	D	Signal	D	47.8	Signal	D	51.6
66	Sunrise Blvd & International Dr/Monier Circle	City of Rancho Cordova	Rancho Cordova	D	Signal	D	47.8	Signal	D	45.8
67	Sunrise Blvd & Douglas Rd	City of Rancho Cordova	Rancho Cordova	D	Signal	D	51.7	Signal	D	46.5
68	Sunrise Blvd & Chrysanthy Blvd	City of Rancho Cordova / County	Rancho Cordova	D	Signal	C	27.0	Signal	C	21.0
69	Sunrise Blvd & Kiefer Blvd	City of Rancho Cordova / County	Rancho Cordova	D	Signal	D	53.6	Signal	C	27.0
70	Sunrise Blvd & Jackson Rd	City of Rancho Cordova / County	Rancho Cordova	D	Signal	E	57.0	Signal	D	47.2
71	Sunrise Blvd & Florin Rd	County	County Urban	E	Signal	B	11.3	Signal	D	48.3
72	Sheldon Lake Dr/Sunrise Blvd & Grant Line Rd	County	County Urban	E	Signal	D	43.2	Signal	D	40.7
73	Hazel Ave & Tributary Point Dr/US 50 WB Off-ramp	County	County Urban	E	Signal	C	31.2	Signal	D	41.4

Intersection		Jurisdiction	Governing Jurisdiction / Area ¹	LOS Policy Criteria	AM Peak Hour			PM Peak Hour		
					Existing			Existing		
					Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)
74	Hazel Ave & US 50 EB Ramps	City of Rancho Cordova / County	Rancho Cordova	D	Signal	C	20.6	Signal	C	29.9
75	Hazel Ave & Folsom Blvd	City of Rancho Cordova / County	Rancho Cordova	D	Signal	D	51.7	Signal	D	46.7
76	Prairie City Rd & White Rock Rd	City of Folsom / County	Folsom	C	Signal	B	19.2	Signal	B	15.0
77	Grant Line Rd & White Rock Rd	County	County Urban	E	Signal	B	10.9	Signal	B	11.2
78	Grant Line Rd & Douglas Rd	City of Rancho Cordova / County	Rancho Cordova	D	All-way stop	C	15.2	All-way stop	B	12.3
79	Grant Line Rd & Kiefer Blvd	City of Rancho Cordova / County	Rancho Cordova	D	All-way stop	B	11.4	All-way stop	B	10.5
80	Grant Line Rd & Jackson Rd	City of Rancho Cordova / County	Rancho Cordova	D	Signal	E	74.0	Signal	E	78.9
81	Watt Ave & US-50 EB Ramps	City of Sacramento / County	City Exempt Light Rail	E	Signal	B	13.0	Signal	B	14.9
82	Watt Ave & US-50 WB Ramps	City of Sacramento / County	City Default	D	Signal	C	32.9	Signal	C	28.6
83	Mayhew Rd & Folsom Blvd.	County	County Urban	E	Signal	B	19.8	Signal	C	20.1

Intersection	Jurisdiction	Governing Jurisdiction / Area ¹	LOS Policy Criteria	AM Peak Hour			PM Peak Hour			
				Existing			Existing			
				Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
84	65th Street Expy & Fruitridge Rd	City of Sacramento	City Default	D	Signal	C	31.2	Signal	D	35.3
85	Power Inn Rd & Elder Creek Rd	City of Sacramento	City Exempt Roadway	E	Signal	D	35.2	Signal	D	36.3
86	Power Inn Rd & Florin Rd	County	County Urban	E	Signal	D	36.3	Signal	D	45.9
87	Florin Perkins Rd & Florin Rd	County	County Urban	E	Signal	D	36.7	Signal	C	32.5
88	Bradshaw Rd & Calvine Rd	City of Elk Grove / County	Elk Grove	D	Signal	C	30.5	Signal	D	36.9
89	Vineyard Rd & Calvine Rd	City of Elk Grove / County	Elk Grove	D	Signal	C	30.8	Signal	C	34.9
90	Excelsior Rd & Calvine Rd	City of Elk Grove / County	Elk Grove	D	All-way stop	C	16.6	All-way stop	B	13.0
91	Grant Line Rd & Eagles Nest Rd/Sloughhouse Rd	County	County Urban	E	Signal	D	51.7	Signal	D	46.5
92	Grant Line Rd & Calvine Rd	City of Elk Grove / County	Elk Grove	D	Signal	C	21.4	Signal	C	24.0
93	Grant Line Rd & Dwy/Wilton Rd	City of Elk Grove	Elk Grove	D	Signal	E	65.9	Signal	E	64.8

Table TC-9 continued										
Intersection	Jurisdiction	Governing Jurisdiction / Area ¹	LOS Policy Criteria	AM Peak Hour			PM Peak Hour			
				Existing			Existing			
				Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
94	Grant Line Rd & Bond Rd/Wrangler Dr	City of Elk Grove	Elk Grove	D	Signal	C	33.3	Signal	D	46.4

¹ The following classifications are used to determine the applicable LOS Policy:
 County Rural - Sacramento County, Outside Urban Service Boundary
 County Urban - Sacramento County, Within Urban Service Boundary
 City Default - City of Sacramento, Base Level of Service Standard
 City Exempt Roadway - City of Sacramento, Roadways Exempt from Base Level of Service Standard
 City Exempt Light Rail - City of Sacramento, Within 1/2 Mile Walking Distance of Light Rail Station

ROADWAY SEGMENT ANALYSIS

Level of service analyses were also conducted for the roadway segments in the study area based upon daily traffic volumes, number of traffic lanes between intersections, and roadway characteristics. Table TC-10 summarizes the roadway levels of service, and the performance of the segment compared to the level of service policies of the assigned jurisdiction.

The following segments do not meet the level of service policies in the existing conditions:

- Bradshaw Road - US 50 to Lincoln Village Drive
- Elk Grove Florin Road - Florin Road to Gerber Road
- Folsom Boulevard - Howe Avenue to Jackson Road
- Grant Line Road - Calvine Road to Bond Road
- South Watt Avenue - Jackson Road to Florin Road
- Sunrise Boulevard - US 50 to Trade Center Drive
- Sunrise Boulevard - Kiefer Boulevard to Jackson Road
- Watt Avenue - US 50 to Folsom Boulevard

Table TC-10: Existing Roadway Segment Levels of Service

ID	Roadway	Segment		Jurisdiction	Governing Jurisdiction / Area ¹	LOS Policy Criteria	Existing				
		From	To				Travel Lanes	Facility Type ¹	Daily Volume	Volume / Capacity Ratio	Level of Service
1	Bradshaw Rd	Folsom Blvd	US 50	Rancho Cordova/County	Rancho Cordova	D	6	Arterial M	20,592	0.38	A
2	Bradshaw Rd	US 50	Lincoln Village Dr	Rancho Cordova/County	Rancho Cordova	D	6	Arterial M	52,590	0.97	E
3	Bradshaw Rd	Lincoln Village Dr	Old Placerville Rd	Rancho Cordova/County	Rancho Cordova	D	6	Arterial M	42,787	0.79	C
4	Bradshaw Rd	Old Placerville Rd	Goethe Rd	County	County Urban	E	6	Arterial M	38,984	0.72	C
5	Bradshaw Rd	Goethe Rd	Kiefer Blvd	County	County Urban	E	4	Arterial M	28,651	0.80	C
6	Bradshaw Rd	Kiefer Blvd	Jackson Rd	County	County Urban	E	4	Arterial M	30,726	0.85	D
7	Bradshaw Rd	Jackson Rd	Elder Creek Rd	County	County Urban	E	4	Arterial M	22,871	0.64	B
8	Bradshaw Rd	Elder Creek Rd	Florin Rd	County	County Urban	E	4	Arterial M	22,265	0.62	B
9	Bradshaw Rd	Florin Rd	Gerber Rd	County	County Urban	E	4	Arterial M	22,883	0.64	B
10	Bradshaw Rd	Gerber Rd	Calvine Rd	County	County Urban	E	4	Arterial M	16,984	0.47	A
11	Calvine Rd	Waterman Rd	Bradshaw Rd	Elk Grove/County	Elk Grove	D	4	Arterial M	16,015	0.44	A
12	Calvine Rd	Bradshaw Rd	Vineyard Rd	Elk Grove/County	Elk Grove	D	4	Arterial M	12,395	0.34	A
13	Calvine Rd	Vineyard Rd	Excelsior Rd	Elk Grove/County	Elk Grove	D	2	Arterial M	6,036	0.34	A
14	Chrysanthy Blvd	Sunrise Blvd	Rancho Cordova Pkwy	Rancho Cordova/County	Rancho Cordova	D	4	Arterial M	3,411	0.09	A
15	Douglas Rd	Mather Blvd	Zinfandel Dr	County	County Urban	E	2	Arterial M	6,635	0.37	A
16	Douglas Rd	Zinfandel Dr	Sunrise Blvd	Rancho Cordova/County	Rancho Cordova	D	2	Arterial M	8,369	0.46	A
17	Douglas Rd	Sunrise Blvd	Rancho Cordova Pkwy	Rancho Cordova	Rancho Cordova	D	5	Arterial M	3,674	0.10	A
18	Douglas Rd	Rancho Cordova Pkwy	Grant Line Rd	Rancho Cordova	Rancho Cordova	D	2	Arterial M	3,674	0.20	A
19	Eagles Nest Rd	Kiefer Blvd	Jackson Rd	County	County Urban	E	2	Arterial M	740	0.04	A
20	Eagles Nest Rd	Jackson Rd	Florin Rd	County	County Urban	E	2	Arterial M	517	0.03	A
21	Eagles Nest Rd	Florin Rd	Grant Line Rd	County	County Urban	E	2	Arterial M	189	0.01	A
22	Elder Creek Rd	65th St	Power Inn Rd	City of Sacramento	City Exempt Roadway	E	4	Arterial M	17,891	0.50	A
23	Elder Creek Rd	Power Inn Rd	Florin-Perkins Rd	City of Sacramento	City Default	D	2	Arterial M	15,734	0.87	D
24	Elder Creek Rd	Florin Perkins Rd	South Watt Ave	City of Sacramento	City Default	D	2	Arterial M	11,092	0.62	B
25	Elder Creek Rd	South Watt Ave	Hedge Ave	County	County Urban	E	2	Arterial M	5,576	0.31	A
26	Elder Creek Rd	Hedge Ave	Mayhew Rd	County	County Urban	E	2	Arterial M	5,797	0.32	A
27	Elder Creek Rd	Mayhew Rd	Bradshaw Rd	County	County Urban	E	2	Arterial M	5,355	0.30	A
28	Elder Creek Rd	Bradshaw Rd	Excelsior Rd	County	County Urban	E	2	Arterial M	2,158	0.12	A
29	Elk Grove-Florin Rd	Florin Rd	Gerber Rd	County	County Urban	E	2	Arterial M	22,960	1.28	F
30	Excelsior Rd	Kiefer Blvd	Jackson Rd	County	County Urban	E	2	Arterial M	3,716	0.21	A
31	Excelsior Rd	Jackson Rd	Elder Creek Rd	County	County Urban	E	2	Arterial M	5,075	0.28	A
32	Excelsior Rd	Elder Creek Rd	Florin Rd	County	County Urban	E	2	Arterial M	4,203	0.23	A
33	Excelsior Rd	Florin Rd	Gerber Rd	County	County Urban	E	2	Arterial M	5,423	0.30	A

Table TC-10 continued											
ID	Roadway	Segment		Jurisdiction	Governing Jurisdiction / Area ¹	LOS Policy Criteria	Existing				
		From	To				Travel Lanes	Facility Type ¹	Daily Volume	Volume / Capacity Ratio	Level of Service
34	Excelsior Rd	Gerber Rd	Calvine Rd	County	County Urban	E	2	Arterial M	4,229	0.23	A
35	Excelsior Rd	Calvine Rd	Sheldon Rd	Elk Grove	Elk Grove	D	2	Arterial M	4,473	0.25	A
36	Florin Rd	Stockton Blvd	Power Inn Rd	County	County Urban	E	4	Arterial M	27,495	0.76	C
37	Florin Rd	Power Inn Rd	Florin-Perkins Rd	County	County Urban	E	4	Arterial M	21,595	0.60	A
38	Florin Rd	Florin-Perkins Rd	So Watt Ave/ Elk Grove Florin Rd	County	County Urban	E	4	Arterial M	14,163	0.39	A
39	Florin Rd	South Watt Ave	Hedge Ave	County	County Urban	E	2	Arterial M	7,718	0.43	A
40	Florin Rd	Hedge Ave	Mayhew Rd	County	County Urban	E	2	Arterial M	6,312	0.35	A
41	Florin Rd	Mayhew Rd	Bradshaw Rd	County	County Urban	E	2	Arterial M	6,317	0.35	A
42	Florin Rd	Bradshaw Rd	Excelsior Rd	County	County Urban	E	2	Arterial M	3,478	0.19	A
43	Florin Rd	Excelsior Rd	Sunrise Blvd	County	County Urban	E	2	Arterial M	3,835	0.21	A
44	Folsom Blvd	Howe Ave	Jackson Rd	City of Sacramento	City Exempt Roadway	E	4	Arterial M	37,516	1.04	F
45	Fruitridge Rd	65th St	Power Inn Rd	City of Sacramento	City Default	D	4	Arterial M	16,634	0.46	A
46	Fruitridge Rd	Power Inn Rd	Florin Perkins Rd	City of Sacramento	City Default	D	4	Arterial M	15,214	0.42	A
47	Fruitridge Rd	Florin Perkins Rd	South Watt Ave	City of Sacramento	City Default	D	2	Arterial M	10,280	0.57	A
48	Fruitridge Rd	South Watt Ave	Hedge Ave	City of Sacramento/ County	City Default	D	2	Arterial M	2,890	0.16	A
49	Fruitridge Rd	Hedge Ave	Mayhew Rd	County	County Urban	E	2	Arterial M	1,790	0.10	A
50	Grant Line Rd	White Rock Rd	Douglas Rd	Rancho Cordova/County	Rancho Cordova	D	2	Rural NS	7,189	0.42	D
51	Grant Line Rd	Douglas Rd	Kiefer Blvd	Rancho Cordova/County	Rancho Cordova	D	2	Rural S	6,143	0.31	C
52	Grant Line Rd	Kiefer Blvd	Jackson Rd	Rancho Cordova/County	Rancho Cordova	D	2	Rural S	5,758	0.29	C
53	Grant Line Rd	Jackson Rd	Sunrise Blvd	County	County Urban	E	2	Rural S	14,720	0.74	E
54	Grant Line Rd	Sunrise Blvd	Calvine Rd	County	County Urban	E	2	Rural S	14,812	0.74	E
55	Grant Line Rd	Calvine Rd	Sheldon Rd	Elk Grove/County	Elk Grove	D	2	Rural S	13,140	0.66	E
56	Grant Line Rd	Sheldon Rd	Wilton Rd	Elk Grove	Elk Grove	D	2	Rural S	17,459	0.87	E
57	Grant Line Rd	Wilton Rd	Bond Rd	Elk Grove	Elk Grove	D	2	Rural S	16,064	0.80	E
58	Happy Ln	Old Placerville Rd	Kiefer Blvd	County	County Urban	E	2	Rural S	4,635	0.23	C
59	Hedge Ave	Jackson Rd	Fruitridge Rd	County	County Urban	E	2	Arterial M	3,061	0.17	A
60	Hedge Ave	Fruitridge Rd	Elder Creek Rd	City of Sacramento/County	County Urban	E	2	Arterial M	3,737	0.21	A
61	Hedge Ave	Elder Creek Rd	Florin Rd	County	County Urban	E	2	Arterial M	2,722	0.15	A
62	Howe Ave	US 50	Folsom Blvd	City of Sacramento	City Exempt Roadway	E	6	Arterial M	53,849	1.00	E
63	International Dr	Mather Field Rd	Zinfandel Dr	Rancho Cordova	Rancho Cordova	D	6	Arterial M	17,500	0.32	A
64	International Dr	Zinfandel Dr	Sunrise Blvd	Rancho Cordova	Rancho Cordova	D	6	Arterial M	8,802	0.16	A

Table TC-10 continued											
ID	Roadway	Segment		Jurisdiction	Governing Jurisdiction / Area ¹	LOS Policy Criteria	Existing				
		From	To				Travel Lanes	Facility Type ¹	Daily Volume	Volume / Capacity Ratio	Level of Service
65	Jackson Rd	Folsom Blvd	Florin Perkins Rd	City of Sacramento	City Exempt Light Rail	E	2	Arterial M	12,358	0.69	B
66	Jackson Rd	Florin Perkins Rd	South Watt Ave	City of Sacramento/County	City Exempt Light Rail	E	2	Arterial M	10,414	0.58	A
67	Jackson Rd	South Watt Ave	Hedge Ave	County	County Urban	E	2	Arterial M	17,060	0.95	E
68	Jackson Rd	Hedge Ave	Mayhew Rd	County	County Urban	E	2	Arterial M	12,616	0.70	C
69	Jackson Rd	Mayhew Rd	Bradshaw Rd	County	County Urban	E	2	Arterial M	14,996	0.83	D
70	Jackson Rd	Bradshaw Rd	Excelsior Rd	County	County Urban	E	2	Arterial M	13,030	0.72	C
71	Jackson Rd	Excelsior Rd	Eagles Nest Rd	County	County Urban	E	2	Rural Hwy	10,478	0.46	D
72	Jackson Rd	Eagles Nest Rd	Sunrise Blvd	County	County Urban	E	2	Rural Hwy	9,976	0.44	D
73	Jackson Rd	Sunrise Blvd	Grant Line Rd	Rancho Cordova/County	Rancho Cordova	D	2	Rural Hwy	13,306	0.58	D
74	Kiefer Blvd	Florin Perkins Rd	South Watt Ave	City of Sacramento/County	City Exempt Light Rail	E	2	Arterial M	4,616	0.26	A
75	Kiefer Blvd	South Watt Ave	Mayhew Rd	County	County Urban	E	4	Arterial M	18,668	0.52	A
76	Kiefer Blvd	Mayhew Rd	Bradshaw Rd	County	County Urban	E	4	Arterial M	9,274	0.26	A
77	Kiefer Blvd	Bradshaw Rd	Happy Ln	County	County Urban	E	2	Arterial M	4,618	0.26	A
78	Kiefer Blvd	Zinfandel Dr	Sunrise Blvd	County	County Urban	E	2	Arterial M	656	0.04	A
79	Kiefer Blvd	Sunrise Blvd	Rancho Cordova Pkwy	Rancho Cordova	Rancho Cordova	D	2	Arterial M	2,786	0.15	A
80	Mather Blvd / Norden Ave	Von Karman St	Bleckely St	Rancho Cordova	Rancho Cordova	D	4	Arterial M	4,373	0.12	A
81	Mather Blvd	Bleckely St	Femoyer St	Rancho Cordova	Rancho Cordova	D	4	Arterial M	4,373	0.12	A
82	Mather Blvd	Femoyer St	Douglas Rd	Rancho Cordova/County	Rancho Cordova	D	2	Arterial M	4,373	0.24	A
83	Mather Blvd-Excelsior Rd	Douglas Rd	Kiefer Blvd	County	County Urban	E	2	Res Collector F	6,751	0.84	E
84	Mather Field Rd	US 50	Rockingham Dr	Rancho Cordova	Rancho Cordova	D	6	Arterial M	37,755	0.70	B
85	Mather Field Rd	Rockingham Dr	International Dr	Rancho Cordova	Rancho Cordova	D	6	Arterial M	37,520	0.69	B
86	Mather Field Rd	International Dr	Peter A McCuen Blvd	Rancho Cordova	Rancho Cordova	D	4	Arterial M	14,857	0.41	A
87	Mayhew Rd	Folsom Blvd	Goethe Rd	County	County Urban	E	2	Arterial M	6,977	0.39	A
88	Mayhew Rd	Goethe Rd	Kiefer Blvd	County	County Urban	E	2	Arterial L	6,593	0.44	A
89	Mayhew Rd	Jackson Rd	Fruitridge Rd	County	County Urban	E	2	Arterial L	1,616	0.11	A
90	Old Placerville Rd	Bradshaw Rd	Granby Dr	Rancho Cordova/County	Rancho Cordova	D	4	Arterial M	15,800	0.44	A
91	Old Placerville Rd	Granby Dr	Happy Ln	Rancho Cordova/County	Rancho Cordova	D	2	Arterial M	13,573	0.75	C
92	Old Placerville Rd	Happy Ln	Routier Rd	Rancho Cordova/County	Rancho Cordova	D	2	Arterial M	10,710	0.60	A
93	Old Placerville Rd	Routier Rd	Rockingham Dr	Rancho Cordova/County	Rancho Cordova	D	4	Arterial M	10,710	0.30	A

Table TC-10 continued											
ID	Roadway	Segment		Jurisdiction	Governing Jurisdiction / Area ¹	LOS Policy Criteria	Existing				
		From	To				Travel Lanes	Facility Type ¹	Daily Volume	Volume / Capacity Ratio	Level of Service
94	Power Inn Rd	Folsom Blvd	14th Ave	City of Sacramento	City Exempt Light Rail	E	6	Arterial M	36,175	0.67	B
95	Rockingham Dr	Old Placerville Rd	Mather Field Rd	Rancho Cordova	Rancho Cordova	D	4	Arterial M	19,881	0.55	A
96	South Watt Ave	Folsom Blvd	Kiefer Blvd	County	County Urban	E	6	Arterial M	40,920	0.76	C
97	South Watt Ave	Kiefer Blvd	Jackson Rd	County	County Urban	E	5	Arterial M	32,415	0.90	E
98	South Watt Ave	Jackson Rd	Fruitridge Rd	City of Sacramento/County	City Default	D	2	Arterial M	25,832	1.44	F
99	South Watt Ave	Fruitridge Rd	Elder Creek Rd	City of Sacramento/County	City Default	D	2	Arterial M	21,567	1.20	F
100	South Watt Ave	Elder Creek Rd	Florin Rd	City of Sacramento/County	City Default	D	2	Arterial M	19,069	1.06	F
101	Sunrise Blvd	US 50	Folsom Blvd	Rancho Cordova	Rancho Cordova	D	7	Arterial M	54,500	1.01	F
102	Sunrise Blvd	Folsom Blvd	Trade Center Dr	Rancho Cordova	Rancho Cordova	D	6	Arterial M	49,500	0.92	E
103	Sunrise Blvd	Trade Center Dr	White Rock Rd	Rancho Cordova	Rancho Cordova	D	6	Arterial M	34,571	0.64	B
104	Sunrise Blvd	White Rock Rd	Douglas Rd	Rancho Cordova	Rancho Cordova	D	6	Arterial M	25,811	0.48	A
105	Sunrise Blvd	Douglas Rd	Kiefer Blvd	Rancho Cordova/County	Rancho Cordova	D	5	Arterial M	21,878	0.61	B
106	Sunrise Blvd	Kiefer Blvd	Jackson Rd	Rancho Cordova/County	Rancho Cordova	D	2	Arterial M	16,894	0.94	E
107	Sunrise Blvd	Jackson Rd	Florin Rd	County	County Urban	E	2	Rural S	11,181	0.56	D
108	Sunrise Blvd	Florin Rd	Grant Line Rd	County	County Urban	E	2	Rural S	7,752	0.39	D
109	Vineyard Rd	Gerber Rd	Calvine Rd	County	County Urban	E	2	Arterial M	5,515	0.31	A
110	Watt Ave	US 50	Folsom Blvd	City of Sacramento/County	City Exempt Light Rail	E	6	Arterial H	65,242	1.09	F
111	White Rock Rd	International Rd	Quality Dr	Rancho Cordova	Rancho Cordova	D	2	Arterial M	3,962	0.22	A
112	White Rock Rd	Quality Dr	Zinfandel Dr	Rancho Cordova	Rancho Cordova	D	4	Arterial M	11,200	0.31	A
113	White Rock Rd	Zinfandel Dr	Kilgore Rd	Rancho Cordova	Rancho Cordova	D	6	Arterial M	14,756	0.27	A
114	White Rock Rd	Kilgore Rd	Sunrise Blvd	Rancho Cordova	Rancho Cordova	D	5	Arterial M	14,756	0.41	A
115	White Rock Rd	Sunrise Blvd	Fitzgerald Rd	Rancho Cordova	Rancho Cordova	D	4	Arterial M	15,433	0.43	A
116	White Rock Rd	Fitzgerald Rd	Grant Line Rd	Rancho Cordova/County	Rancho Cordova	D	2	Rural NS	2,490	0.15	B
117	White Rock Rd	Grant Line Rd	Prairie City Rd	County	County Urban	E	4	Arterial M	9,400	0.26	A
118	Zinfandel Dr	US 50	White Rock Rd	Rancho Cordova	Rancho Cordova	D	7	Arterial M	45,228	0.84	D
119	Zinfandel Dr	White Rock Rd	International Rd	Rancho Cordova	Rancho Cordova	D	6	Arterial M	17,923	0.33	A
120	Zinfandel Dr	International Rd	Baroque Dr	Rancho Cordova	Rancho Cordova	D	6	Arterial M	7,595	0.14	A
121	Zinfandel Dr	Baroque Dr	City Limit	Rancho Cordova	Rancho Cordova	D	4	Arterial M	7,595	0.21	A
122	Zinfandel Dr	City Limit	Douglas Rd	County	County Urban	E	2	Arterial M	7,595	0.42	A
123	Zinfandel Dr	Douglas Rd	Kiefer Blvd	County	County Urban	E	2	Arterial M	2,848	0.16	A

Note: Gray shading indicates changes in travel lanes or facility type that the project is responsible to provide.

¹ The following classifications are used to determine daily roadway capacity:
 Arterial L - Arterial, Low Access Control; Arterial M - Arterial, Moderate Access Control;
 Arterial H - Arterial, High Access Control; Rural Hwy - Rural 2-lane Highway
 Rural S - Rural 2-lane Road, 24'-36' of pavement, Paved Shoulders;
 Rural NS - Rural 2-lane Road, 24'-36' of pavement, No Shoulders;
 Res Collector F - Residential Collector with Frontage;
 Res Collector NF - Residential Collector with No Frontage

U.S. 50 FREEWAY

FREEWAY MAINLINE

Table TC-11 summarizes a.m. and p.m. peak hour US 50 freeway mainline operations. Details of the analysis are included in the technical appendix. The following locations exhibit LOS F conditions:

- Eastbound
 - Stockton Boulevard to 59th Street - a.m. and p.m. peak hours
 - Bradshaw Road to Mather Field Road - a.m. peak hour
 - Zinfandel Drive to Hazel Avenue - p.m. peak hour
- Westbound
 - Mather Field Road to Watt Avenue - a.m. peak hour
 - Watt Avenue to 59th Street - a.m. and p.m. peak hours
 - 59th Street to SR 51 / SR 99 - p.m. peak hour

FREEWAY RAMP JUNCTIONS / WEAVING

Table TC-12 summarizes a.m. and p.m. peak hour freeway operations at ramp junctions and weaving areas. Details of the analysis are included in the technical appendix. The following locations exhibit LOS F conditions:

- Eastbound
 - Watt Avenue Entrance Merge - a.m. peak hour
 - Mather Field Road to Zinfandel Drive weave - a.m. peak hour
- Westbound
 - Sunrise Boulevard Entrance - a.m. peak hour

FREEWAY RAMP INTERSECTION QUEUING

Table TC-13 of the Traffic Study summarizes a.m. and p.m. peak hour freeway ramp intersection queuing. None of the existing queues extends onto the freeway mainline.

Table TC-11: Existing Peak Hour Freeway Mainline Level of Service

Direction	Location	Mixed Flow Lanes	AM Peak Hour			PM Peak Hour		
			Volume	Density	LOS	Volume	Density	LOS
East-bound US 50	SR 99 / SR 51 to Stockton Boulevard	5	7,068	23.46	C	6,415	23.33	C
	Stockton Boulevard to 59th Street	5	7,470	35.05	F	7,228	41.46	F
	59th Street to 65th Street	4	6,767	27.40	D	6,641	28.36	D
	65th Street to Howe Avenue	5	7,962	28.05	D	7,562	29.71	D
	Howe Avenue to Watt Avenue	4	7,405	31.77	D	7,602	33.01	D
	Watt Avenue to Bradshaw Road	4	7,935	27.22	D	7,176	24.80	C
	Bradshaw Rd to Mather Field Rd	4	7,725	45.10	F	7,366	25.50	C
	Mather Field Rd to Zinfandel Drive	5	7,275	19.18	C	7,224	20.13	C
	Zinfandel Drive to Sunrise Blvd	4	5,121	20.08	C	6,649	42.12	F
Sunrise Boulevard to Hazel Avenue	3	4,985	27.67	D	5,323	37.30	F	
West-bound US 50	Hazel Avenue to Sunrise Boulevard	3	6,068	32.91	D	4,370	23.17	C
	Sunrise Blvd to Zinfandel Drive	4	7,502	33.31	D	4,762	19.30	C
	Zinfandel Drive to Mather Field Rd	5	7,548	21.96	C	5,765	14.85	B
	Mather Field Rd to Bradshaw Road	4	7,859	44.40	F	6,939	28.66	D
	Bradshaw Road to Watt Avenue	4	7,488	53.92	F	6,466	32.91	D
	Watt Avenue to Howe Avenue	5	7,376	53.44	F	6,234	28.04	F
	Howe Avenue to 65th Street	5	8,157	35.68	F	7,407	41.55	F
	65th Street to 59th Street	4	8,278	44.85	F	7,358	51.56	F
	59th Street to Stockton Boulevard	5	9,115	29.39	D	7,945	32.31	F
Stockton Boulevard to SR 99 / SR 51	5	8,546	31.89	D	8,136	33.25	F	

Density = passenger cars per hour per lane (pc/ph/pl). **Bold** values denote level of service "F" conditions.

Source: DKS Associates, 2014.

Table TC-12: Existing Peak Hour Freeway Ramp Junction/Weaving Level of Service

Direction	Location	Junction Type	A.M. Peak Hour		P.M. Peak Hour	
			Ramp Volume	LOS	Ramp Volume	LOS
East-bound US 50	Northbound 65th Street Slip Entrance	Weave	765	D	653	C
	Howe Avenue / Hornet Drive Exit		1,631		1,417	
	Southbound Howe Avenue Loop Entrance	One-Lane Merge	484	C	881	C
	Northbound Howe Avenue Slip Entrance	One-Lane Merge	419	C	431	C
	Watt Avenue Exit	Two-Lane Diverge	1,317	B	1,634	B
	Watt Avenue Entrance	One-Lane Merge	2,134	F	1,724	D
	Bradshaw Road Exit	Two-Lane Diverge	1,520	B	1,228	B
	Southbound Bradshaw Road Loop Entrance	One-Lane Merge	220	C	422	C
	Northbound Bradshaw Road Slip Entrance	One-Lane Merge	971	C	918	C
	Mather Field Road Exit	Two-Lane Diverge	1,266	B	1,062	A
	Southbound Mather Field Road Loop Entrance	One-Lane Merge	125	C	101	B
	Northbound Mather Field Road Slip Entrance	Weave	317	F	816	C
	Zinfandel Drive Exit		2,932		1,452	
	Southbound Zinfandel Drive Loop Entrance	One-Lane Merge	182	B	129	C
	Northbound Zinfandel Drive Slip Entrance	One-Lane Merge	348	B	540	C
	Sunrise Boulevard Exit	Major Diverge	1,773	C	1,959	D
	Sunrise Boulevard Entrance	One-Lane Merge	992	C	889	D
	Hazel Avenue Exit	Two-Lane Diverge	933	B	1,541	C
	Hazel Avenue Entrance	Weave	804	C	945	C
	Aerojet Road Exit		241		55	

Table TC-12 continued						
Direction	Location	Junction Type	A.M. Peak Hour		P.M. Peak Hour	
			Ramp Volume	LOS	Ramp Volume	LOS
West-bound US 50	Hazel Avenue Exit	Two-Lane Diverge	631	A	869	A
	Northbound Hazel Avenue Loop Entrance	One-Lane Merge	160	B	600	B
	Southbound Hazel Avenue Slip Entrance	One-Lane Merge	1,550	B	800	B
	Sunrise Boulevard Exit	One-Lane Diverge	749	E	758	D
	Sunrise Blvd Entrance	Lane Addition	2,183	F	1,656	D
	Zinfandel Drive Exit	One-Lane Diverge	1,034	E	608	C
	Northbound Zinfandel Drive Loop Entrance	Lane Addition	585	B	1,197	B
	Southbound Zinfandel Drive Slip Entrance	One-Lane Merge	442	C	561	B
	Mather Field Road Exit	One-Lane Drop	1,093	C	556	A
	Northbound Mather Field Road Loop Entrance	One-Lane Merge	515	B	861	B
	Southbound Mather Field Road Slip Entrance	One-Lane Merge	387	B	380	B
	Bradshaw Road Exit	Two-Lane Diverge	1,236	B	1,327	B
	Northbound Bradshaw Road Loop Entrance	One-Lane Merge	914	D	910	C
	Southbound Bradshaw Road Slip Entrance	One-Lane Merge	338	D	590	C
	Watt Avenue Exit	Major Diverge	1,373	D	1,188	C
	Northbound Watt Avenue Entrance	One-Lane Merge	820	D	943	C
	Southbound Watt Avenue Slip Entrance	Lane Addition / Weave	1,232	C	1,317	D
	Howe Avenue Exit	Major Diverge / Weave	1,531	D	1,419	
	Northbound Howe Avenue Loop Entrance	One-Lane Merge	654	D	602	C
	Southbound Howe Avenue Slip Entrance	One-Lane Merge	574	C	574	C

Bold values denote level of service “F” conditions.
Source: DKS Associates, 2014.

Table TC-13: Existing Peak Hour Freeway Ramp Queuing

Direction	US 50 Exit Ramp	Available Storage Length (feet / lane)			Maximum Queue Length (feet / lane)					
					Existing AM Peak Hour			Existing PM Peak Hour		
		L	T	R	L	T	R	L	T	R
Eastbound US-50	Howe Avenue	765	-	765	200	-	378	224	-	247
	Watt Avenue	1,500	-	1,500	179	-	201	254	-	181
	Bradshaw Road	1,250	-	1,250	198	-	509	164	-	414
	Mather Field Road	1,385	-	1,385	207	-	554	271	-	61
	Zinfandel Drive	1,025	1,025	1,025	218	810	746	430	361	131
	Sunrise Boulevard	1,695	-	1,695	283	-	184	360	-	76
	Hazel Avenue	1,310	-	1,310	317	-	76	808	-	29
Westbound US-50	Hazel Avenue	1,995		1,995	271		48	281	271	499
	Sunrise Boulevard	1,540	-	1,540	134	-	165	133	-	172
	Zinfandel Drive	1,065	-	1,065	390	-	68	132	-	199
	Mather Field Road	1,335	-	1,335	594	-	538	222	-	97
	Bradshaw Road	1,330	-	1,330	326	-	107	389	-	31
	Watt Avenue	1,480	-	1,480	147	-	448	94	-	425
	Howe Avenue	1,355	1,355	1,355	192	412	123	241	412	239

L = left turn movement, T = through movement, R = right turn movement
Source: DKS Associates, 2014.

RURAL ROADWAY FUNCTIONALITY

Plate TC-8 shows rural roadway segments that currently do not meet the County standard of 12-foot vehicle lanes with 6-foot paved shoulders. Sacramento County is currently the only jurisdiction that has policies regarding the functionality of rural roadways, therefore the functionality of rural roadways in other jurisdictions was not considered in the traffic study. Table TC-14 summarizes substandard County rural roadways in the study area.

Plate TC-8: Existing Substandard Roadways

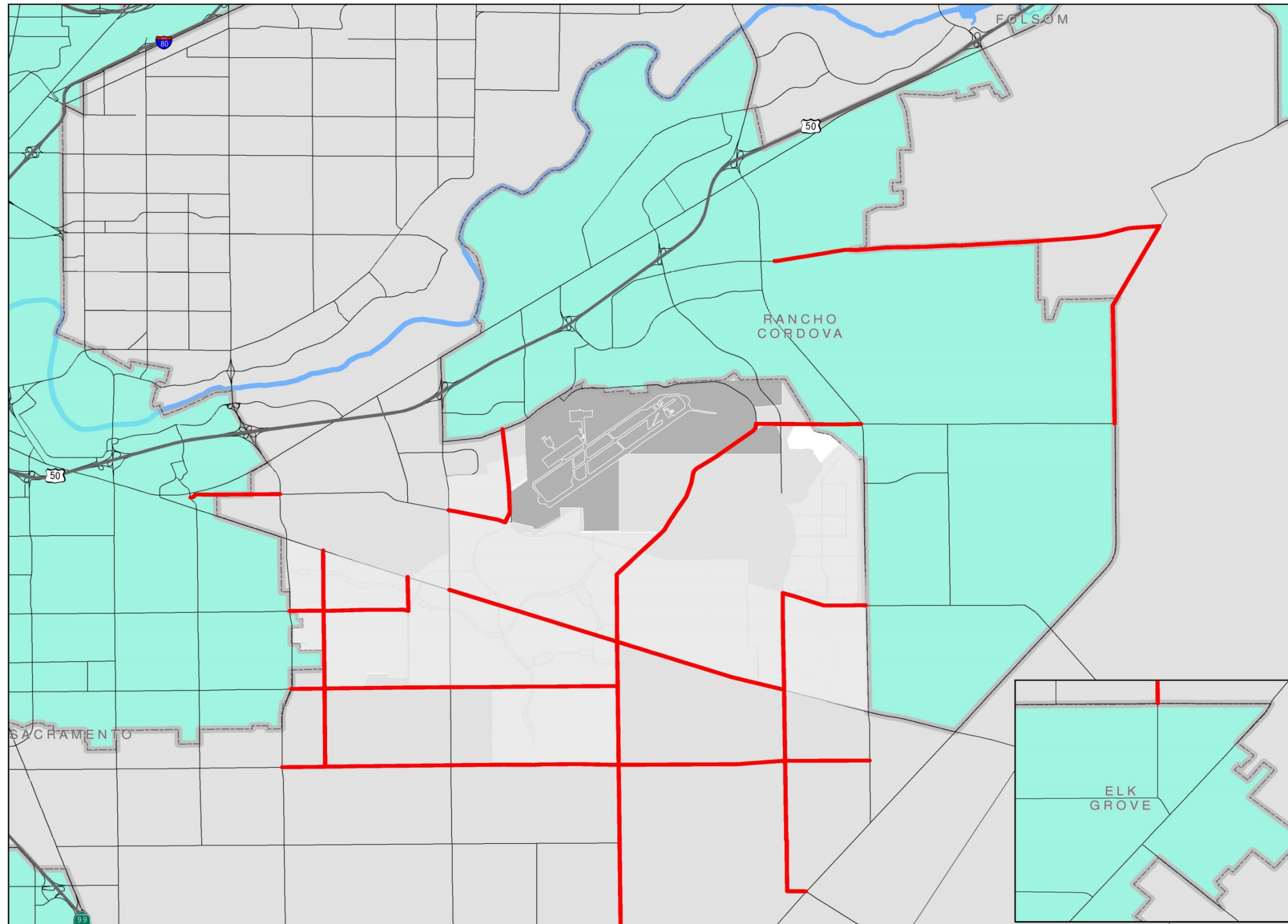


FIGURE 2.5
EXISTING SUBSTANDARD ROADWAYS

Legend

-  Substandard Roadways
-  Cities
-  Mather Airport



Table TC-14: Existing Substandard Roadway Segments

ID	Roadway	Segment		Jurisdiction	Existing Substandard Roadways			
		From	To		Travel Lanes	Pavement (ft)	Substandard? ¹	Existing Volume
15	Douglas Rd	Mather Blvd	Zinfandel Dr	County	2	23	Yes	6,635
16	Douglas Rd	Zinfandel Dr	Sunrise Blvd	Rancho Cordova/County	2	23	Yes	8,369
19	Eagles Nest Rd	Kiefer Blvd	Jackson Rd	County	2	20	Yes	740
20	Eagles Nest Rd	Jackson Rd	Florin Rd	County	2	<21	Yes	517
21	Eagles Nest Rd	Florin Rd	Grant Line Rd	County	2	<21	Yes	189
25	Elder Creek Rd	South Watt Ave	Hedge Ave	County	2	23	Yes	5,576
26	Elder Creek Rd	Hedge Ave	Mayhew Rd	County	2	23	Yes	5,797
27	Elder Creek Rd	Mayhew Rd	Bradshaw Rd	County	2	23	Yes	5,355
28	Elder Creek Rd	Bradshaw Rd	Excelsior Rd	County	2	23	Yes	2,158
30	Excelsior Rd	Kiefer Blvd	Jackson Rd	County	2	22	Yes	3,716
31	Excelsior Rd	Jackson Rd	Elder Creek Rd	County	2	<21	Yes	5,075
32	Excelsior Rd	Elder Creek Rd	Florin Rd	County	2	<21	Yes	4,203
33	Excelsior Rd	Florin Rd	Gerber Rd	County	2	<21	Yes	5,423
34	Excelsior Rd	Gerber Rd	Calvine Rd	County	2	<21	Yes	4,229
39	Florin Rd	South Watt Ave	Hedge Ave	County	2	22	Yes	7,718
40	Florin Rd	Hedge Ave	Mayhew Rd	County	2	22	Yes	6,312
41	Florin Rd	Mayhew Rd	Bradshaw Rd	County	2	22	Yes	6,317
42	Florin Rd	Bradshaw Rd	Excelsior Rd	County	2	22	Yes	3,478
43	Florin Rd	Excelsior Rd	Sunrise Blvd	County	2	22	Yes	3,835
48	Fruitridge Rd	South Watt Ave	Hedge Ave	City of Sacramento/ County	2	22	Yes	2,890
49	Fruitridge Rd	Hedge Ave	Mayhew Rd	County	2	22	Yes	1,790

Table TC-14 continued

50	Grant Line Rd	White Rock Rd	Douglas Rd	Rancho Cordova/County	2	22	Yes	7,189
58	Happy Ln	Old Placerville Rd	Kiefer Blvd	County	2	22	Yes	4,635
59	Hedge Ave	Jackson Rd	Fruitridge Rd	County	2	22	Yes	3,061
60	Hedge Ave	Fruitridge Rd	Elder Creek Rd	City of Sacramento/County	2	22	Yes	3,737
61	Hedge Ave	Elder Creek Rd	Florin Rd	County	2	22	Yes	2,722
70	Jackson Rd	Bradshaw Rd	Excelsior Rd	County	2	26	Yes	13,030
71	Jackson Rd	Excelsior Rd	Eagles Nest Rd	County	2	26	Yes	10,478
74	Kiefer Blvd	Florin Perkins Rd	South Watt Ave	City of Sacramento/County	2	22	Yes	4,616
77	Kiefer Blvd	Bradshaw Rd	Happy Ln	County	2	22	Yes	4,618
78	Kiefer Blvd	Zinfandel Dr	Sunrise Blvd	County	2	22	Yes	656
83	Mather Blvd-Excelsior Rd ⁴	Douglas Rd	Kiefer Blvd	County	2	22	Yes	6,751
89	Mayhew Rd	Jackson Rd	Fruitridge Rd	County	2	22	Yes	1,616
116	White Rock Rd	Fitzgerald Rd	Grant Line Rd	Rancho Cordova/County	2	20	Yes	2,490
123	Zinfandel Dr	Douglas Rd	Kiefer Blvd	County	2	<21	Yes	2,848

Note: Gray shading indicates changes in travel lanes or facility type that the project is responsible to provide. For all roadway segments to be widened, the project is responsible to build the entire roadway to County standards.

¹ Substandard rural roads are defined as rural, 2-lane roadway segments with travel lanes narrower than 12 feet and/or roadside shoulders narrower than 6 feet.

² Functionality impacts are triggered when a substandard rural road increases over a threshold of 6,000 ADT, or for a roadway already above 6,000 ADT, increases by more than 600 ADT.

³ The potential for an impact exists should the project generate traffic volumes on the roadway exceeding 6,000 ADT, or increasing more than 600 ADT on a roadway already above 6,000 ADT, prior to the construction of roadway improvements.

⁴ Excluding the roadway segment that is within the developed community of Independence at Mather.

⁵ The functionality impact is mitigated by improving the roadway to County standards, including widening travel lanes to 12 feet and/or widening or providing paved shoulders to 6 feet.

IMPACTS AND MITIGATION MEASURES

EXISTING PLUS PROJECT SCENARIO

NEWBRIDGE PROJECT DESCRIPTION

As illustrated previously in Plate TC-1, the NewBridge project is located in unincorporated Sacramento County, generally east of the City of Sacramento and south of the City of Rancho Cordova and Mather Airport. It is bounded on the south by Jackson Road (SR 16), on the east by Sunrise Boulevard, and on the north by existing and future Kiefer Boulevard. The western boundary is located west of Eagles Nest Road.

The SACSIM model (used to estimate travel demand by travel mode) requires estimates of the number and demographics of people who would live in each household as well as key social/economic characteristics of each household. SACOG helped estimate the required household demographics based on the number housing units by density category and detailed local Census data compiled by housing types.

SACSIM also requires employment by type for each parcel in the NewBridge project. The applicant provided number of acres and square feet by non-residential category on each parcel. Employment estimates were then estimated using average square feet per employee and per student. The total employment in the NewBridge project was estimated to be about 1,350.

The model also requires the estimated enrollment at each school within the NewBridge project. The total enrollment for the one elementary school was estimated at about 750 students. Some of those students would come from housing units outside the NewBridge project.

TRANSPORTATION NETWORK

ROADWAY SEGMENTS AND INTERSECTIONS

Plate TC-9 illustrates the NewBridge project transportation network. The NewBridge project would widen and/or complete many roadways that cross or border the site, and would include new roadways to serve the proposed land use. Sections 3.4.1 and 3.4.2 of the Traffic Study include information regarding the roadway segment and intersection improvements that are considered part of the NewBridge project.

PEDESTRIAN AND BICYCLE FACILITIES

Plate TC-10 illustrates the proposed bikeway and trail plan of the NewBridge project. Numerous off-street (Class I) multi-purpose trails would be provided to enhance the local and regional active transportation network. Crossing enhancements would be provided at key intersections both internal to the project and on the boundary.

Plate TC-9: Proposed NewBridge Project Transportation Network

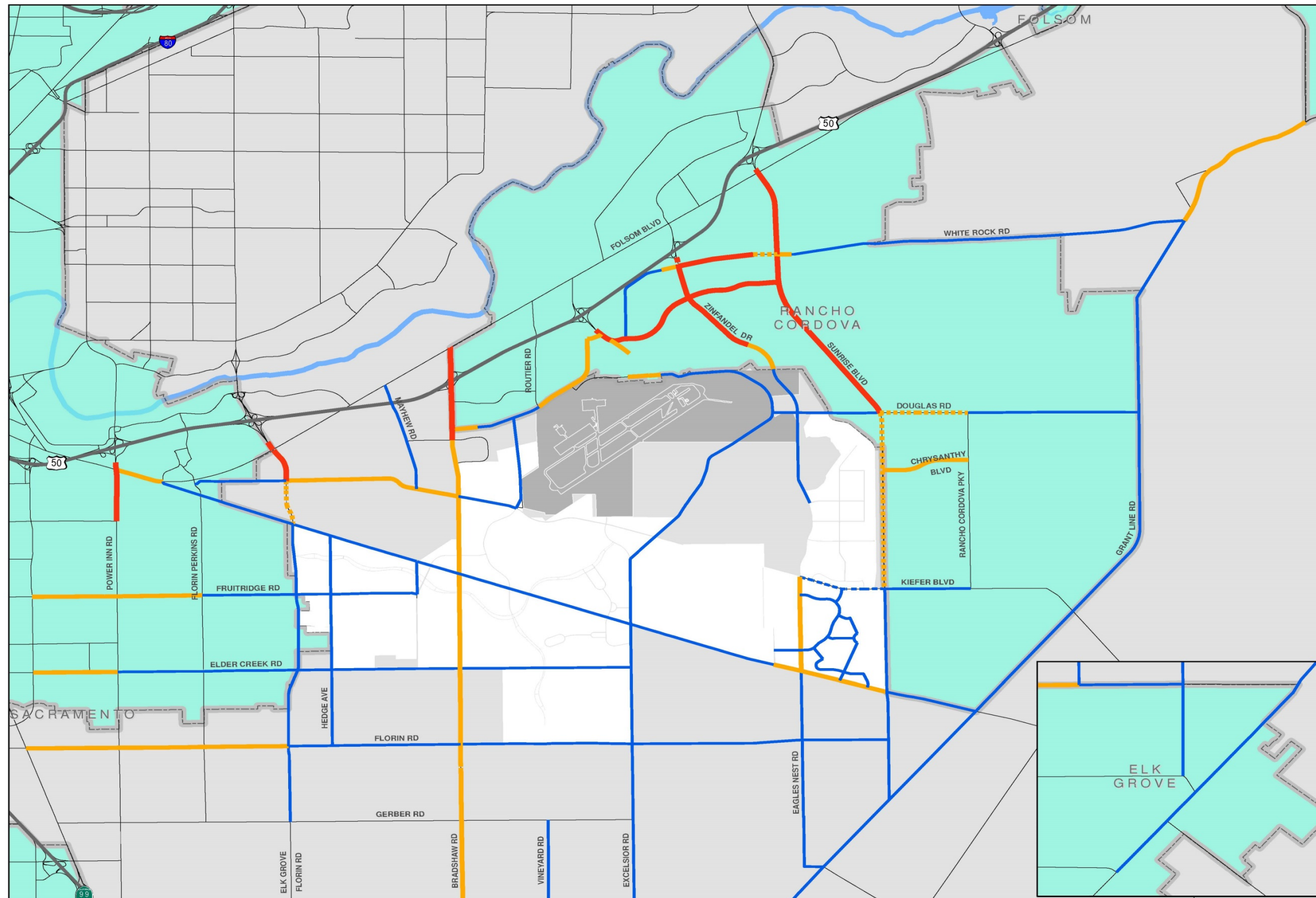


FIGURE 3.1
EXISTING PLUS NEWBRIDGE
ROADWAY NETWORK

Legend

- 2 Lanes
- - - 3 Lanes
- 4 Lanes
- · · 5 Lanes
- 6 Lanes
- · · 7 Lanes
- Cities
- Mather Airport



Plate TC-10: Proposed Bikeway & Trails Master Plan

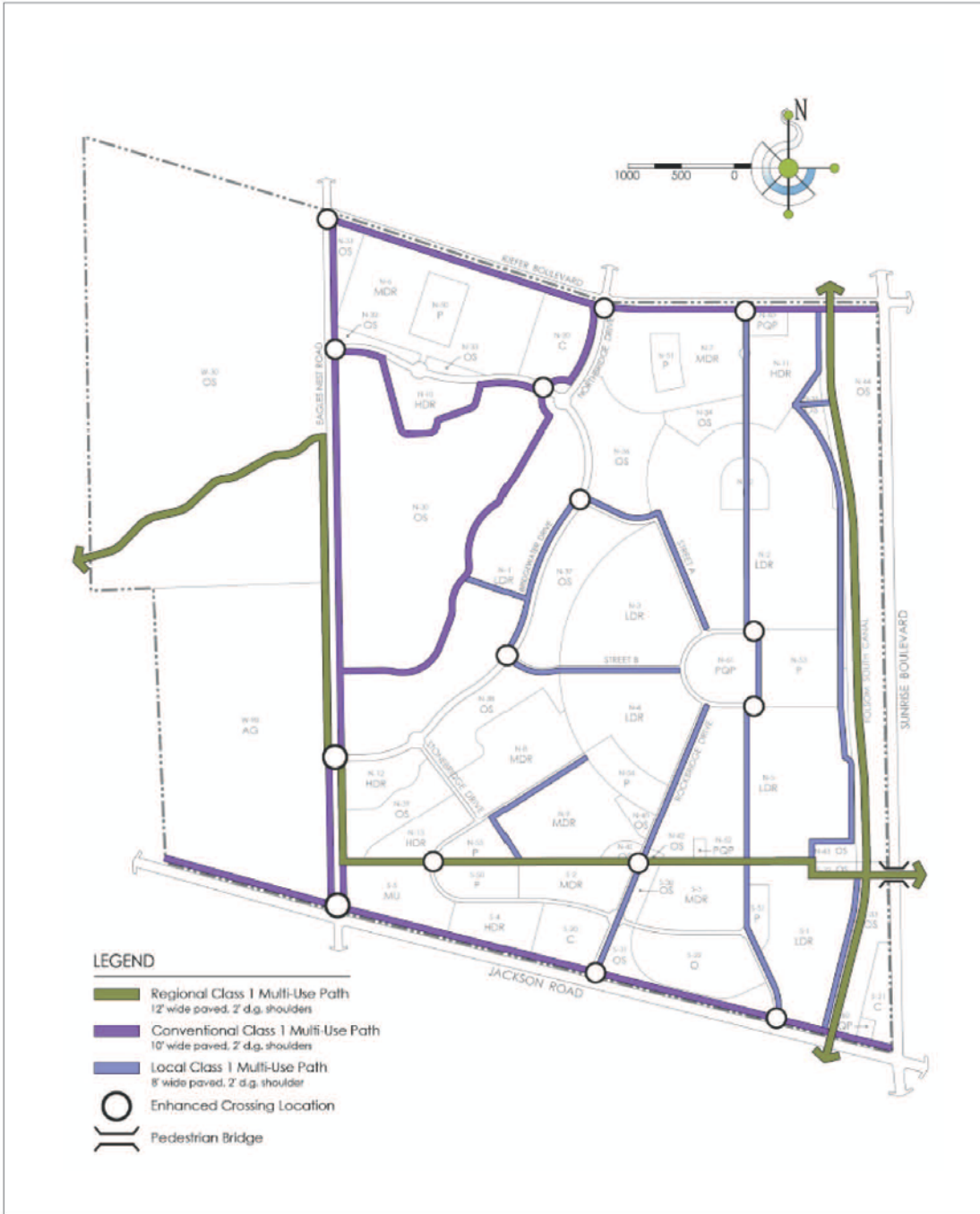


FIGURE 3.2
PROPOSED BIKEWAY AND TRAILS MASTER PLAN



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TRANSIT SYSTEM

Consistent with Sacramento County's General Plan policy LU-120, the NewBridge project incorporates higher density land uses and mixed uses along transportation corridors to help support transit use. However, existing transit service is very limited near the NewBridge project. The transit provider for the area, Sacramento Regional Transit (RT), has developed a long-range transit plan that anticipates three additional high frequency transit lines in the general area by the year 2035. However, even with this additional transit network, the NewBridge project would likely not meet the County's General Plan policy.

To comply with the County's General Plan Policy LU-120, a separate planning effort involving staff from Sacramento County, RT, DKS, and the applicants of the Jackson Corridor Projects was conducted to define an appropriate transit network and frequency that could serve the proposed development in the Jackson Corridor consistent with the intent of the County's policies.

An important consideration in the development of a transit network for the Jackson Corridor is that there are four major master plan development projects proposed in the Jackson Corridor (Jackson Corridor Projects). The transit planning effort needed to define standalone transit systems for each of the Jackson Corridor Projects that would not only serve the transit needs of each of the Jackson Corridor Projects independently, but would also serve as cohesive and complementary transit system units that could operate efficiently together should more than one of the Jackson Corridor Projects be approved for development.

A series of transit networks and service frequencies were developed and tested using the SACSIM model with the objective of optimizing transit ridership and the number of boardings. Utilizing RT's performance criteria for evaluating the effectiveness of the various transit lines and service frequencies, an optimum transit network and frequency was developed for the Jackson Corridor.

The planning effort resulted in four transit lines that at buildout would serve the Jackson Corridor Projects in the Jackson Corridor at a frequency of 15 minutes throughout the typical peak operating hours (approximately 6-9 AM and 4-7 PM) and a frequency of 30 minutes on weekdays. Plate TC-11 illustrates the proposed transit system for the NewBridge project, which represents a portion of the ultimate transit system that would serve the Jackson Corridor Projects. The combined transit system for the Jackson Corridor Projects is discussed and illustrated in Section 4.1.2.3 of the traffic study.

The proposed transit system for the NewBridge project has been assumed as an attribute of the NewBridge project and has been included in the traffic modeling for this traffic analysis. The assumed transit routes and service frequency would be required at full development of the NewBridge project. The full level of transit service would not achieve adequate transit ridership during the early stages of development. Thus the ultimate transit service, like the roadway system serving the NewBridge project, must be phased with development of the NewBridge project.

For purposes of this analysis, full development of the NewBridge project is assumed to occur “instantaneously.” In this manner, the traffic and impacts associated with the NewBridge project can be directly compared to known and measured conditions. Existing scenario impacts are determined by comparing the traffic operating conditions associated with the NewBridge project with the traffic operating conditions associated with the existing (without development) conditions, and comparing the change to the thresholds of significance. Plate TC-12 illustrates the resultant traffic operating conditions.

Plate TC-11: Existing Project Transit Network with Proposed NewBridge Route

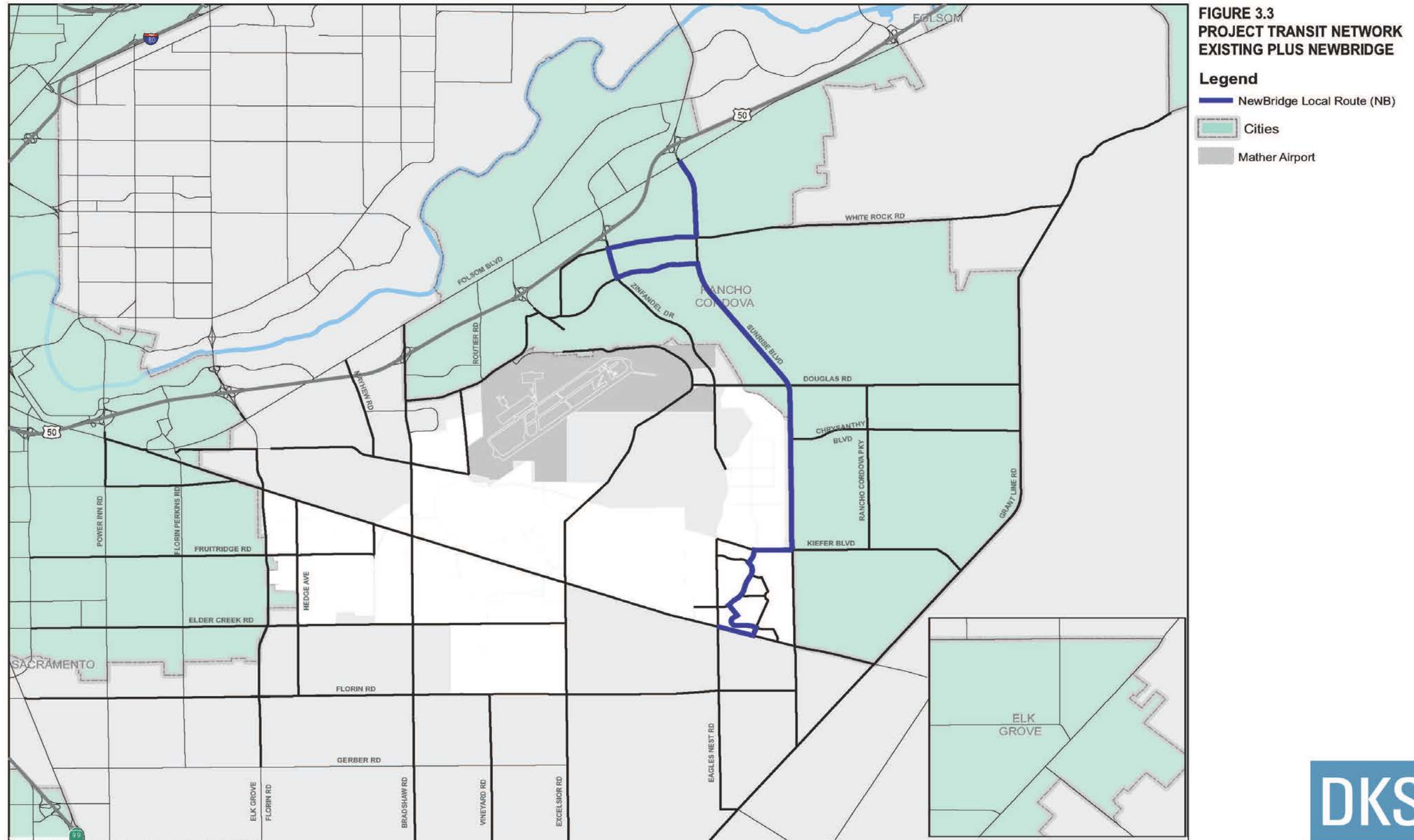
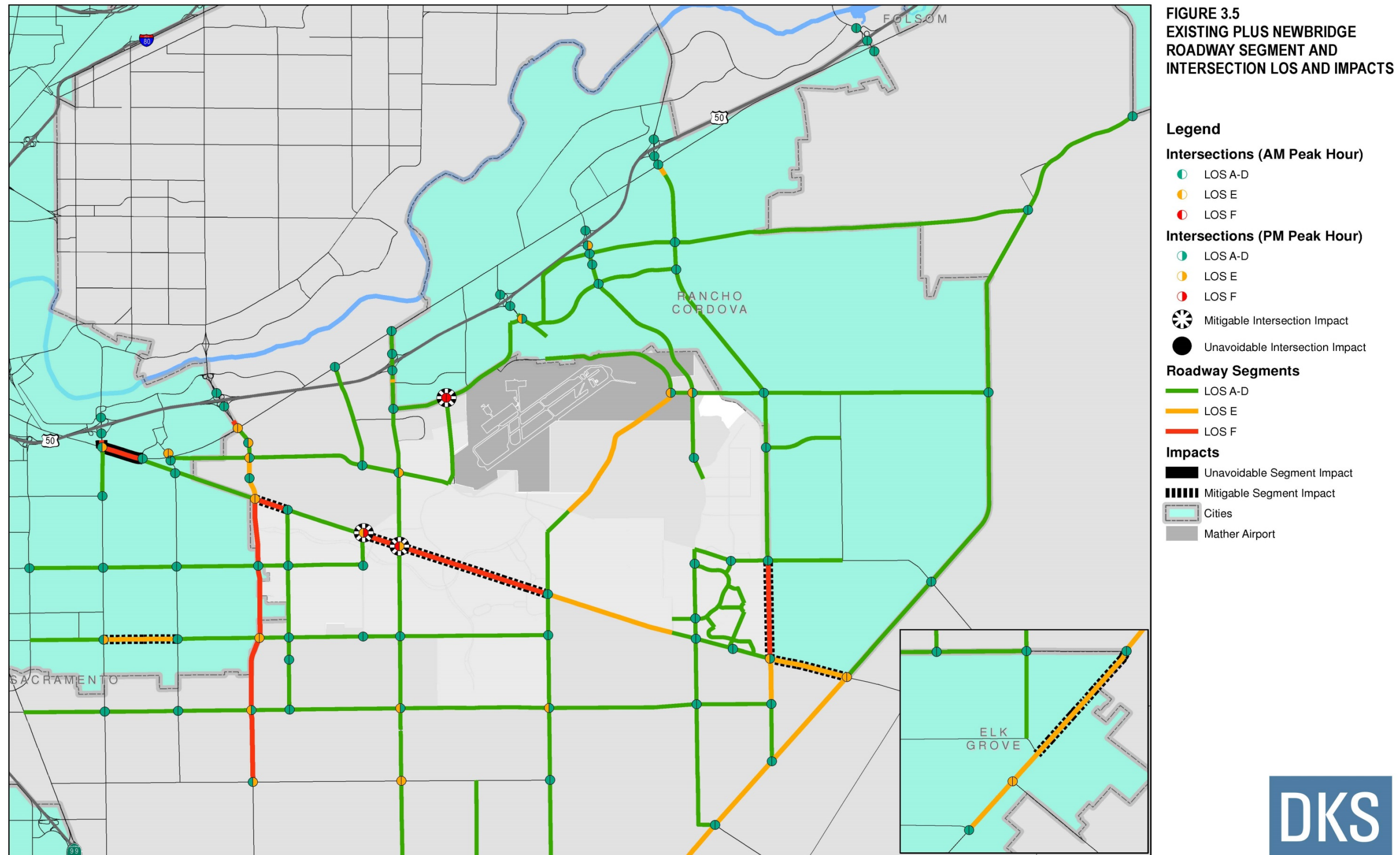


Plate TC-12: Existing Plus NewBridge Roadway Segment and Intersection Impacts



TRIP GENERATION

The SACSIM model that has been utilized for the transportation forecasts in this analysis estimated trip generation of the NewBridge project. Table TC-15 summarizes the person trip generation. The NewBridge project would generate over 7,000 daily work person trip ends, and over 45,000 daily person trip ends for all trip purposes.

Table TC-15: Estimated Daily Person Trip Generation (Existing Plus Project Scenario)

Trip Purpose	Daily Person Trip Ends
Work Trips	7,041
Non-Work Trips	38,001
All Trip Purposes	45,042

Source: DKS Associates, 2014.

Table TC-16 summarizes the estimated mode choice for the Existing plus NewBridge project scenario. About 88.9 percent of all person trips are expected to be accommodated by automobile. Transit will serve about 1.1 percent of all trips, while walk and bike modes will accommodate about 9.9 percent of all trips. The mode choice estimates assume full implementation of the Project's pedestrian and bicycle systems.

Table TC-16: Mode Split (Existing Plus Project Scenario)

Mode	Percentage of Person Trips by Trip Purpose		
	Work Trips	Non-Work Trips	All Trip Purposes
Auto - SOV	87.7%	43.8%	50.6%
Auto - HOV	9.3%	43.7%	38.3%
Transit	1.8%	1.0%	1.1%
Walk	0.9%	10.9%	9.3%
Bike	0.3%	0.7%	0.6%

Source: DKS Associates, 2014.

Table TC-17 summarizes the vehicular (auto) trip generation of the NewBridge project. The NewBridge project is estimated to generate over 27,000 daily vehicle trip ends. It should be noted that more than one person trip may be accommodated by a vehicle trip (e.g. carpooling). About 2,400 of the daily vehicle trip ends will be associated with trips with both an origin and destination within the NewBridge project, about 9 percent of the trip ends. The internal trip ends represent about 1,200 daily vehicle trips (one-half the number of internal trip ends). The NewBridge project will generate about 25,000 external vehicle trips that have an origin or destination inside the NewBridge project but

the other end of the trip is outside the NewBridge project. Table TC-17 also shows the vehicle trips generated during the a.m. and p.m. peak hours.

Table TC-17: Estimated Daily Vehicle Trip Generation (Existing Plus Project Scenario)

Trip Type		AM Peak Hour	PM Peak Hour	Daily
Total Vehicle Trip Ends		2,631	3,484	29,825
Percent Internal Trip Ends ¹		14.7%	19.7%	16.4%
Vehicle Trips	Internal to Project	194	343	2,448
	External to Project	2,243	2,799	24,930
	Total	2,437	3,142	27,378
¹ Both trip ends within the project.				
<i>Source: DKS Associates, 2014.</i>				

TRIP DISTRIBUTION

The distribution of trips associated with development on the NewBridge project site was derived utilizing SACSIM, incorporating the proposed land use and access locations associated with the NewBridge project site. Trip distribution varies by land use and time period. Plate TC-13 illustrates the overall trip distribution of daily NewBridge project trips with the Existing Plus NewBridge project scenario. The highest percentages of NewBridge project traffic are accommodated on Jackson Road and Sunrise Boulevard.

Plate TC-13: Daily Trip Distribution for NewBridge

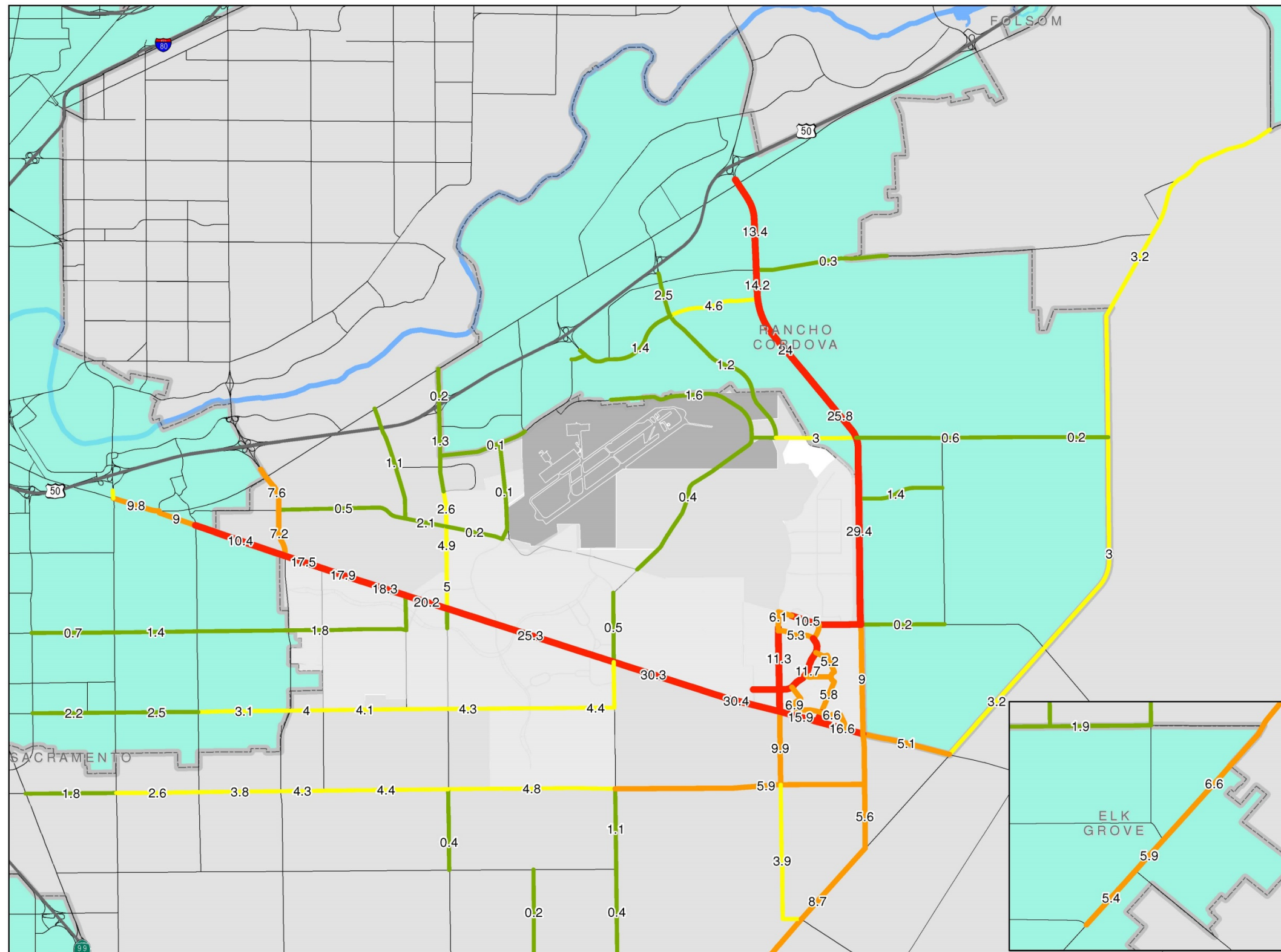


FIGURE 3.4
EXISTING PLUS NEWBRIDGE
TRIP DISTRIBUTION

Legend

- 0.1% to 2.5%
- 2.6% to 5.0%
- 5.1% to 10.0%
- 10.0% and up
- Freeways
- Other Major Roadways
- Cities
- Mather Airport



ROADWAY SEGMENT ANALYSIS

Table TC-18 summarizes the results of the operations analysis for the study area roadway segments. The table includes the number of lanes assumed with the implementation of the NewBridge project, which in many cases is greater than the number of lanes in the existing condition. The shaded table cells under the “Travel Lanes” and “Facility Type” headings illustrate new roadways and widened roadways that are assumed part of the NewBridge project. The shaded table cells under the “Level of Service” heading indicate those locations with an LOS impact.

As stated above, the traffic analysis assumed that the NewBridge project would construct a number of travel lanes on roadway segments that are internal to or on the boundary of the NewBridge project, which would be greater than the number of lanes in the existing condition. The timing of implementation of such additional traffic lanes on these internal or boundary roadway segments will affect whether or not impacts would exist at some time prior to full build out of the NewBridge project.

Table TC-18: Existing Plus NewBridge Project Roadway Segment Levels of Service

ID	Roadway	Segment		Existing					Existing + NewBridge Project				
		From	To	Travel Lanes	Facility Type ¹	Daily Volume	Volume / Capacity Ratio	Level of Service	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/ Capacity Ratio	Level of Service
1	Bradshaw Rd	Folsom Blvd	US 50	6	Arterial M	20,592	0.38	A	6	Arterial M	20,630	0.38	A
2	Bradshaw Rd	US 50	Lincoln Village Dr	6	Arterial M	52,590	0.97	E	6	Arterial M	53,140	0.98	E
3	Bradshaw Rd	Lincoln Village Dr	Old Placerville Rd	6	Arterial M	42,787	0.79	C	6	Arterial M	43,520	0.81	D
4	Bradshaw Rd	Old Placerville Rd	Goethe Rd	6	Arterial M	38,984	0.72	C	6	Arterial M	39,340	0.73	C
5	Bradshaw Rd	Goethe Rd	Kiefer Blvd	4	Arterial M	28,651	0.80	C	4	Arterial M	28,990	0.81	D
6	Bradshaw Rd	Kiefer Blvd	Jackson Rd	4	Arterial M	30,726	0.85	D	4	Arterial M	32,250	0.90	D
7	Bradshaw Rd	Jackson Rd	Elder Creek Rd	4	Arterial M	22,871	0.64	B	4	Arterial M	22,550	0.63	B
8	Bradshaw Rd	Elder Creek Rd	Florin Rd	4	Arterial M	22,265	0.62	B	4	Arterial M	22,030	0.61	B
9	Bradshaw Rd	Florin Rd	Gerber Rd	4	Arterial M	22,883	0.64	B	4	Arterial M	22,940	0.64	B
10	Bradshaw Rd	Gerber Rd	Calvine Rd	4	Arterial M	16,984	0.47	A	4	Arterial M	17,040	0.47	A
11	Calvine Rd	Waterman Rd	Bradshaw Rd	4	Arterial M	16,015	0.44	A	4	Arterial M	16,410	0.46	A
12	Calvine Rd	Bradshaw Rd	Vineyard Rd	4	Arterial M	12,395	0.34	A	4	Arterial M	12,900	0.36	A
13	Calvine Rd	Vineyard Rd	Excelsior Rd	2	Arterial M	6,036	0.34	A	2	Arterial M	6,560	0.36	A
14	Chrysanthy Blvd	Sunrise Blvd	Rancho Cordova Pkwy	4	Arterial M	3,411	0.09	A	4	Arterial M	3,930	0.11	A
15	Douglas Rd	Mather Blvd	Zinfandel Dr	2	Arterial M	6,635	0.37	A	2	Arterial M	7,250	0.40	A
16	Douglas Rd	Zinfandel Dr	Sunrise Blvd	2	Arterial M	8,369	0.46	A	2	Arterial M	9,750	0.54	A
17	Douglas Rd	Sunrise Blvd	Rancho Cordova Pkwy	5	Arterial M	3,674	0.10	A	5	Arterial M	4,680	0.13	A
18	Douglas Rd	Rancho Cordova Pkwy	Grant Line Rd	2	Arterial M	3,674	0.20	A	2	Arterial M	3,910	0.22	A
19.1	Eagles Nest Rd	Kiefer Blvd	N Bridgewater Dr	2	Arterial M	740	0.04	A	4	Arterial M	2,510	0.07	A
19.2	Eagles Nest Rd	N Bridgewater Dr	S Bridgewater Dr	2	Arterial M	740	0.04	A	4	Arterial M	4,020	0.11	A
19.3	Eagles Nest Rd	S Bridgewater Dr	Jackson Rd	2	Arterial M	740	0.04	A	4	Arterial M	9,790	0.27	A
20	Eagles Nest Rd	Jackson Rd	Florin Rd	2	Arterial M	517	0.03	A	2	Arterial M	3460	0.19	A
21	Eagles Nest Rd	Florin Rd	Grant Line Rd	2	Arterial M	189	0.01	A	2	Arterial M	1330	0.07	A
22	Elder Creek Rd	65th St	Power Inn Rd	4	Arterial M	17,891	0.50	A	4	Arterial M	18,200	0.51	A
23	Elder Creek Rd	Power Inn Rd	Florin-Perkins Rd	2	Arterial M	15,734	0.87	D	2	Arterial M	16,320	0.91	E
24	Elder Creek Rd	Florin Perkins Rd	South Watt Ave	2	Arterial M	11,092	0.62	B	2	Arterial M	11,830	0.66	B
25	Elder Creek Rd	South Watt Ave	Hedge Ave	2	Arterial M	5,576	0.31	A	2	Arterial M	6,300	0.35	A
26	Elder Creek Rd	Hedge Ave	Mayhew Rd	2	Arterial M	5,797	0.32	A	2	Arterial M	6,540	0.36	A
27	Elder Creek Rd	Mayhew Rd	Bradshaw Rd	2	Arterial M	5,355	0.30	A	2	Arterial M	6,400	0.36	A
28	Elder Creek Rd	Bradshaw Rd	Excelsior Rd	2	Arterial M	2,158	0.12	A	2	Arterial M	3,440	0.19	A
29	Elk Grove-Florin Rd	Florin Rd	Gerber Rd	2	Arterial M	22,960	1.28	F	2	Arterial M	22,910	1.27	F
30	Excelsior Rd	Kiefer Blvd	Jackson Rd	2	Arterial M	3,716	0.21	A	2	Arterial M	3,660	0.20	A
31	Excelsior Rd	Jackson Rd	Elder Creek Rd	2	Arterial M	5,075	0.28	A	2	Arterial M	5,470	0.30	A

Bold values do not meet LOS policy. Red values with light gray shading indicate project impacts.

Table TC-18 continued

ID	Roadway	Segment		Existing					Existing + NewBridge Project				
		From	To	Travel Lanes	Facility Type ¹	Daily Volume	Volume / Capacity Ratio	Level of Service	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/ Capacity Ratio	Level of Service
32	Excelsior Rd	Elder Creek Rd	Florin Rd	2	Arterial M	4,203	0.23	A	2	Arterial M	3,990	0.22	A
33	Excelsior Rd	Florin Rd	Gerber Rd	2	Arterial M	5,423	0.30	A	2	Arterial M	5,390	0.30	A
34	Excelsior Rd	Gerber Rd	Calvine Rd	2	Arterial M	4,229	0.23	A	2	Arterial M	3,970	0.22	A
35	Excelsior Rd	Calvine Rd	Sheldon Rd	2	Arterial M	4,473	0.25	A	2	Arterial M	4,400	0.24	A
36	Florin Rd	Stockton Blvd	Power Inn Rd	4	Arterial M	27,495	0.76	C	4	Arterial M	28,310	0.79	C
37	Florin Rd	Power Inn Rd	Florin-Perkins Rd	4	Arterial M	21,595	0.60	A	4	Arterial M	22,690	0.63	B
38	Florin Rd	Florin-Perkins Rd	So Watt Ave/ Elk Grove Florin Rd	4	Arterial M	14,163	0.39	A	4	Arterial M	15,540	0.43	A
39	Florin Rd	South Watt Ave	Hedge Ave	2	Arterial M	7,718	0.43	A	2	Arterial M	8,940	0.50	A
40	Florin Rd	Hedge Ave	Mayhew Rd	2	Arterial M	6,312	0.35	A	2	Arterial M	7,680	0.43	A
41	Florin Rd	Mayhew Rd	Bradshaw Rd	2	Arterial M	6,317	0.35	A	2	Arterial M	7,750	0.43	A
42	Florin Rd	Bradshaw Rd	Excelsior Rd	2	Arterial M	3,478	0.19	A	2	Arterial M	5,110	0.28	A
43	Florin Rd	Excelsior Rd	Sunrise Blvd	2	Arterial M	3,835	0.21	A	2	Arterial M	5,910	0.33	A
44	Folsom Blvd	Howe Ave	Jackson Rd	4	Arterial M	37,516	1.04	F	4	Arterial M	38,790	1.08	F
45	Fruitridge Rd	65th St	Power Inn Rd	4	Arterial M	16,634	0.46	A	4	Arterial M	16,880	0.47	A
46	Fruitridge Rd	Power Inn Rd	Florin Perkins Rd	4	Arterial M	15,214	0.42	A	4	Arterial M	15,780	0.44	A
47	Fruitridge Rd	Florin Perkins Rd	South Watt Ave	2	Arterial M	10,280	0.57	A	2	Arterial M	10,660	0.59	A
48	Fruitridge Rd	South Watt Ave	Hedge Ave	2	Arterial M	2,890	0.16	A	2	Arterial M	3,140	0.17	A
49	Fruitridge Rd	Hedge Ave	Mayhew Rd	2	Arterial M	1,790	0.10	A	2	Arterial M	2,030	0.11	A
50	Grant Line Rd	White Rock Rd	Douglas Rd	2	Rural NS	7,189	0.42	D	2	Rural NS	7,920	0.47	D
51	Grant Line Rd	Douglas Rd	Kiefer Blvd	2	Rural S	6,143	0.31	C	2	Rural S	6,940	0.35	C
52	Grant Line Rd	Kiefer Blvd	Jackson Rd	2	Rural S	5,758	0.29	C	2	Rural S	6,460	0.32	C
53	Grant Line Rd	Jackson Rd	Sunrise Blvd	2	Rural S	14,720	0.74	E	2	Rural S	14,440	0.72	E
54	Grant Line Rd	Sunrise Blvd	Calvine Rd	2	Rural S	14,812	0.74	E	2	Rural S	16,430	0.82	E
55	Grant Line Rd	Calvine Rd	Sheldon Rd	2	Rural S	13,140	0.66	E	2	Rural S	14,240	0.71	E
56	Grant Line Rd	Sheldon Rd	Wilton Rd	2	Rural S	17,459	0.87	E	2	Rural S	18,280	0.91	E
57	Grant Line Rd	Wilton Rd	Bond Rd	2	Rural S	16,064	0.80	E	2	Rural S	16,880	0.84	E
58	Happy Ln	Old Placerville Rd	Kiefer Blvd	2	Rural S	4,635	0.23	C	2	Rural S	6,660	0.33	C
59	Hedge Ave	Jackson Rd	Fruitridge Rd	2	Arterial M	3,061	0.17	A	2	Arterial M	2,970	0.17	A
60	Hedge Ave	Fruitridge Rd	Elder Creek Rd	2	Arterial M	3,737	0.21	A	2	Arterial M	3,680	0.20	A
61	Hedge Ave	Elder Creek Rd	Florin Rd	2	Arterial M	2,722	0.15	A	2	Arterial M	2,790	0.16	A
62	Howe Ave	US 50	Folsom Blvd	6	Arterial M	53,849	1.00	E	6	Arterial M	54,510	1.01	F

Bold values do not meet LOS policy. Red values with light gray shading indicate project impacts.

Table TC-18 continued													
ID	Roadway	Segment		Existing					Existing + NewBridge Project				
		From	To	Travel Lanes	Facility Type ¹	Daily Volume	Volume / Capacity Ratio	Level of Service	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/ Capacity Ratio	Level of Service
63	International Dr	Mather Field Rd	Zinfandel Dr	6	Arterial M	17,500	0.32	A	6	Arterial M	17,850	0.33	A
64	International Dr	Zinfandel Dr	Sunrise Blvd	6	Arterial M	8,802	0.16	A	6	Arterial M	9,610	0.18	A
65	Jackson Rd	Folsom Blvd	Florin Perkins Rd	2	Arterial M	12,358	0.69	B	2	Arterial M	12,960	0.72	C
66	Jackson Rd	Florin Perkins Rd	South Watt Ave	2	Arterial M	10,414	0.58	A	2	Arterial M	11,770	0.65	B
67	Jackson Rd	South Watt Ave	Hedge Ave	2	Arterial M	17,060	0.95	E	2	Arterial M	19,820	1.10	F
68	Jackson Rd	Hedge Ave	Mayhew Rd	2	Arterial M	12,616	0.70	C	2	Arterial M	15,530	0.86	D
69	Jackson Rd	Mayhew Rd	Bradshaw Rd	2	Arterial M	14,996	0.83	D	2	Arterial M	18,170	1.01	F
70	Jackson Rd	Bradshaw Rd	Excelsior Rd	2	Arterial M	13,030	0.72	C	2	Arterial M	18,090	1.01	F
71	Jackson Rd	Excelsior Rd	Eagles Nest Rd	2	Rural Hwy	10,478	0.46	D	2	Rural Hwy	17,610	0.77	E
72.1	Jackson Rd	Eagles Nest Rd	Rockbridge Dr	2	Rural Hwy	9,976	0.44	D	4	Arterial M	13,160	0.37	A
72.2	Jackson Rd	Rockbridge Dr	Sunrise Blvd	2	Rural Hwy	9,976	0.44	D	4	Arterial M	13,540	0.38	A
73	Jackson Rd	Sunrise Blvd	Grant Line Rd	2	Rural Hwy	13,306	0.58	D	2	Rural Hwy	14,120	0.62	E
74	Kiefer Blvd	Florin Perkins Rd	South Watt Ave	2	Arterial M	4,616	0.26	A	2	Arterial M	4,810	0.27	A
75	Kiefer Blvd	South Watt Ave	Mayhew Rd	4	Arterial M	18,668	0.52	A	4	Arterial M	19,330	0.54	A
76	Kiefer Blvd	Mayhew Rd	Bradshaw Rd	4	Arterial M	9,274	0.26	A	4	Arterial M	10,430	0.29	A
77	Kiefer Blvd	Bradshaw Rd	Happy Ln	2	Arterial M	4,618	0.26	A	2	Arterial M	5,500	0.31	A
78.1	Kiefer Blvd	Eagles Nest Rd	W Collector MS-1	2	Arterial M	656	0.04	A	3	Arterial M	2430	0.14	A
78.2	Kiefer Blvd	W Collector MS-1	Northbridge Dr	2	Arterial M	656	0.04	A	3	Arterial M	3440	0.19	A
78.3	Kiefer Blvd	Northbridge Dr	E Collector MS-1	2	Arterial M	656	0.04	A	3	Arterial M	6400	0.36	A
78.4	Kiefer Blvd	E Collector MS-1	Sunrise Blvd	2	Arterial M	656	0.04	A	3	Arterial M	7510	0.42	A
79	Kiefer Blvd	Sunrise Blvd	Rancho Cordova Pkwy	2	Arterial M	2,786	0.15	A	2	Arterial M	2,730	0.15	A
80	Mather Blvd / Norden Ave	Von Karman St	Bleckely St	4	Arterial M	4,373	0.12	A	4	Arterial M	5,120	0.14	A
81	Mather Blvd	Bleckely St	Femoyer St	4	Arterial M	4,373	0.12	A	4	Arterial M	5,120	0.14	A
82	Mather Blvd	Femoyer St	Douglas Rd	2	Arterial M	4,373	0.24	A	2	Arterial M	5,110	0.28	A
83	Mather Blvd-Excelsior Rd	Douglas Rd	Kiefer Blvd	2	Res Collector F	6,751	0.84	E	2	Res Collector F	6,660	0.83	E
84	Mather Field Rd	US 50	Rockingham Dr	6	Arterial M	37,755	0.70	B	6	Arterial M	38,300	0.71	C

Bold values do not meet LOS policy. Red values with light gray shading indicate project impacts.

Table TC-18 continued													
ID	Roadway	Segment		Existing					Existing + NewBridge Project				
		From	To	Travel Lanes	Facility Type ¹	Daily Volume	Volume / Capacity Ratio	Level of Service	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/ Capacity Ratio	Level of Service
85	Mather Field Rd	Rockingham Dr	International Dr	6	Arterial M	37,520	0.69	B	6	Arterial M	37,680	0.70	B
86	Mather Field Rd	International Dr	Peter A McCuen Blvd	4	Arterial M	14,857	0.41	A	4	Arterial M	14,840	0.41	A
87	Mayhew Rd	Folsom Blvd	Goethe Rd	2	Arterial M	6,977	0.39	A	2	Arterial M	7,460	0.41	A
88	Mayhew Rd	Goethe Rd	Kiefer Blvd	2	Arterial L	6,593	0.44	A	2	Arterial L	7,230	0.48	A
89	Mayhew Rd	Jackson Rd	Fruitridge Rd	2	Arterial L	1,616	0.11	A	2	Arterial L	1,860	0.12	A
90	Old Placerville Rd	Bradshaw Rd	Granby Dr	4	Arterial M	15,800	0.44	A	4	Arterial M	16,630	0.46	A
91	Old Placerville Rd	Granby Dr	Happy Ln	2	Arterial M	13,573	0.75	C	2	Arterial M	14,350	0.80	C
92	Old Placerville Rd	Happy Ln	Routier Rd	2	Arterial M	10,710	0.60	A	2	Arterial M	12,040	0.67	B
93	Old Placerville Rd	Routier Rd	Rockingham Dr	4	Arterial M	10,710	0.30	A	4	Arterial M	11,490	0.32	A
94	Power Inn Rd	Folsom Blvd	14th Ave	6	Arterial M	36,175	0.67	B	6	Arterial M	36,320	0.67	B
95	Rockingham Dr	Old Placerville Rd	Mather Field Rd	4	Arterial M	19,881	0.55	A	4	Arterial M	20,700	0.58	A
96	South Watt Ave	Folsom Blvd	Kiefer Blvd	6	Arterial M	40,920	0.76	C	6	Arterial M	42,450	0.79	C
97	South Watt Ave	Kiefer Blvd	Jackson Rd	5	Arterial M	32,415	0.90	E	5	Arterial M	33,780	0.94	E
98	South Watt Ave	Jackson Rd	Fruitridge Rd	2	Arterial M	25,832	1.44	F	2	Arterial M	25,820	1.43	F
99	South Watt Ave	Fruitridge Rd	Elder Creek Rd	2	Arterial M	21,567	1.20	F	2	Arterial M	21,630	1.20	F
100	South Watt Ave	Elder Creek Rd	Florin Rd	2	Arterial M	19,069	1.06	F	2	Arterial M	19,040	1.06	F
101	Sunrise Blvd	US 50	Folsom Blvd	7	Arterial M	54,500	1.01	F	7	Arterial M	56,230	1.04	F
102	Sunrise Blvd	Folsom Blvd	Trade Center Dr	6	Arterial M	49,500	0.92	E	6	Arterial M	51,850	0.96	E
103	Sunrise Blvd	Trade Center Dr	White Rock Rd	6	Arterial M	34,571	0.64	B	6	Arterial M	37,680	0.70	B
104.1	Sunrise Blvd	White Rock Rd	International Dr	6	Arterial M	25,811	0.48	A	6	Arterial M	28,610	0.53	A
104.2	Sunrise Blvd	International Dr	Future Rio Del Oro Pkwy	6	Arterial M	28,400	0.53	A	6	Arterial M	33,940	0.63	B
104.3	Sunrise Blvd	Future Rio Del Oro Pkwy	Douglas Rd	6	Arterial M	25,811	0.48	A	6	Arterial M	31,970	0.59	A
105	Sunrise Blvd	Douglas Rd	Kiefer Blvd	5	Arterial M	21,878	0.61	B	5	Arterial M	28,740	0.80	C
106	Sunrise Blvd	Kiefer Blvd	Jackson Rd	2	Arterial M	16,894	0.94	E	2	Arterial M	18,370	1.02	F
107	Sunrise Blvd	Jackson Rd	Florin Rd	2	Rural S	11,181	0.56	D	2	Rural S	12,420	0.62	E
108	Sunrise Blvd	Florin Rd	Grant Line Rd	2	Rural S	7,752	0.39	D	2	Rural S	8,730	0.44	D
109	Vineyard Rd	Gerber Rd	Calvine Rd	2	Arterial M	5,515	0.31	A	2	Arterial M	5,730	0.32	A
110	Watt Ave	US 50	Folsom Blvd	6	Arterial H	65,242	1.09	F	6	Arterial H	66,200	1.10	F
111	White Rock Rd	International Rd	Quality Dr	2	Arterial M	3,962	0.22	A	2	Arterial M	3,970	0.22	A
112	White Rock Rd	Quality Dr	Zinfandel Dr	4	Arterial M	11,200	0.31	A	4	Arterial M	11,040	0.31	A
113	White Rock Rd	Zinfandel Dr	Kilgore Rd	6	Arterial M	14,756	0.27	A	6	Arterial M	15,100	0.28	A
114	White Rock Rd	Kilgore Rd	Sunrise Blvd	5	Arterial M	14,756	0.41	A	5	Arterial M	15,380	0.43	A

Bold values do not meet LOS policy. Red values with light gray shading indicate project impacts.

Table TC-18 continued													
ID	Roadway	Segment		Existing					Existing + NewBridge Project				
		From	To	Travel Lanes	Facility Type ¹	Daily Volume	Volume / Capacity Ratio	Level of Service	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/ Capacity Ratio	Level of Service
115	White Rock Rd	Sunrise Blvd	Fitzgerald Rd	4	Arterial M	15,433	0.43	A	4	Arterial M	15,650	0.43	A
116	White Rock Rd	Fitzgerald Rd	Grant Line Rd	2	Rural NS	2,490	0.15	B	2	Rural NS	2,520	0.15	B
117	White Rock Rd	Grant Line Rd	Prairie City Rd	4	Arterial M	9,400	0.26	A	4	Arterial M	10,100	0.28	A
118	Zinfandel Dr	US 50	White Rock Rd	7	Arterial M	45,228	0.84	D	7	Arterial M	45,450	0.84	D
119	Zinfandel Dr	White Rock Rd	International Rd	6	Arterial M	17,923	0.33	A	6	Arterial M	18,710	0.35	A
120	Zinfandel Dr	International Rd	Baroque Dr	6	Arterial M	7,595	0.14	A	6	Arterial M	8,500	0.16	A
121	Zinfandel Dr	Baroque Dr	City Limit	4	Arterial M	7,595	0.21	A	4	Arterial M	8,500	0.24	A
122	Zinfandel Dr	City Limit	Douglas Rd	2	Arterial M	7,595	0.42	A	2	Arterial M	8,500	0.47	A
123	Zinfandel Dr	Douglas Rd	Kiefer Blvd	2	Arterial M	2,848	0.16	A	2	Arterial M	2,860	0.16	A
500	S Bridgewater Dr	Collector JT-4	Eagles Nest Rd						2	Res Collector F	4,670	0.58	C
501	S Bridgewater Dr	Eagles Nest Rd	Northbridge Dr						2	Res Collector F	3,780	0.47	C
502	N Bridgewater Dr	Northbridge Dr	Eagles Nest Rd						2	Res Collector F	1,520	0.19	A
503	Northbridge Dr	Kiefer Blvd	Bridgewater Dr						2	Arterial M	2,970	0.17	A
504	Street A	S Bridgewater Dr	Street B						2	Res Collector F	1,560	0.20	A
505	Street B	S Bridgewater Dr	Street A						2	Res Collector F	1,500	0.19	A
506	Rockbridge Dr	Street B	Stonebridge Dr						2	Res Collector F	1,790	0.22	B
507	Rockbridge Dr	Stonebridge Dr	Jackson Rd						2	Arterial M	5,500	0.31	A
508	Stonebridge Dr	S Bridgewater Dr	Rockbridge Dr						2	Arterial M	2,490	0.14	A
509	Stonebridge Dr	Rockbridge Dr	Jackson Rd						2	Res Collector F	2,880	0.36	B

Note: Gray shading indicates changes in travel lanes or facility type that the project is responsible to provide.

¹ The following classifications are used to determine daily roadway

capacity: Arterial L - Arterial, Low Access Control

Arterial M - Arterial, Moderate

Access Control Arterial H - Arterial,

High Access Control Rural Hwy -

Rural 2-lane Highway

Rural S - Rural 2-lane Road, 24'-36' of pavement, Paved

Shoulders Rural NS - Rural 2-lane Road, 24'-36' of

pavement, No Shoulders Res Collector F - Residential

Collector with Frontage

Res Collector NF - Residential Collector with No Frontage

INTERSECTION ANALYSIS

Table TC-19 and Table TC-20 summarize the results of the operations analysis for the study area intersections. The tables include the implementation of intersection changes associated with the NewBridge project. Table TC-20 illustrates the type of traffic control and number of lanes by type on each study area intersection approach. Shaded table cells indicate those locations where changes in traffic control and / or number of approach lanes by type were assumed to be implemented by the NewBridge project. Shaded table cells in Table TC-19 illustrate those locations with an LOS impact. Detailed analysis information is included in the technical appendix.

As stated above, the traffic analysis assumed that the NewBridge project would construct a number of changes to many of the intersections that are internal to or on the boundary of the NewBridge project, which would be an improvement over the existing condition. The timing of implementation of such intersection improvements on these internal or boundary roadway segments will affect whether or not impacts would exist at some time prior to full build out of the NewBridge project.

Signal warrant analysis was conducted for all unsignalized intersections along Jackson Road, and other unsignalized intersections in close proximity to the project. The project is considered to have a significant impact at an unsignalized location if both the impact criteria in Table TC-3 are met, and one or more of the signal warrants specified in the California Manual on Uniform Traffic Control Devices (CAMUTCD) are met. Detailed signal warrant calculation sheets are included in the technical appendix. The following unsignalized intersections exhibit significant impacts and meet one or more traffic signal warrants:

- Mayhew Road and Jackson Road
- Happy Lane and Old Placerville Road

Table TC-19: Existing Plus NewBridge Project Intersection Levels of Service

Intersection		AM Peak Hour							PM Peak Hour						
		Existing			Existing Plus NewBridge Project			LOS Impact	Existing			Existing Plus NewBridge Project			LOS Impact
		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
1	Howe Avenue & College Town Drive/US 50 WB Ramps	Signal	D	36.6	Signal	D	36.6	No	Signal	D	44.4	Signal	D	44.6	No
2	Howe Avenue & US 50 EB Ramps	Signal	B	16.9	Signal	B	17.2	No	Signal	C	20.5	Signal	C	20.7	No
3	Power Inn Road/Howe Avenue & Folsom Blvd	Signal	D	39.1	Signal	D	40.1	No	Signal	D	55.0	Signal	E	55.7	No
4	Power Inn Road & 14th Avenue	Signal	C	31.5	Signal	C	31.7	No	Signal	D	39.6	Signal	D	39.4	No
5	Power Inn Road & Fruitridge Road	Signal	D	43.4	Signal	D	42.5	No	Signal	C	33.5	Signal	C	34.1	No
6	Jackson Road/Notre Dame Dr. & Folsom Blvd.	Signal	D	36.8	Signal	D	41.0	No	Signal	C	32.1	Signal	C	32.4	No
7	Florin Perkins Road/Julliard Dr. & Folsom Boulevard	Signal	D	39.0	Signal	E	56.5	No	Signal	E	55.6	Signal	E	55.2	No
8	Florin Perkins Road & Kiefer Blvd.	Two-way stop	A	2.8	Two-way stop	A	2.5	No	Two-way stop	A	3.2	Two-way stop	A	3.4	No
	<i>Westbound Left Turn</i>		<i>C</i>	<i>20.1</i>		<i>C</i>	<i>21.6</i>			<i>C</i>	<i>23.3</i>		<i>C</i>	<i>23.9</i>	
	<i>Westbound Right Turn</i>		<i>B</i>	<i>13.3</i>		<i>B</i>	<i>13.6</i>			<i>B</i>	<i>12.6</i>		<i>B</i>	<i>12.8</i>	
	<i>Southbound Left Turn</i>		<i>A</i>	<i>10.0</i>		<i>B</i>	<i>10.3</i>			<i>B</i>	<i>10.9</i>		<i>B</i>	<i>11.0</i>	
9	Florin Perkins Road & Jackson Road	Signal	D	51.5	Signal	D	51.6	No	Signal	D	54.1	Signal	C	31.5	No
10	Florin Perkins Road & Fruitridge Road	Signal	C	25.1	Signal	C	27.7	No	Signal	C	25.4	Signal	C	25.4	No
11	Florin Perkins Road & Elder Creek Road	Signal	C	25.7	Signal	C	25.9	No	Signal	C	26.2	Signal	C	26.5	No
12	Watt Avenue & Folsom Blvd.	Signal	E	66.2	Signal	E	69.6	No	Signal	E	71.9	Signal	E	72.3	No
13	S. Watt Ave. & Reith Ct/Manlove Road	Signal	B	19.6	Signal	B	19.8	No	Signal	D	54.1	Signal	E	57.0	No
14	S. Watt Avenue & Kiefer Blvd.	Signal	E	56.0	Signal	E	62.2	No	Signal	E	75.9	Signal	D	52.0	No

Bold values do not meet LOS policy. **Red** values with light gray shading indicate project impacts.

Table TC-19 continued															
Intersection		AM Peak Hour							PM Peak Hour						
		Existing			Existing Plus NewBridge Project			LOS Impact	Existing			Existing Plus NewBridge Project			LOS Impact
		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
15	S. Watt Avenue & Canberra Dr.	Signal	B	11.5	Signal	B	11.7	No	Signal	A	9.7	Signal	A	9.9	No
16	S. Watt Avenue & Jackson Road	Signal	E	62.5	Signal	E	62.3	No	Signal	E	66.4	Signal	E	66.0	No
17	S. Watt Avenue & Fruitridge Road	Signal	D	38.1	Signal	D	39.5	No	Signal	D	41.7	Signal	C	32.0	No
18	S. Watt Avenue & Elder Creek Road	Signal	E	62.7	Signal	E	62.5	No	Signal	E	68.8	Signal	E	68.8	No
20	Elk Grove Florin Road/S. Watt Ave. & Florin Road	Signal	D	54.7	Signal	E	59.9	No	Signal	D	51.8	Signal	D	42.7	No
21	Elk Grove Florin Road & Gerber Road	Signal	D	49.1	Signal	D	49.1	No	Signal	E	64.6	Signal	E	75.4	No
23	Hedge Avenue & Jackson Road	Signal	D	35.1	Signal	D	41.5	No	Signal	D	37.3	Signal	D	41.9	No
24	Hedge Avenue & Fruitridge Road	All-way stop	B	13.6	All-way stop	C	15.8	No	All-way stop	A	9.4	All-way stop	A	9.6	No
25	Hedge Avenue & Elder Creek Road	All-way stop	C	15.9	All-way stop	C	22.3	No	All-way stop	B	11.6	All-way stop	B	12.9	No
26	Hedge Avenue & Tokay Lane	Two-way stop	A	0.4	Two-way stop	A	0.4	No	Two-way stop	A	0.2	Two-way stop	A	0.2	No
	<i>Northbound Left Turn</i>		A	0.0		A	0.0			A	0.0		A	0.0	
	<i>Southbound Left Turn</i>		A	8.0		A	8.1			A	7.3		A	7.3	
	<i>Eastbound</i>		B	12.2		B	12.4			B	10.2		B	10.4	
	<i>Westbound</i>		B	11.1		B	11.3			A	9.6		A	9.7	
27	Hedge Avenue & Florin Road	All-way stop	B	12.9	All-way stop	B	14.2	No	All-way stop	B	11.1	All-way stop	B	12.5	No
28	Mayhew Road & Kiefer Boulevard	Signal	D	48.6	Signal	D	50.8	No	Signal	D	51.1	Signal	D	51.1	No

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Table TC-19 continued															
Intersection		AM Peak Hour						PM Peak Hour							
		Existing			Existing Plus NewBridge Project			LOS Impact	Existing			Existing Plus NewBridge Project			LOS Impact
		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
29	Mayhew Road & Jackson Road	Two-way stop	A	1.8	Two-way stop	A	1.7	No	Two-way stop	A	1.9	Two-way stop	A	2.1	Yes
	<i>Northbound Through - Left Turn</i>		<i>D</i>	<i>27.6</i>		<i>E</i>	<i>36.6</i>			<i>D</i>	<i>34.0</i>		<i>F</i>	<i>50.0</i>	
	<i>Northbound Right Turn</i>		<i>B</i>	<i>11.8</i>		<i>B</i>	<i>13.0</i>			<i>C</i>	<i>15.0</i>		<i>C</i>	<i>15.9</i>	
	<i>Southbound</i>		<i>C</i>	<i>18.3</i>		<i>C</i>	<i>22.2</i>			<i>C</i>	<i>24.9</i>		<i>D</i>	<i>33.6</i>	
	<i>Eastbound Left Turn</i>		<i>A</i>	<i>8.9</i>		<i>A</i>	<i>9.0</i>			<i>A</i>	<i>8.4</i>		<i>A</i>	<i>8.7</i>	
	<i>Westbound Left Turn</i>		<i>A</i>	<i>8.3</i>		<i>A</i>	<i>8.7</i>			<i>A</i>	<i>9.3</i>		<i>A</i>	<i>9.6</i>	
30	Mayhew Road & Fruitridge Road	Two-way stop	A	6.2	Two-way stop	A	5.6	No	Two-way stop	A	5.1	Two-way stop	A	4.5	No
	<i>Northbound Left Turn</i>		<i>A</i>	<i>0.0</i>		<i>A</i>	<i>0.0</i>			<i>A</i>	<i>7.4</i>		<i>A</i>	<i>7.4</i>	
	<i>Eastbound</i>		<i>A</i>	<i>9.2</i>		<i>A</i>	<i>9.2</i>			<i>A</i>	<i>9.2</i>		<i>A</i>	<i>9.3</i>	
31	Mayhew Road & Elder Creek Road	Two-way stop	A	0.2	Two-way stop	A	0.2	No	Two-way stop	A	0.3	Two-way stop	A	0.2	No
	<i>Northbound</i>		<i>B</i>	<i>11.9</i>		<i>B</i>	<i>12.8</i>			<i>B</i>	<i>10.9</i>		<i>B</i>	<i>11.6</i>	
	<i>Southbound</i>		<i>B</i>	<i>11.1</i>		<i>B</i>	<i>12.0</i>			<i>A</i>	<i>9.8</i>		<i>B</i>	<i>10.2</i>	
	<i>Eastbound Left Turn</i>		<i>A</i>	<i>8.3</i>		<i>A</i>	<i>8.6</i>			<i>A</i>	<i>7.6</i>		<i>A</i>	<i>7.7</i>	
	<i>Westbound Left Turn</i>		<i>A</i>	<i>7.5</i>		<i>A</i>	<i>7.5</i>			<i>A</i>	<i>0.0</i>		<i>A</i>	<i>0.0</i>	
32	Woodring Drive & Zinfandel Drive	Two-way stop	A	5.9	Two-way stop	A	5.9	No	Two-way stop	A	3.0	Two-way stop	A	3.0	No
	<i>Eastbound</i>		<i>A</i>	<i>9.3</i>		<i>A</i>	<i>9.3</i>			<i>A</i>	<i>9.3</i>		<i>A</i>	<i>9.3</i>	
	<i>Northbound Left Turn</i>		<i>A</i>	<i>0.0</i>		<i>A</i>	<i>0.0</i>			<i>A</i>	<i>0.0</i>		<i>A</i>	<i>0.0</i>	
33	Bradshaw Road & Folsom Blvd.	Signal	E	56.7	Signal	D	55.0	No	Signal	D	49.9	Signal	D	55.0	No
34	Bradshaw Road & US 50 WB Ramps	Signal	B	15.9	Signal	B	14.9	No	Signal	B	15.2	Signal	B	15.3	No
35	Bradshaw Road & US 50 EB Ramps	Signal	C	24.4	Signal	C	29.5	No	Signal	B	16.0	Signal	B	15.9	No
36	Bradshaw Road & Old Placerville Road	Signal	D	45.9	Signal	D	47.6	No	Signal	D	52.0	Signal	D	53.7	No
37	Bradshaw Road & Kiefer Boulevard	Signal	D	45.7	Signal	D	46.6	No	Signal	E	66.2	Signal	E	71.6	No

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Table TC-19 continued															
Intersection		AM Peak Hour							PM Peak Hour						
		Existing			Existing Plus NewBridge Project			LOS Impact	Existing			Existing Plus NewBridge Project			LOS Impact
		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
38	Bradshaw Road & Jackson Road	Signal	E	73.1	Signal	F	86.2	Yes	Signal	E	59.4	Signal	E	65.4	No
39	Bradshaw Road & Elder Creek Road	Signal	D	36.8	Signal	D	37.9	No	Signal	D	36.1	Signal	D	36.6	No
40	Bradshaw Road & Florin Road	Signal	D	38.1	Signal	E	56.4	No	Signal	D	53.6	Signal	D	52.1	No
41	Bradshaw Road & Gerber Road	Signal	E	72.2	Signal	E	74.3	No	Signal	D	49.9	Signal	E	65.3	No
42	Happy Lane & Old Placerville Road	Two-way stop	A	7.3	Two-way stop	B	11.8	Yes	Two-way stop	A	4.7	Two-way stop	B	12.5	Yes
	<i>Northbound Left Turn</i>		F	64.8		F	201.8			F	95.9		F	288.0	
	<i>Northbound Right Turn</i>		D	30.6		E	36.1			C	15.4		C	17.5	
	<i>Westbound Left Turn</i>		B	10.2		B	11.0			B	10.1		B	10.2	
45	Excelsior Road & Jackson Road	Signal	D	36.7	Signal	D	39.9	No	Signal	D	40.3	Signal	C	26.3	No
46	Excelsior Road & Elder Creek Road	Two-way stop	A	3.5	Two-way stop	A	4.4	No	Two-way stop	A	2.7	Two-way stop	A	5.0	No
	<i>Northbound Left Turn</i>		A	7.5		A	7.5			A	8.0		A	7.9	
	<i>Eastbound</i>		C	18.6		C	18.7			B	12.3		B	13.8	
47	Excelsior Road & Florin Road	All-way stop	C	24.9	All-way stop	E	35.5	No	All-way stop	B	12.5	All-way stop	B	14.2	No
48	Excelsior Road & Gerber Road/Birch Ranch Drive	All-way stop	B	14.0	All-way stop	B	13.1	No	All-way stop	B	10.6	All-way stop	B	10.4	No
49	Mather Field Road & US 50 WB Ramps	Signal	C	24.7	Signal	C	27.9	No	Signal	A	9.4	Signal	A	9.8	No
50	Mather Field Road & US 50 EB Ramps	Signal	C	27.7	Signal	C	29.1	No	Signal	B	13.4	Signal	B	13.2	No
51	Mather Field Road & Rockingham Drive	Signal	E	56.4	Signal	E	60.9	No	Signal	D	54.7	Signal	D	45.0	No
52	Mather Boulevard & Douglas Road	All-way stop	E	39.3	All-way stop	E	40.0	No	All-way stop	C	15.5	All-way stop	C	17.9	No

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Table TC-19 continued															
Intersection		AM Peak Hour							PM Peak Hour						
		Existing			Existing Plus NewBridge Project			LOS Impact	Existing			Existing Plus NewBridge Project			LOS Impact
		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
53	Zinfandel Drive & US 50 WB Ramps	Signal	B	16.4	Signal	B	16.9	No	Signal	D	51.7	Signal	D	36.9	No
54	Zinfandel Drive & US 50 EB Ramps/Gold Center Drive	Signal	D	40.0	Signal	D	41.0	No	Signal	E	60.1	Signal	E	63.5	No
55	Zinfandel Drive & White Rock Road	Signal	D	47.7	Signal	D	48.9	No	Signal	D	54.7	Signal	D	55.0	No
56	Zinfandel Drive & Data Drive	Signal	D	49.3	Signal	D	49.8	No	Signal	D	52.9	Signal	D	52.9	No
57	Zinfandel Drive & International Dr	Signal	C	34.0	Signal	D	48.8	No	Signal	D	48.5	Signal	D	47.4	No
58	Zinfandel Drive & Douglas Road	Signal	E	55.5	Signal	E	62.7	No	Signal	D	54.2	Signal	C	25.9	No
60	Eagles Nest Road & Jackson Road	Two-way stop	A	2.3	Signal	C	28.0	No	Two-way stop	A	3.6	Signal	C	25.7	No
	<i>Northbound</i>		<i>C</i>	<i>22.0</i>						<i>C</i>	<i>23.8</i>				
	<i>Southbound</i>		<i>B</i>	<i>13.9</i>						<i>C</i>	<i>22.0</i>				
	<i>Eastbound Left Turn</i>		<i>A</i>	<i>8.8</i>						<i>A</i>	<i>7.9</i>				
	<i>Westbound Left Turn</i>		<i>A</i>	<i>7.9</i>						<i>A</i>	<i>8.7</i>				
61	Eagles Nest Road & Florin Road	Two-way stop	A	2.3	Two-way stop	A	7.2	No	Two-way stop	A	2.6	Two-way stop	A	7.0	No
	<i>Northbound</i>		<i>B</i>	<i>12.7</i>		<i>C</i>	<i>19.1</i>			<i>B</i>	<i>12.1</i>		<i>C</i>	<i>16.4</i>	
	<i>Southbound</i>		<i>B</i>	<i>10.0</i>		<i>B</i>	<i>13.7</i>			<i>B</i>	<i>10.5</i>		<i>B</i>	<i>14.9</i>	
	<i>Eastbound Left Turn</i>		<i>A</i>	<i>7.7</i>		<i>A</i>	<i>8.0</i>			<i>A</i>	<i>7.7</i>		<i>A</i>	<i>7.9</i>	
	<i>Westbound Left Turn</i>		<i>A</i>	<i>0.0</i>		<i>A</i>	<i>7.6</i>			<i>A</i>	<i>7.6</i>		<i>A</i>	<i>7.6</i>	
62	Sunrise Boulevard & US 50 WB Ramps	Signal	D	44.7	Signal	D	44.2	No	Signal	B	19.7	Signal	B	19.6	No
63	Sunrise Boulevard & US 50 EB Ramps	Signal	B	16.9	Signal	B	16.7	No	Signal	B	17.6	Signal	B	17.8	No
64	Sunrise Boulevard & Folsom Boulevard	Signal	D	54.4	Signal	D	53.9	No	Signal	D	48.6	Signal	D	48.5	No

Bold values do not meet LOS policy. **Red** values with light gray shading indicate project impacts.

Table TC-19 continued															
Intersection		AM Peak Hour							PM Peak Hour						
		Existing			Existing Plus NewBridge Project			LOS Impact	Existing			Existing Plus NewBridge Project			LOS Impact
		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
65	Sunrise Boulevard & White Rock Road	Signal	D	47.8	Signal	D	48.4	No	Signal	D	51.6	Signal	D	51.8	No
66	Sunrise Boulevard & International Drive/Monier Circle	Signal	D	47.8	Signal	D	50.6	No	Signal	D	45.8	Signal	D	47.7	No
67	Sunrise Boulevard & Douglas Road	Signal	D	51.7	Signal	C	33.7	No	Signal	D	46.5	Signal	C	33.5	No
68	Sunrise Boulevard & Chrysanthy Boulevard	Signal	C	27.0	Signal	C	30.5	No	Signal	C	21.0	Signal	C	22.9	No
69	Sunrise Boulevard & Kiefer Boulevard	Signal	D	53.6	Signal	D	38.7	No	Signal	C	27.0	Signal	C	26.1	No
70	Sunrise Boulevard & Jackson Road	Signal	E	57.0	Signal	E	60.4	No	Signal	D	47.2	Signal	D	44.0	No
71	Sunrise Boulevard & Florin Road	Signal	B	11.3	Signal	B	11.9	No	Signal	D	48.3	Signal	D	52.0	No
72	Sheldon Lake Drive/Sunrise Boulevard & Grant Line Road	Signal	D	43.2	Signal	D	42.5	No	Signal	D	40.7	Signal	D	40.2	No
73	Hazel Avenue & Tributary Point Drive/US 50 WB Off-ramp	Signal	C	31.2	Signal	C	31.0	No	Signal	D	41.4	Signal	D	37.4	No
74	Hazel Avenue & US 50 EB Ramps	Signal	C	20.6	Signal	C	21.0	No	Signal	C	29.9	Signal	C	30.2	No
75	Hazel Avenue & Folsom Boulevard	Signal	D	51.7	Signal	D	53.7	No	Signal	D	46.7	Signal	D	47.6	No
76	Prairie City Road & White Rock Road	Signal	B	19.2	Signal	B	19.2	No	Signal	B	15.0	Signal	B	15.0	No
77	Grant Line Road & White Rock Road	Signal	B	10.9	Signal	B	11.0	No	Signal	B	11.2	Signal	B	11.2	No
78	Grant Line Road & Douglas Road	All-way stop	C	15.2	All-way stop	C	17.8	No	All-way stop	B	12.3	All-way stop	B	13.0	No
79	Grant Line Road & Kiefer Boulevard	All-way stop	B	11.4	All-way stop	B	12.3	No	All-way stop	B	10.5	All-way stop	B	11.4	No

Bold values do not meet LOS policy. **Red** values with light gray shading indicate project impacts.

Table TC-19 continued															
Intersection		AM Peak Hour							PM Peak Hour						
		Existing			Existing Plus NewBridge Project			LOS Impact	Existing			Existing Plus NewBridge Project			LOS Impact
		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
80	Grant Line Road & Jackson Road	Signal	E	74.0	Signal	E	77.9	No	Signal	E	78.9	Signal	E	76.0	No
81	Watt Avenue & US-50 EB Ramps	Signal	B	13.0	Signal	B	13.2	No	Signal	B	14.9	Signal	B	14.9	No
82	Watt Avenue & US-50 WB Ramps	Signal	C	32.9	Signal	D	38.0	No	Signal	C	28.6	Signal	C	29.2	No
83	Mayhew Rd & Folsom Blvd.	Signal	B	19.8	Signal	C	20.3	No	Signal	C	20.1	Signal	C	20.2	No
84	65th Street Expy & Fruitridge Road	Signal	C	31.2	Signal	C	33.6	No	Signal	D	35.3	Signal	C	33.6	No
85	Power Inn Road & Elder Creek Road	Signal	D	35.2	Signal	C	34.8	No	Signal	D	36.3	Signal	E	67.3	No
86	Power Inn Road & Florin Rd	Signal	D	36.3	Signal	D	39.9	No	Signal	D	45.9	Signal	D	49.5	No
87	Florin Perkins Road & Florin Rd	Signal	D	36.7	Signal	D	49.2	No	Signal	C	32.5	Signal	D	42.9	No
88	Bradshaw Rd & Calvine Rd	Signal	C	30.5	Signal	C	31.7	No	Signal	D	36.9	Signal	D	37.6	No
89	Vineyard Rd & Calvine Rd	Signal	C	30.8	Signal	C	30.9	No	Signal	C	34.9	Signal	C	34.7	No
90	Excelsior Road & Calvine Rd	All-way stop	C	16.6	All-way stop	C	16.7	No	All-way stop	B	13.0	All-way stop	B	13.1	No
91	Grant Line Rd & Eagles Nest Rd/Sloughhouse Rd	Signal	D	51.7	Signal	D	50.7	No	Signal	D	46.5	Signal	D	47.9	No
92	Grant Line Rd & Calvine Rd	Signal	C	21.4	Signal	C	25.2	No	Signal	C	24.0	Signal	C	29.6	No
93	Grant Line Rd & Dwy/Wilton Rd	Signal	E	65.9	Signal	E	70.0	No	Signal	E	64.8	Signal	E	66.5	No
94	Grant Line Rd & Bond Rd/Wrangler Dr	Signal	C	33.3	Signal	C	32.7	No	Signal	D	46.4	Signal	D	48.4	No

Bold values do not meet LOS policy. **Red** values with light gray shading indicate project impacts.

Table TC-19 continued															
Intersection		AM Peak Hour						PM Peak Hour							
		Existing			Existing Plus NewBridge Project			LOS Impact	Existing			Existing Plus NewBridge Project			LOS Impact
		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
203	Northbridge Dr & Kiefer Boulevard	NewBridge Project Int.			Signal	B	15.7	No	NewBridge Project Int.			Signal	B	18.5	No
500	Rockbridge Dr & Jackson Road	NewBridge Project Int.			Signal	B	17.8	No	NewBridge Project Int.			Signal	B	14.5	No
501	Eagles Nest Road & N Bridgewater Dr	NewBridge Project Int.			Signal	B	10.2	No	NewBridge Project Int.			Signal	A	8.8	No
502	Eagles Nest Road & S Bridgewater Dr	NewBridge Project Int.			Signal	D	46.0	No	NewBridge Project Int.			Signal	C	24.7	No

Note: Gray shading represents changes in traffic control that the project is responsible to provide.

Bold values do not meet LOS policy. **Red** values with light gray shading indicate project impacts.

Table TC-20: Existing & Existing Plus NewBridge Project Intersection Geometrics

Intersection	Traffic Control		Existing Lane Geometrics				Existing Plus NewBridge Project Lane Geometrics			
	Existing	Existing Plus Project	NB Approach	SB Approach	EB Approach	WB Approach	NB Approach	SB Approach	EB Approach	WB Approach
1 Howe Avenue & College Town Drive/US 50 WB Ramps	Signal	Signal	↑↑↑↗	↘↓↓↓↓	↖↗↗	↖↖↗↗	↑↑↑↗	↘↓↓↓↓	↖↗↗	↖↖↗↗
2 Howe Avenue & US 50 EB Ramps	Signal	Signal	↑↑↑↗	↘↓↓↓	↖↖↗↗		↑↑↑↗	↘↓↓↓	↖↖↗↗	
3 Power Inn Road/Howe Avenue & Folsom Blvd	Signal	Signal	↖↖↑↑↑↗	↘↓↓↓↓↘↘	↖↖↑↗	↖↖↑↑↗↗	↖↖↑↑↑↗	↘↓↓↓↓↘↘	↖↖↑↗	↖↖↑↑↗↗
4 Power Inn Road & 14th Avenue	Signal	Signal	↖↖↑↑↗	↘↓↓↓↘	↖↖↗	↘	↖↖↑↑↗	↘↓↓↓↘	↖↖↗	↘
5 Power Inn Road & Fruitridge Road	Signal	Signal	↖↖↑↗	↘↓↓↓↘↘	↖↑↗	↖↑↑↗	↖↖↑↗	↘↓↓↓↘↘	↖↑↗	↖↑↑↗
6 Jackson Road/Notre Dame Dr. & Folsom Blvd.	Signal	Signal	↖↖↗	↘↖	↖↑↑↗	↖↑↑↗	↖↖↗	↘↖	↖↑↑↗	↖↑↑↗
7 Florin Perkins Road/Julliard Dr. & Folsom Boulevard	Signal	Signal	↖↖↗	↘↖	↖↑↑↗	↖↑↗	↖↖↗	↘↖	↖↑↑↗	↖↑↗
8 Florin Perkins Road & Kiefer Blvd.	Two-way stop	Two-way stop	↑↗	↓↘↘		↖↗	↑↗	↓↘↘		↖↗
9 Florin Perkins Road & Jackson Road	Signal	Signal	↖↑↑↗	↘↓↓↘	↖↑↗↗	↖↑↗	↖↑↑↗	↘↓↓↘	↖↑↗↗	↖↑↗
10 Florin Perkins Road & Fruitridge Road	Signal	Signal	↖↑↑↗	↘↓↓↘↘	↖↑↑↗	↖↑↗	↖↑↑↗	↘↓↓↘↘	↖↑↑↗	↖↑↗
11 Florin Perkins Road & Elder Creek Road	Signal	Signal	↖↑↑↗	↘↓↓↘↘	↖↑↑↗	↖↑↑↗	↖↑↑↗	↘↓↓↘↘	↖↑↑↗	↖↑↑↗
12 Watt Avenue & Folsom Blvd.	Signal	Signal	↖↖↑↑↑↗	↘↓↓↓↓↘↘↘	↖↖↑↑↗	↖↖↑↑↗	↖↖↑↑↑↗	↘↓↓↓↓↘↘↘	↖↖↑↑↗	↖↖↑↑↗
13 S. Watt Ave. & Reith Ct/Manlove Road	Signal	Signal	↖↑↑↑↗	↘↓↓↘↘	↘	↖↗↗	↖↑↑↑↗	↘↓↓↘↘	↘	↖↗↗
14 S. Watt Avenue & Kiefer Blvd.	Signal	Signal	↖↖↑↑↗	↘↓↓↘↘↘	↖↖↑↑↗	↖↖↑↑↗	↖↖↑↑↗	↘↓↓↘↘↘	↖↖↑↑↗	↖↖↑↑↗
15 S. Watt Avenue & Canberra Dr.	Signal	Signal	↑↑↗	↓↘↘		↖↗	↑↑↗	↓↘↘		↖↗
16 S. Watt Avenue & Jackson Road	Signal	Signal	↖↑↑↗	↘↓↓↘↘	↖↗	↖↑↗	↖↑↑↗	↘↓↓↘↘	↖↗	↖↑↗
17 S. Watt Avenue & Fruitridge Road	Signal	Signal	↖↑↗	↘↓↓↘↘	↖↑↗	↖↗	↖↑↗	↘↓↓↘↘	↖↑↗	↖↗
18 S. Watt Avenue & Elder Creek Road	Signal	Signal	↖↑↗	↘↓↓↘	↖↗	↖↑↗	↖↑↗	↘↓↓↘	↖↗	↖↑↗
20 Elk Grove Florin Road/S. Watt Ave. & Florin Road	Signal	Signal	↖↑↗	↘↓↓↘	↖↑↗	↖↑↑↗	↖↑↗	↘↓↓↘	↖↑↗	↖↑↑↗
21 Elk Grove Florin Road & Gerber Road	Signal	Signal	↖↖↑↗	↘↓↓↓↘↘	↖↖↑↑↗	↖↖↑↑↗	↖↖↑↗	↘↓↓↓↘↘	↖↖↑↑↗	↖↖↑↑↗
23 Hedge Avenue & Jackson Road	Signal	Signal	↖↗	↘↘	↖↑↗	↖↑↗	↖↗	↘↘	↖↑↗	↖↑↗
24 Hedge Avenue & Fruitridge Road	All-way stop	All-way stop	↘	↖	↘	↘	↘	↖	↘	↘
25 Hedge Avenue & Elder Creek Road	All-way stop	All-way stop	↘	↖	↘	↘	↘	↖	↘	↘
26 Hedge Avenue & Tokay Lane	Two-way stop	Two-way stop	↘	↖	↘	↘	↘	↖	↘	↘
27 Hedge Avenue & Florin Road	All-way stop	All-way stop	↘	↖	↘	↘	↘	↖	↘	↘
28 Mayhew Road & Kiefer Boulevard	Signal	Signal	↖↑↗	↘↓↓↘	↖↑↗	↖↑↗	↖↑↗	↘↓↓↘	↖↑↗	↖↑↗
29 Mayhew Road & Jackson Road	Two-way stop	Two-way stop	↖↗	↖	↖↑↗	↖↗	↖↗	↖	↖↑↗	↖↗

Note: Gray shading represents changes in traffic control or approach lanes that the project is responsible to provide.

Intersection	Traffic Control		Existing Lane Geometrics				Existing Plus NewBridge Project Lane Geometrics			
	Existing	Existing Plus Project	NB Approach	SB Approach	EB Approach	WB Approach	NB Approach	SB Approach	EB Approach	WB Approach
30 Mayhew Road & Fruitridge Road	Two-way stop	Two-way stop	↕	↕	↕		↕	↕	↕	
31 Mayhew Road & Elder Creek Road	Two-way stop	Two-way stop	↕	↕	↕	↕	↕	↕	↕	↕
32 Zinfandel Drive & Woodring Drive	Two-way stop	Two-way stop	↕	↕	↕		↕	↕	↕	
33 Bradshaw Road & Folsom Blvd.	Signal	Signal	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕
34 Bradshaw Road & US 50 WB Ramps	Signal	Signal	↕↕↕↕	↕↕↕↕		↕↕↕↕	↕↕↕↕	↕↕↕↕		↕↕↕↕
35 Bradshaw Road & US 50 EB Ramps	Signal	Signal	↕↕↕↕	↕↕↕↕	↕↕↕↕		↕↕↕↕	↕↕↕↕	↕↕↕↕	
36 Bradshaw Road & Old Placerville Road	Signal	Signal	↕↕↕↕	↕↕↕↕	↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕	↕↕↕↕
37 Bradshaw Road & Kiefer Boulevard	Signal	Signal	↕↕↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕
38 Bradshaw Road & Jackson Road	Signal	Signal	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕
39 Bradshaw Road & Elder Creek Road	Signal	Signal	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕
40 Bradshaw Road & Florin Road	Signal	Signal	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕
41 Bradshaw Road & Gerber Road	Signal	Signal	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕
42 Happy Lane & Old Placerville Road	Two-way stop	Two-way stop	↕↕		↕↕	↕↕	↕↕		↕↕	↕↕
43 Happy Lane & Kiefer Boulevard				↕	↕			↕	↕	
45 Excelsior Road & Jackson Road	Signal	Signal	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕
46 Excelsior Road & Elder Creek Road	Two-way stop	Two-way stop	↕	↕	↕		↕	↕	↕	
47 Excelsior Road & Florin Road	All-way stop	All-way stop	↕	↕	↕	↕	↕	↕	↕	↕
48 Excelsior Road & Gerber Road/Birch Ranch Drive	All-way stop	All-way stop	↕	↕	↕	↕	↕	↕	↕	↕
49 Mather Field Road & US 50 WB Ramps	Signal	Signal	↕↕↕↕	↕↕↕↕		↕↕↕↕	↕↕↕↕	↕↕↕↕		↕↕↕↕
50 Mather Field Road & US 50 EB Ramps	Signal	Signal	↕↕↕↕	↕↕↕↕	↕↕↕↕		↕↕↕↕	↕↕↕↕	↕↕↕↕	
51 Mather Field Road & Rockingham Drive	Signal	Signal	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕
52 Mather Boulevard & Douglas Road	All-way stop	All-way stop	↕	↕	↕	↕	↕	↕	↕	↕
53 Zinfandel Drive & US 50 WB Ramps	Signal	Signal	↕↕↕↕	↕↕↕↕		↕↕↕↕	↕↕↕↕	↕↕↕↕		↕↕↕↕
54 Zinfandel Drive & US 50 EB Ramps/Gold Center Drive	Signal	Signal	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕
55 Zinfandel Drive & White Rock Road	Signal	Signal	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕
56 Zinfandel Drive & Data Drive	Signal	Signal	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕
57 Zinfandel Drive & International Dr	Signal	Signal	↕↕↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕↕↕	↕↕↕↕↕↕	↕↕↕↕	↕↕↕↕	↕↕↕↕↕↕

Note: Gray shading represents changes in traffic control or approach lanes that the project is responsible to provide.

Intersection		Traffic Control		Existing Lane Geometrics				Existing Plus NewBridge Project Lane Geometrics			
		Existing	Existing Plus Project	NB Approach	SB Approach	EB Approach	WB Approach	NB Approach	SB Approach	EB Approach	WB Approach
58	Zinfandel Drive & Douglas Road	Signal	Signal	↖ ↗	↘ ↙	↖ ↗	↖ ↗	↖ ↗	↘ ↙	↖ ↗	↖ ↗
59	Eagles Nest Road/Zinfandel Drive & Kiefer Boulevard			↗			↖	↗			↖
60	Eagles Nest Road & Jackson Road	Two-way stop	Signal	↘	↗	↖ ↗	↖ ↗	↖ ↗	↘ ↙	↖ ↗ ↘	↖ ↗ ↘
61	Eagles Nest Road & Florin Road	Two-way stop	Two-way stop	↘	↗	↘	↘	↘	↗	↘	↗
62	Sunrise Boulevard & US 50 WB Ramps	Signal	Signal	↑ ↑ ↑ ↗	↘ ↓ ↓ ↓		↖ ↗ ↘	↑ ↑ ↑ ↗	↘ ↓ ↓ ↓		↖ ↗ ↘
63	Sunrise Boulevard & US 50 EB Ramps	Signal	Signal	↑ ↑ ↑ ↑ ↗	↘ ↓ ↓ ↓	↖ ↗ ↘		↑ ↑ ↑ ↑ ↗	↘ ↓ ↓ ↓	↖ ↗ ↘	
64	Sunrise Boulevard & Folsom Boulevard	Signal	Signal	↖ ↗ ↑ ↑ ↑ ↗	↘ ↓ ↓ ↓ ↙	↖ ↗ ↑ ↗	↖ ↗ ↘ ↗	↖ ↗ ↑ ↑ ↑ ↗	↘ ↓ ↓ ↓ ↙	↖ ↗ ↑ ↗	↖ ↗ ↘ ↗
65	Sunrise Boulevard & White Rock Road	Signal	Signal	↖ ↗ ↑ ↑ ↑ ↗	↘ ↓ ↓ ↓ ↙	↖ ↗ ↑ ↗	↖ ↗ ↑ ↑ ↑ ↗	↖ ↗ ↑ ↑ ↑ ↗	↘ ↓ ↓ ↓ ↙	↖ ↗ ↑ ↗	↖ ↗ ↑ ↑ ↑ ↗
66	Sunrise Boulevard & International Drive/Monier Circle	Signal	Signal	↖ ↗ ↑ ↑ ↗	↘ ↓ ↓ ↓ ↙	↖ ↗ ↘ ↗	↖ ↗	↖ ↗ ↑ ↑ ↗	↘ ↓ ↓ ↓ ↙	↖ ↗ ↘ ↗	↖ ↗
67	Sunrise Boulevard & Douglas Road	Signal	Signal	↖ ↗ ↑ ↑ ↑ ↗	↘ ↓ ↓ ↓ ↙	↖ ↗ ↗	↖ ↗ ↑ ↗	↖ ↗ ↑ ↑ ↑ ↗	↘ ↓ ↓ ↓ ↙	↖ ↗ ↗	↖ ↗ ↑ ↗
68	Sunrise Boulevard & Chrysanthy Boulevard	Signal	Signal	↑ ↑ ↑ ↗	↓ ↓ ↓ ↙		↖ ↗	↑ ↑ ↑ ↗	↓ ↓ ↓ ↙		↖ ↗
69	Sunrise Boulevard & Kiefer Boulevard	Signal	Signal	↖ ↑ ↑ ↗	↘ ↓ ↓ ↙	↘	↖ ↗	↖ ↑ ↑ ↗	↘ ↓ ↓ ↙	↖ ↑ ↑ ↗	↖ ↗
70	Sunrise Boulevard & Jackson Road	Signal	Signal	↖ ↗	↘ ↓ ↙	↖ ↗ ↘	↖ ↗ ↘	↖ ↗	↘ ↓ ↙	↖ ↗ ↘	↖ ↗ ↘
71	Sunrise Boulevard & Florin Road	Signal	Signal	↖ ↗	↘	↘		↖ ↗	↘	↘	
72	Sheldon Lake Drive/Sunrise Boulevard & Grant Line Road	Signal	Signal	↘	↗	↖ ↗ ↘	↖ ↗	↘	↗	↖ ↗ ↘	↖ ↗
73	Hazel Avenue & Tributary Point Drive/US 50 WB Off-ramp	Signal	Signal	↖ ↗ ↑ ↑ ↑	↘ ↓ ↓ ↓ ↓	↗	↖ ↗ ↘	↖ ↗ ↑ ↑ ↑	↘ ↓ ↓ ↓ ↓	↗	↖ ↗ ↘
74	Hazel Avenue & US 50 EB Ramps	Signal	Signal		↘ ↓ ↓	↖ ↗ ↘			↘ ↓ ↓	↖ ↗ ↘	
75	Hazel Avenue & Folsom Boulevard	Signal	Signal	↖ ↗	↘ ↓ ↓ ↙	↖ ↗ ↘ ↗	↖ ↗ ↘	↖ ↗	↘ ↓ ↓ ↙	↖ ↗ ↘ ↗	↖ ↗ ↘
76	Prairie City Road & White Rock Road	Signal	Signal		↘ ↙	↖ ↑ ↑	↑ ↑ ↗		↘ ↙	↖ ↑ ↑	↑ ↑ ↗
77	Grant Line Road & White Rock Road	Signal	Signal	↖ ↑ ↑	↘ ↓ ↓	↖ ↗ ↘		↖ ↑ ↑	↘ ↓ ↓	↖ ↗ ↘	
78	Grant Line Road & Douglas Road	All-way stop	All-way stop	↘	↗	↘		↘	↗	↘	
79	Grant Line Road & Kiefer Boulevard	All-way stop	All-way stop	↘	↗	↘	↘	↘	↗	↘	↘
80	Grant Line Road & Jackson Road	Signal	Signal	↘	↗	↖ ↗	↖ ↗	↘	↗	↖ ↗	↖ ↗
81	Watt Avenue & US-50 EB Ramps	Signal	Signal	↑ ↑ ↑ ↑ ↗	↘ ↓ ↓ ↓	↖ ↗ ↘		↑ ↑ ↑ ↑ ↗	↘ ↓ ↓ ↓	↖ ↗ ↘	
82	Watt Avenue & US-50 WB Ramps	Signal	Signal	↑ ↑ ↘ ↘	↘ ↓ ↓ ↓ ↓		↖ ↗ ↘ ↘	↑ ↑ ↘ ↘	↘ ↓ ↓ ↓ ↓		↖ ↗ ↘ ↘
83	Mayhew Rd & Folsom Blvd.	Signal	Signal	↖ ↗ ↘		↑ ↑ ↗	↖ ↑ ↑	↖ ↗ ↘		↑ ↑ ↗	↖ ↑ ↑
84	65th Street Expy & Fruitridge Road	Signal	Signal	↖ ↑ ↑ ↗	↘ ↓ ↓ ↙	↖ ↑ ↑	↖ ↑ ↑ ↗	↖ ↑ ↑ ↗	↘ ↓ ↓ ↙	↖ ↑ ↑	↖ ↑ ↑ ↗

Note: Gray shading represents changes in traffic control or approach lanes that the project is responsible to provide.

Intersection		Traffic Control		Existing Lane Geometrics				Existing Plus NewBridge Project Lane Geometrics			
		Existing	Existing Plus Project	NB Approach	SB Approach	EB Approach	WB Approach	NB Approach	SB Approach	EB Approach	WB Approach
85	Power Inn Road & Elder Creek Road	Signal	Signal	↖↑↗	↓↘↙	↖↑↑↗	↖↑↗	↖↑↗	↓↘↙	↖↑↑↗	↖↑↗
86	Power Inn Road & Florin Rd	Signal	Signal	↖↑↗	↘↓↙↘	↖↑↑↗	↖↑↑↗	↖↑↗	↘↓↙↘	↖↑↑↗	↖↑↑↗
87	Florin Perkins Road & Florin Rd	Signal	Signal	↖↑↑↗	↘↓↙↘	↖↑↗	↖↑↗	↖↑↑↗	↘↓↙↘	↖↑↗	↖↑↗
88	Bradshaw Rd & Calvine Rd	Signal	Signal	↖↖↑↗	↘↓↙↘↘	↖↖↑↑↗	↖↖↑↗	↖↖↑↗	↘↓↙↘↘	↖↖↑↑↗	↖↖↑↗
89	Vineyard Rd & Calvine Rd	Signal	Signal	Ψ	↘↙↘	↖↑↗	↖↑↗	Ψ	↘↙↘	↖↑↗	↖↑↗
90	Excelsior Road & Calvine Rd	All-way stop	All-way stop	Ψ	↖	Ψ	Ψ	Ψ	↖	Ψ	Ψ
91	Grant Line Rd & Eagles Nest Rd/Sloughhouse Rd	Signal	Signal	↖↑↗	↓↘	Ψ	↖↗	↖↑↗	↓↘	Ψ	↖↗
92	Grant Line Rd & Calvine Rd	Signal	Signal	↖↑	↖	Ψ		↖↑	↖	Ψ	
93	Grant Line Rd & Dwy/Wilton Rd	Signal	Signal	↖↗	↓↘	↖↗	↖↗	↖↗	↓↘	↖↗	↖↗
94	Grant Line Rd & Bond Rd/Wrangler Dr	Signal	Signal	↖↗	↘↓↙	↖↗	Ψ	↖↗	↘↓↙	↖↗	Ψ
203	Northbridge Dr & Kiefer Boulevard		Signal					↖↗		↑↗	↖↑
500	Rockbridge Dr & Jackson Road		Signal						↘	↖↑↑	↑↗
501	Zinfandel Drive & N Bridgewater Dr		Signal					↑↗	↓↘↙		↖↗
502	Zinfandel Drive & S Bridgewater Dr		Signal					↖↑↗	↓↘↙	↖↑↗	↖↑↗

Note: Gray shading represents changes in traffic control or approach lanes that the project is responsible to provide.

*U.S. 50 FREEWAY ANALYSIS***FREEWAY MAINLINE**

Table TC-21 summarizes a.m. and p.m. peak hour US 50 freeway mainline operations. Details of the analysis are included in the technical appendix. The following locations exhibit significant impacts:

- Eastbound US 50
 - Stockton Boulevard to 59th Street - a.m. and p.m. peak hours
 - Bradshaw Road to Mather Field Road - a.m. peak hour
 - Zinfandel Drive to Hazel Avenue - p.m. peak hour
- Westbound US 50
 - Mather Field Road to Watt Avenue - a.m. peak hour
 - Watt Avenue to 59th Street – a.m. and p.m. peak hours
 - 59th Street to SR 51 / SR 99 - p.m. peak hour

FREEWAY RAMP JUNCTIONS / WEAVING

Table TC-22 summarizes a.m. and p.m. peak hour freeway operations at ramp junctions and weaving areas. Details of the analysis are included in the technical appendix. The following locations exhibit significant impacts:

- Eastbound
 - Mather Field Road to Zinfandel Drive weave - a.m. peak hour
- Westbound
 - Sunrise Boulevard Entrance - a.m. peak hour

FREEWAY RAMP INTERSECTION QUEUING

Table TC-23 summarizes a.m. and p.m. peak hour freeway ramp intersection queuing. No locations exhibit a significant impact.

Table TC-21: Existing Plus NewBridge Project Peak Hour Freeway Mainline Level of Service

Direction	Location	Existing				Existing Plus NewBridge Project			
		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
		Volume	LOS	Volume	LOS	Volume	LOS	Volume	LOS
East-bound US 50	SR 99 / SR 51 to Stockton Boulevard	7,068	C	6,415	C	7,124	C	6,436	C
	Stockton Boulevard to 59th Street	7,470	F	7,228	F	7,537	F	7,261	F
	59th Street to 65th Street	6,767	D	6,641	D	6,827	D	6,659	D
	65th Street to Howe Avenue	7,962	D	7,562	D	8,039	D	7,582	D
	Howe Avenue to Watt Avenue	7,405	D	7,602	D	7,437	D	7,660	D
	Watt Avenue to Bradshaw Road	7,935	D	7,176	C	7,958	D	7,253	C
	Bradshaw Rd to Mather Field Rd	7,725	F	7,366	C	7,733	F	7,414	C
	Mather Field Rd to Zinfandel Drive	7,275	C	7,224	C	7,294	C	7,294	C
	Zinfandel Drive to Sunrise Blvd	5,121	C	6,649	F	5,146	C	6,709	F
	Sunrise Boulevard to Hazel Avenue	4,985	C	5,323	F	5,054	C	5,362	F

Bold values denote level of service “F” conditions.
Red shaded values indicate project impacts.
Source: DKS Associates, 2014

Table TC-21 continued									
Direction	Location	Existing				Existing Plus NewBridge Project			
		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
		Volume	LOS	Volume	LOS	Volume	LOS	Volume	LOS
West-bound US 50	Hazel Avenue to Sunrise Boulevard	6,068	D	4,370	C	6,083	D	4,436	C
	Sunrise Blvd to Zinfandel Drive	7,502	D	4,762	C	7,566	D	4,807	C
	Zinfandel Drive to Mather Field Rd	7,548	C	5,765	B	7,620	C	5,800	B
	Mather Field Rd to Bradshaw Road	7,859	F	6,939	D	7,909	F	6,931	D
	Bradshaw Road to Watt Avenue	7,550	F	6,466	D	7,626	F	6,499	D
	Watt Avenue to Howe Avenue	7,376	F	5,106	F	7,429	F	5,133	F
	Howe Avenue to 65th Street	8,157	F	7,407	F	8,232	F	7,417	F
	65th Street to 59th Street	8,278	F	7,358	F	8,310	F	7,378	F
	59th Street to Stockton Boulevard	9,115	D	7,945	F	9,152	D	7,971	F
	Stockton Boulevard to SR 99 / SR 51	8,546	D	8,136	F	8,571	D	8,160	F

Bold values denote level of service “F” conditions.
Red shaded values indicate project impacts.
Source: DKS Associates, 2014
Source: DKS Associates, 2014.

Table TC-22: Existing Plus NewBridge Project Peak Hour Freeway Ramp Junction/Weaving Level of Service

Direction	Location	Junction Type	Existing				Existing Plus NewBridge Project			
			A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
			Ramp Volume	LOS	Ramp Volume	LOS	Ramp Volume	LOS	Ramp Volume	LOS
East-bound US 50	Northbound 65th Street Slip Entrance	Weave	765	D	653	C	773	D	655	C
	Howe Avenue / Hornet Drive Exit		1,631		1,417		1,665		1,381	
	Southbound Howe Avenue Loop Entrance	One-Lane Merge	484	C	881	C	476	C	874	C
	Northbound Howe Avenue Slip Entrance	One-Lane Merge	419	C	431	C	431	C	448	C
	Watt Avenue Exit	Two-Lane Diverge	1,317	B	1,634	B	1,317	B	1,611	B
	Watt Avenue Entrance	One-Lane Merge	2,134	F	1,724	D	2,131	F	1,727	D
	Bradshaw Road Exit	Two-Lane Diverge	1,520	B	1,228	B	1,538	B	1,257	B
	Southbound Bradshaw Road Loop Entrance	One-Lane Merge	220	C	422	C	217	C	421	C
	Northbound Bradshaw Road Slip Entrance	One-Lane Merge	971	C	918	C	976	C	925	C
	Mather Field Road Exit	Two-Lane Diverge	1,266	B	1,062	A	1,262	B	1,080	A
Southbound Mather Field Road Loop Entrance	One-Lane Merge	125	C	101	B	120	C	105	B	

Bold values denote level of service “F” conditions.
Red shaded values indicate project impacts.
Source: DKS Associates 2014

Table TC-22 continued										
Direction	Location	Junction Type	Existing				Existing Plus NewBridge Project			
			A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
			Ramp Volume	LOS	Ramp Volume	LOS	Ramp Volume	LOS	Ramp Volume	LOS
East-bound US 50	Northbound Mather Field Road Slip Entrance	Weave	317	F	816	C	327	F	840	C
	Zinfandel Drive Exit		2,932		1,452		2,934		1,465	
	Southbound Zinfandel Drive Loop Entrance	One-Lane Merge	182	B	129	C	181	B	129	C
	Northbound Zinfandel Drive Slip Entrance	One-Lane Merge	348	B	540	C	359	B	545	C
	Sunrise Boulevard Exit	Major Diverge	1,773	C	1,959	D	1,763	C	1,976	D
	Sunrise Boulevard Entrance	One-Lane Merge	992	C	889	D	1,023	C	890	D
	Hazel Avenue Exit	Two-Lane Diverge	933	B	1,541	C	958	B	1,547	C
	Hazel Avenue Entrance	Weave	804	C	945	C	792	C	948	C
	Aerojet Road Exit		241		55		241		51	
West-bound US 50	Hazel Avenue Exit	Two-Lane Diverge	631	A	869	A	662	A	869	B
	Northbound Hazel Avenue Loop Entrance	One-Lane Merge	160	B	600	B	163	B	612	B
	Southbound Hazel Avenue Slip Entrance	One-Lane Merge	1,550	B	800	B	1,558	B	821	B

Bold values denote level of service “F” conditions.
Red shaded values indicate project impacts.
Source: DKS Associates, 2014

Table TC-22 continued										
Direction	Location	Junction Type	Existing				Existing Plus NewBridge Project			
			A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
			Ramp Volume	LOS	Ramp Volume	LOS	Ramp Volume	LOS	Ramp Volume	LOS
West-bound US 50	Sunrise Boulevard Exit	One-Lane Diverge	749	E	758	D	701	E	783	D
	Sunrise Blvd Entrance	Lane Addition	2,183	F	1,656	D	2,186	F	1,658	D
	Zinfandel Drive Exit	One-Lane Diverge	1,034	E	608	C	1,046	E	609	C
	Northbound Zinfandel Drive Loop Entrance	Lane Addition	585	B	1,197	B	617	B	1,180	B
	Southbound Zinfandel Drive Slip Entrance	One-Lane Merge	442	C	561	B	447	C	569	B
	Mather Field Road Exit	One-Lane Drop	1,093	C	556	A	1,125	C	583	A
	Northbound Mather Field Road Loop Entrance	One-Lane Merge	515	B	861	B	520	B	878	B
	Southbound Mather Field Road Slip Entrance	One-Lane Merge	387	B	380	B	383	B	349	B
	Bradshaw Road Exit	Two-Lane Diverge	1,236	B	1,327	B	1,251	B	1,319	B
	Northbound Bradshaw Road Loop Entrance	One-Lane Merge	914	D	910	C	946	D	930	C
	Southbound Bradshaw Road Slip Entrance	One-Lane Merge	338	D	590	C	337	D	608	C
	Watt Avenue Exit	Major Diverge	1,373	D	1,188	C	1,384	D	1,195	C
	Northbound Watt Avenue Entrance	One-Lane Merge	820	D	943	C	806	D	948	C

Bold values denote level of service “F” conditions.
Red shaded values indicate project impacts.
Source: DKS Associates, 2014.

Table TC-22 continued										
Direction	Location	Junction Type	Existing				Existing Plus NewBridge Project			
			A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
			Ramp Volume	LOS	Ramp Volume	LOS	Ramp Volume	LOS	Ramp Volume	LOS
West-bound US 50	Southbound Watt Avenue Slip Entrance	Lane Addition / Weave	1,232	C	1,317	D	1,234	C	1,313	D
	Howe Avenue Exit	Major Diverge / Weave	1,531	D	1,419		1,540	D	1,439	
	Northbound Howe Avenue Loop Entrance	One-Lane Merge	654	D	602	C	655	D	600	C
	Southbound Howe Avenue Slip Entrance	One-Lane Merge	574	C	574	C	564	C	564	C

Bold values denote level of service “F” conditions.
Red shaded values indicate project impacts.
Source: DKS Associates, 2014.

Table TC-23: Existing Plus NewBridge Project Peak Hour Freeway Ramp Termini Queuing

Direction	US 50 Exit Ramp	Available Storage Length (feet/lane)			Maximum Queue Length (feet/lane)					
		L	T	R	AM Peak Hour			PM Peak Hour		
					L	T	R	L	T	R
Eastbound US-50	Howe Avenue	765	-	765	202	-	395	226	-	248
	Watt Avenue	1,500	-	1,500	156	-	209	249	-	186
	Bradshaw Avenue	1,250	-	1,250	193	-	556	169	-	412
	Mather Field Road	1,385	-	1,385	198	-	572	276	-	69
	Zinfandel Drive	1,025	1,025	1,025	225	812	736	412	341	123
	Sunrise Boulevard	1,695	-	1,695	280	-	185	371	-	90
	Hazel Avenue	1,310	-	1,310	312	-	84	817	-	26
Westbound US-50	Hazel Avenue	1,995		1,995	268		50	295		469
	Sunrise Boulevard	1,540	-	1,540	130	-	135	154	-	167
	Zinfandel Drive	1,065	-	1,065	429	-	67	65	-	103
	Mather Field Road	1,335	-	1,335	629	-	575	242	-	31
	Bradshaw Road	1,330	-	1,330	321	-	117	399	-	31
	Watt Avenue	1,480	-	1,480	155	-	512	104	-	471
	Howe Avenue	1,355	1,355	1,355	197	412	131	250	412	242

L = left turn movement, T = through movement, R = right turn movement
Source: DKS Associates, 2014.

PEDESTRIAN AND BICYCLE ANALYSIS

The NewBridge project would not remove any existing or planned pedestrian facility, nor would the Project remove any existing or planned bicycle facility in the Bicycle Master Plan. The NewBridge project would add pedestrian and bicycle demands within the NewBridge project site and to and from nearby land uses. Very few bicycle and pedestrian facilities exist in the Project area, with the exception of the existing Class I bike trail along the western side of the Folsom South Canal. Therefore, the impact of the NewBridge project on pedestrian and bicycle circulation in the site vicinity is *potentially significant*.

As illustrated in Plate TC-10, the NewBridge project has proposed changes to the Bicycle Master Plan, consisting of approximately 14 miles of regional Class I and 6.5 miles of Class II bikeways to be constructed as part of the project. The complete bicycle and pedestrian network within the NewBridge project consists of Class I multi-use paths/trails, Class II bikeways, pedestrian routes, and parkways. This comprehensive system provides attractive transportation choices for residents, employees, and visitors, and is an important component to providing connectivity for non-vehicular travel within the Project. The bicycle and pedestrian network has been designed to provide linkages to existing and planned pedestrian and bicycle facilities and land uses in the Project vicinity, including adjacent proposed master plans.

TRANSIT ANALYSIS

Public transit is not currently provided to, or in the vicinity of, the NewBridge project site. In the preparation of this analysis, a conceptual transit system to serve the NewBridge project and adjacent future projects was developed. **The proposed transit system was assumed as an attribute of the NewBridge Project and was included in the traffic modeling and analysis in the Joint TIS.** The additional transit service was assumed to be funded by the NewBridge project. ~~However~~**Although**, the timing and implementation of the transit system are uncertain at this time, **the assumed transit routes and service frequency would be required at full buildout of the NewBridge Project and would be included as a condition of approval.** The NewBridge project would increase demands for public transit facilities. **Because adequate transit facilities would be provided,** ~~Therefore~~, the impact of the NewBridge project on the transit system is *potentially significant* **less than significant**.

RURAL ROAD FUNCTIONALITY ANALYSIS

Table TC-24 summarizes the results of the rural roadway segment functionality analysis. Plate TC-14 illustrates the resultant functionality impacts. The table includes the number of lanes assumed with the implementation of the NewBridge project, which in many cases is greater than the number of lanes in the existing condition. The shaded table cells under the “Travel Lanes” heading illustrates new roadways and widened roadways that are assumed part of the NewBridge project. The “Substandard?” heading indicates whether or not a roadway meets the County standards of 12-foot lanes and 6-foot shoulders. If the project makes improvements to a roadway segment such as widening, it would be required to reconstruct the entire substandard roadway segment

to County standards. The shaded table cells under the “Functionality Impact?” heading indicate those locations with a functionality impact.

As stated above, the traffic analysis assumed that the NewBridge project would construct a number of travel lanes on roadway segments that are internal to or on the boundary of the NewBridge project, and the entire roadway segment would be reconstructed to County standards at that time. The timing of implementation of such additional traffic lanes on these internal or boundary roadway segments will affect whether or not impacts would exist at some time prior to full build out of the NewBridge project.

Table TC-24: Existing Plus NewBridge Project Functionality Impacts

ID	Roadway	Segment		Jurisdiction	Existing Substandard Roadways				Existing + NewBridge Project			
		From	To		Travel Lanes	Pavement (ft)	Substandard? ¹	Existing Volume	Travel Lanes	Substandard? ¹	Forecasted Volume	Functionality Impact? ²
15	Douglas Rd	Mather Blvd	Zinfandel Dr	County	2	23	Yes	6,635	2	Yes	7,250	Yes
16	Douglas Rd	Zinfandel Dr	Sunrise Blvd	Rancho Cordova/County	2	23	Yes	8,369	2	Yes	9,750	Yes
19	Eagles Nest Rd	Kiefer Blvd	Jackson Rd	County	2	20	Yes	740	4	No	9,790	Yes ³
20	Eagles Nest Rd	Jackson Rd	Florin Rd	County	2	<21	Yes	517	2	Yes	3,460	No
21	Eagles Nest Rd	Florin Rd	Grant Line Rd	County	2	<21	Yes	189	2	Yes	1,330	No
25	Elder Creek Rd	South Watt Ave	Hedge Ave	County	2	23	Yes	5,576	2	Yes	6,300	Yes
26	Elder Creek Rd	Hedge Ave	Mayhew Rd	County	2	23	Yes	5,797	2	Yes	6,540	Yes
27	Elder Creek Rd	Mayhew Rd	Bradshaw Rd	County	2	23	Yes	5,355	2	Yes	6,400	Yes
28	Elder Creek Rd	Bradshaw Rd	Excelsior Rd	County	2	23	Yes	2,158	2	Yes	3,440	No
30	Excelsior Rd	Kiefer Blvd	Jackson Rd	County	2	22	Yes	3,716	2	Yes	3,660	No
31	Excelsior Rd	Jackson Rd	Elder Creek Rd	County	2	<21	Yes	5,075	2	Yes	5,470	No
32	Excelsior Rd	Elder Creek Rd	Florin Rd	County	2	<21	Yes	4,203	2	Yes	3,990	No
33	Excelsior Rd	Florin Rd	Gerber Rd	County	2	<21	Yes	5,423	2	Yes	5,390	No
34	Excelsior Rd	Gerber Rd	Calvine Rd	County	2	<21	Yes	4,229	2	Yes	3,970	No
39	Florin Rd	South Watt Ave	Hedge Ave	County	2	22	Yes	7,718	2	Yes	8,940	Yes
40	Florin Rd	Hedge Ave	Mayhew Rd	County	2	22	Yes	6,312	2	Yes	7,680	Yes
41	Florin Rd	Mayhew Rd	Bradshaw Rd	County	2	22	Yes	6,317	2	Yes	7,750	Yes
42	Florin Rd	Bradshaw Rd	Excelsior Rd	County	2	22	Yes	3,478	2	Yes	5,110	No
43	Florin Rd	Excelsior Rd	Sunrise Blvd	County	2	22	Yes	3,835	2	Yes	5,910	No
48	Fruitridge Rd	South Watt Ave	Hedge Ave	City of Sacramento/County	2	22	Yes	2,890	2	Yes	3,140	No
49	Fruitridge Rd	Hedge Ave	Mayhew Rd	County	2	22	Yes	1,790	2	Yes	2,030	No
50	Grant Line Rd	White Rock Rd	Douglas Rd	Rancho Cordova/County	2	22	Yes	7,189	2	Yes	7,920	Yes
58	Happy Ln	Old Placerville Rd	Kiefer Blvd	County	2	22	Yes	4,635	2	Yes	6,660	Yes
59	Hedge Ave	Jackson Rd	Fruitridge Rd	County	2	22	Yes	3,061	2	Yes	2,970	No
60	Hedge Ave	Fruitridge Rd	Elder Creek Rd	City of Sacramento/County	2	22	Yes	3,737	2	Yes	3,680	No
61	Hedge Ave	Elder Creek Rd	Florin Rd	County	2	22	Yes	2,722	2	Yes	2,790	No

Red text with light gray shading indicate project impacts

ID	Roadway	Segment		Jurisdiction	Existing Substandard Roadways				Existing + NewBridge Project			
		From	To		Travel Lanes	Pavement (ft)	Substandard? ¹	Existing Volume	Travel Lanes	Substandard? ¹	Forecasted Volume	Functionality Impact? ²
70	Jackson Rd	Bradshaw Rd	Excelsior Rd	County	2	26	Yes	13,030	2	Yes	18,090	Yes
71	Jackson Rd	Excelsior Rd	Eagles Nest Rd	County	2	26	Yes	10,478	2	Yes	17,610	Yes
74	Kiefer Blvd	Florin Perkins Rd	South Watt Ave	City of Sacramento/County	2	22	Yes	4,616	2	Yes	4,810	No
77	Kiefer Blvd	Bradshaw Rd	Happy Ln	County	2	22	Yes	4,618	2	Yes	5,500	No
78	Kiefer Blvd	Zinfandel Dr	Sunrise Blvd	County	2	22	Yes	656	3	No	7,510	Yes ³
83	Mather Blvd-Excelsior Rd ⁴	Douglas Rd	Kiefer Blvd	County	2	22	Yes	6,751	2	Yes	6,660	No
89	Mayhew Rd	Jackson Rd	Fruitridge Rd	County	2	22	Yes	1,616	2	Yes	1,860	No
116	White Rock Rd	Fitzgerald Rd	Grant Line Rd	Rancho Cordova/County	2	20	Yes	2,490	2	Yes	2,520	No
123	Zinfandel Dr	Douglas Rd	Kiefer Blvd	County	2	<21	Yes	2,848	2	Yes	2,860	No

Red text with light gray shading indicate project impacts.

Note: Gray shading indicates changes in travel lanes or facility type that the project is responsible to provide. For all roadway segments to be widened, the project is responsible to build the entire roadway to County standards.

¹ Substandard rural roads are defined as rural, 2-lane roadway segments with travel lanes narrower than 12 feet and/or roadside shoulders narrower than 6 feet.

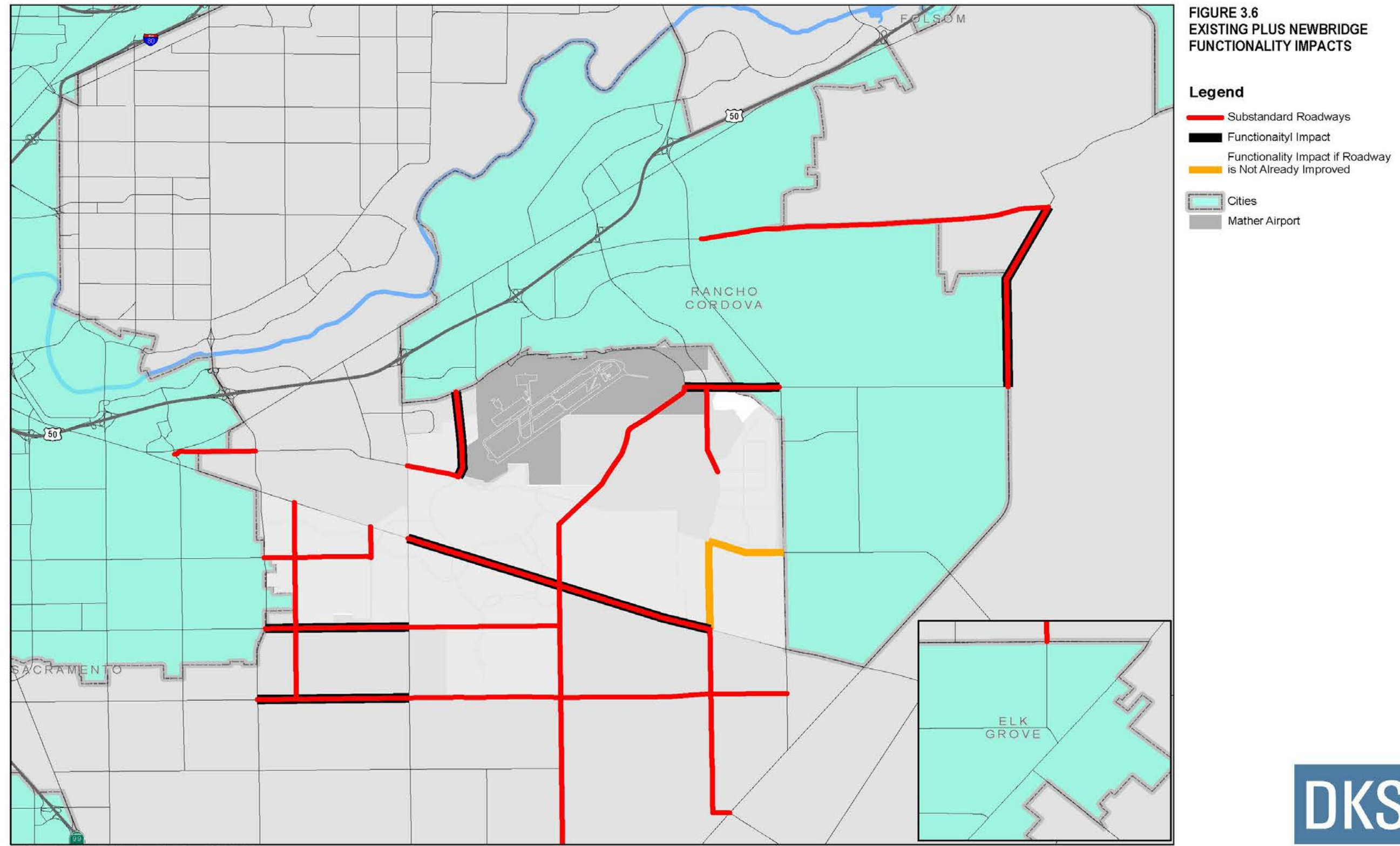
² Functionality impacts are triggered when a substandard rural road increases over a threshold of 6,000 ADT, or for a roadway already above 6,000 ADT, increases by more than 600 ADT.

³ The potential for an impact exists should the project generate traffic volumes on the roadway exceeding 6,000 ADT, or increasing more than 600 ADT on a roadway already above 6,000 ADT, prior to the construction of roadway improvements.

⁴ Excluding the roadway segment that is within the developed community of Independence at Mather.

⁵ The functionality impact is mitigated by improving the roadway to County standards, including widening travel lanes to 12 feet and/or widening or providing paved shoulders to 6 feet.

Plate TC-14: Existing Plus NewBridge Functionality Impacts



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EXISTING PLUS PROJECT MITIGATION MEASURES

ROADWAY SEGMENT MITIGATION

Table TC-25 summarizes the results of the operations analysis for the study area roadway segments with mitigation. Where feasible, the number of roadway lanes was increased to mitigate the impact. However, the increased number of lanes could not exceed the maximum designated in the General Plans of the applicable jurisdictions. The shaded table cells under the “Travel Lanes” and “Facility Type” headings illustrate widened roadways for mitigation purposes, which would be the responsibility of the Project to implement. The shaded table cells under the “Level of Service” heading indicate those locations that would continue to have LOS impacts after mitigation. The table also includes the constraint that precluded full mitigation of the LOS impact.

The “LOS Impact with Mitigation?” column shows whether there is still an LOS impact after the mitigation measure is applied. In other words, this column shows whether a mitigation measure successfully mitigates the impact or not. In several locations where the improvements allowed under the General Plan would not mitigate an LOS impact, the County has proposed alternative mitigation measures, which are shown in the “Alternative Mitigation” column. These alternative mitigation measures will either fully mitigate the impact or substantially reduce the level of impact.

INTERSECTION MITIGATION

Table TC-26 and Table TC-27 summarize the results of the operations analysis for the study area intersections with mitigation. However, the increased number of lanes on each approach does not exceed the County’s standard number of approach lanes. Shaded table cells in Table TC-27 indicate those locations where changes in traffic control and / or number of approach lanes by type have been made which would be the responsibility of the Project to implement. As shown in Table TC-26, all LOS impacts have been fully mitigated. Detailed analysis information is included in the technical appendix.

The “LOS Impact with Mitigation?” column in Table TC-27 shows whether there is still an LOS impact after the mitigation measure is applied. In other words, this column shows whether a mitigation measure successfully mitigates the impact. In locations where the LOS impact could not be mitigated by implementing the County’s standard number of approach lanes, the County has proposed alternative mitigation measures, which are shown in the “Alternative Mitigation” column. These generally include providing additional turn lanes, carrying an additional through lane past the intersection, or designating the intersection as a High Capacity Intersection. These alternative mitigation measures will either fully mitigate the impact or substantially reduce the level of impact.

U.S. 50 FREEWAY MITIGATION

Capacity improvements such as widening of the freeway and freeway junctions would reduce the severity of the impacts, but were generally not considered feasible due to right-of-way restrictions, legal constraints, and the numerous transportation structures

that would need to be modified and/or replaced. Potential alternative improvements have been identified from Caltrans' US-50 Transportation Concept Report (TCR) and Corridor System Management Plan (CSMP). The TCR and CSMP is focused on intelligent transportation systems (ITS) and integrated corridor management (ICM) projects that would have operational benefits to US-50 without adding additional capacity. The TCR and CSMP also identify potential improvements to parallel local facilities that would be expected to reduce travel demand on US-50. The Project will participate in one or more of these alternative improvements that could directly reduce the severity of the project's impact and/or provide operational benefits to the US-50 corridor in general.

US-50 EASTBOUND ALTERNATIVE IMPROVEMENTS

To lessen the impact to the eastbound US-50 mainline between Stockton Boulevard and 59th Street, the project may pay a fair share toward the construction of:

- Ramp meter improvements (Caltrans ITS/OPS Project List)

To lessen the impact to the eastbound US-50 mainline between Bradshaw Road and Mather Field Road, and to the weave between Mather Field Road to Zinfandel Drive, the project may pay a fair share toward the construction of:

- Auxiliary lanes between Bradshaw Road and Mather Field Road (2035 SACOG MTP)
- An interchange modification of US-50 at Mather Field Road (2035 SACOG MTP)

To lessen the impact to the eastbound US-50 mainline between Zinfandel Drive and Hazel Avenue, the project may pay a fair share toward the construction of:

- Auxiliary lanes between Zinfandel Drive and Sunrise Boulevard (2035 SACOG MTP)
- Auxiliary lanes between Sunrise Boulevard and Hazel Avenue (2035 SACOG MTP)
- Widen Sunrise Boulevard to 6 lanes with special treatments, including intersection improvements at White Rock Road, Folsom Boulevard, Coloma Road, Gold Express Drive, and Gold Country Boulevard (2035 SACOG MTP)
- A new interchange at Rancho Cordova Parkway, including a 4-lane arterial from US-50 to White Rock Road (2035 SACOG MTP)
- Multi-modal corridor improvements and interchange improvements at Hazel Avenue (2035 SACOG MTP)

US-50 WESTBOUND ALTERNATIVE IMPROVEMENTS

To lessen the impact to the westbound US-50 on-ramp at Sunrise Boulevard, the project may pay a fair share toward the construction of:

- Auxiliary lanes between Sunrise Boulevard and Zinfandel Drive (2035 SACOG MTP)

- A transition lane from the Sunrise Boulevard slip off-ramp to the Sunrise Boulevard slip on-ramp (2035 SACOG MTP)

To lessen the impact to the westbound US-50 mainline between Mather Field Road and Watt Avenue, the project may pay a fair share toward the construction of:

- Auxiliary lanes between Mather Field Road and Bradshaw Road (2035 SACOG MTP)
- An interchange modification of US-50 at Mather Field Road (2035 SACOG MTP)

To lessen the impact to the westbound US-50 mainline between Watt Avenue and SR-51/SR-99, the project may pay a fair share toward the construction of:

- Bus/HOV lanes from Watt Avenue to Downtown Sacramento (2035 SACOG MTP)
- Replacement of existing communication lines with fiber optics to improve performance between SR-51/SR-99 and Watt Avenue (2013 10-Year SHOPP Plan)
- Auxiliary lane between the NB Howe Avenue on-ramp and the SB Howe Avenue on-ramp (2035 SACOG MTP)
- Ramp meter improvements (Caltrans ITS/OPS Project List)

Table TC-25: Existing Plus NewBridge Project Roadway Segment Mitigations

ID	Roadway	Segment		Existing + NewBridge Project					Mitigated Existing + NewBridge Project						
		From	To	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/Capacity Ratio	Level of Service	Travel Lanes	Facility Type ¹	Volume / Capacity Ratio	Level of Service	LOS Impact with Mitigation?	Alternative Mitigation ²	Constraint if Full Mitigation Not Possible
23	Elder Creek Rd	Power Inn Rd	Florin-Perkins Rd	2	Arterial M	16,320	0.91	E	4	Arterial M	0.45	A	No		
44	Folsom Blvd	Howe Ave	Jackson Rd	4	Arterial M	38,790	1.08	F	4	Arterial M	1.08	F	Yes		Maximum General Plan lanes
55	Grant Line Rd	Calvine Rd	Sheldon Rd	2	Rural S	14,240	0.71	E	4	Arterial M	0.40	A	No		
62	Howe Ave	US 50	Folsom Blvd	6	Arterial M	54,510	1.01	F	6	Arterial M	1.01	F	Yes		Maximum General Plan lanes
67	Jackson Rd	South Watt Ave	Hedge Ave	2	Arterial M	19,820	1.10	F	4	Arterial M	0.55	A	No		
69	Jackson Rd	Mayhew Rd	Bradshaw Rd	2	Arterial M	18,170	1.01	F	4	Arterial M	0.50	A	No		
70	Jackson Rd	Bradshaw Rd	Excelsior Rd	2	Arterial M	18,090	1.01	F	4	Arterial M	0.50	A	No		
73	Jackson Rd	Sunrise Blvd	Grant Line Rd	2	Rural Hwy	14,120	0.62	E	4	Arterial M	0.39	A	No		
106	Sunrise Blvd	Kiefer Blvd	Jackson Rd	2	Arterial M	18,370	1.02	F	4	Arterial M	0.51	A	No		

Note: Gray shading represents changes in travel lanes or facility type that the project is responsible to provide.

¹ The following classifications are used to determine daily roadway capacity:

Arterial L - Arterial, Low Access Control

Arterial M - Arterial, Moderate Access Control Arterial H - Arterial, High

Access Control Rural Hwy - Rural 2-lane Highway

Rural S - Rural 2-lane Road, 24'-36' of pavement, Paved Shoulders

Rural NS - Rural 2-lane Road, 24'-36' of pavement, No Shoulders

Res Collector F - Residential Collector with Frontage

Res Collector NF - Residential Collector with No Frontage

² Alternative mitigations represent proposed mitigations beyond the General Plan, as proposed by the County of Sacramento.

Bold values do not meet LOS policy. Red values with light gray shading indicate project impacts.

Table TC-26: Existing Plus NewBridge Project Impacted Intersections and Mitigations

Intersection		AM Peak Hour						PM Peak Hour							
		Existing Plus NewBridge Project			LOS Impact	Mitigated Existing Plus NewBridge Project			Existing Plus NewBridge Project			LOS Impact	Mitigated Existing Plus NewBridge Project		
		Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)
29	Mayhew Road & Jackson Road	Two-way stop	A	1.7	No				Two-way stop	A	2.1	Yes	Signal	C	31.5
	<i>Northbound Through - Left Turn</i>		<i>E</i>	<i>36.6</i>						<i>F</i>	<i>50.0</i>				
	<i>Northbound Right Turn</i>		<i>B</i>	<i>13.0</i>						<i>C</i>	<i>15.9</i>				
	<i>Southbound</i>		<i>C</i>	<i>22.2</i>						<i>D</i>	<i>33.6</i>				
	<i>Eastbound Left Turn</i>		<i>A</i>	<i>9.0</i>						<i>A</i>	<i>8.7</i>				
	<i>Westbound Left Turn</i>		<i>A</i>	<i>8.7</i>						<i>A</i>	<i>9.6</i>				
38	Bradshaw Road & Jackson Road	Signal	F	86.2	Yes	Signal	E	69.5	Signal	E	65.4	No			
42	Happy Lane & Old Placerville Road	Two-way stop	B	11.8	Yes	Signal	C	28.0	Two-way stop	B	12.5	Yes	Signal	C	26.4
	<i>Northbound Left Turn</i>		F	201.8						F	288.0				
	<i>Northbound Right Turn</i>		E	36.1						<i>C</i>	<i>17.5</i>				
	<i>Westbound Left Turn</i>		<i>B</i>	<i>11.0</i>						<i>B</i>	<i>10.2</i>				

Note: Gray shading represents changes in traffic control that the project is responsible to provide.

Bold values do not meet LOS policy. **Red** values with light gray shading indicate project impacts.

Table TC-27: Existing Plus NewBridge Project Intersection Impacts and Mitigation

Intersection	Traffic Control		Existing Plus NewBridge Project Lane Geometrics				Mitigated Existing Plus NewBridge Project Lane Geometrics				LOS Impact with Mitigation?	High Capacity Intersection? ¹	Alternative Mitigation ²	Constraint if Full Mitigation Not Possible
	Existing Plus Project	Mitigated Existing Plus Project	NB Approach	SB Approach	EB Approach	WB Approach	NB Approach	SB Approach	EB Approach	WB Approach				
29 Mayhew Road & Jackson Road	Two-way stop	Signal	↘ ↗	↗	↘ ↗	↘ ↗	↘ ↗	↗	↘ ↗	↘ ↗	No	No		
38 Bradshaw Road & Jackson Road	Signal	Signal	↘ ↗	↘ ↗ ↘ ↗	↘ ↗	↘ ↗	↘ ↗	↘ ↗ ↘ ↗	↘ ↗	↘ ↗ ↘ ↗	No	No		
42 Happy Lane & Old Placerville Road	Two-way stop	Signal	↘ ↗		↑ ↗	↘ ↗	↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	No	No	Realign Happy Lane to Routier Road (2 lanes)	

¹ High capacity intersections are defined in the Sacramento County General Plan and may include grade separations, additional turn lanes, and/or other features as deemed appropriate by the County.

² Alternative mitigations represent proposed mitigations beyond the General Plan, excluding high capacity intersections, as proposed by the County of Sacramento.

PEDESTRIAN AND BICYCLE FACILITY MITIGATION

Future development within the NewBridge Specific Plan shall implement the proposed bicycle and pedestrian path/trail system as described in the NewBridge Specific Plan and Design Guidelines. Future projects with NSP shall be coordinated with Sacramento County to identify the design-level details of necessary on- and off-site pedestrian and bicycle facilities to serve the proposed development. These facilities shall be incorporated into subsequent projects and could include sidewalks, stop signs, standard pedestrian and school crossing warning signs, lane striping to provide a bicycle lane, bicycle parking, signs to identify pedestrian and bicycle paths, raised crosswalks, pedestrian signal heads, and all appropriate traffic calming measures as defined in the County's Neighborhood Traffic Management Program (NTMP). Sidewalks would be required as part of the frontage improvements along all new roadway construction in the Project vicinity in conformance with County design standards. Circulation and access to all proposed public spaces shall include sidewalks that meet Americans with Disabilities Act standards. **Implementation of this mitigation will reduce the potentially significant impacts of the Project to a less-than-significant level.**

TRANSIT SYSTEM MITIGATION

The Project applicant shall coordinate with Sacramento County and Sacramento Regional Transit District (or other transit operators) to provide the additional transit facilities and services assumed in the transportation analysis, or a cost-effective equivalent level of transit facilities and services.

The assumed transit routes and service frequency would be required at full development of the Project. The full level of transit service would not achieve adequate transit ridership during the early stages of development. Thus the ultimate transit service, like the roadway system serving the Project, must be phased with development of the Project.

RURAL FUNCTIONALITY MITIGATION

Table TC-28 summarizes the results of the functionality analysis for the study area rural roadway segments with mitigation.

EXISTING PLUS NEWBRIDGE PROJECT MITIGATION SUMMARY

Table TC-28 through Table TC-33 summarize all of the roadway segments, intersections, and freeway facilities that would exhibit significant LOS impacts along with the mitigation success for these impacts.

Table TC-28: Existing Plus NewBridge Project Functionality Mitigations

ID	Roadway	Segment		Existing + NewBridge Project			Mitigation	Impact after Mitigation?	
		From	To	Travel Lanes	Substandard? ¹	Forecasted Volume			Functionality Impact? ²
15	Douglas Rd	Mather Blvd	Zinfandel Dr	2	Yes	7,250	Yes	Widen to County standards ⁵	No
16	Douglas Rd	Zinfandel Dr	Sunrise Blvd	2	Yes	9,750	Yes	Widen to County standards ⁵	No
19	Eagles Nest Rd	Kiefer Blvd	Jackson Rd	4	No	9,790	Yes ³	Widen to County standards ⁵	No
25	Elder Creek Rd	South Watt Ave	Hedge Ave	2	Yes	6,300	Yes	Widen to County standards ⁵	No
26	Elder Creek Rd	Hedge Ave	Mayhew Rd	2	Yes	6,540	Yes	Widen to County standards ⁵	No
27	Elder Creek Rd	Mayhew Rd	Bradshaw Rd	2	Yes	6,400	Yes	Widen to County standards ⁵	No
39	Florin Rd	South Watt Ave	Hedge Ave	2	Yes	8,940	Yes	Widen to County standards ⁵	No
40	Florin Rd	Hedge Ave	Mayhew Rd	2	Yes	7,680	Yes	Widen to County standards ⁵	No
41	Florin Rd	Mayhew Rd	Bradshaw Rd	2	Yes	7,750	Yes	Widen to County standards ⁵	No
50	Grant Line Rd	White Rock Rd	Douglas Rd	2	Yes	7,920	Yes	Widen to County standards ⁵	No
58	Happy Ln	Old Placerville Rd	Kiefer Blvd	2	Yes	6,660	Yes	Widen to County standards ⁵	No
70	Jackson Rd	Bradshaw Rd	Excelsior Rd	2	Yes	18,090	Yes	Widen to County standards ⁵	No
71	Jackson Rd	Excelsior Rd	Eagles Nest Rd	2	Yes	17,610	Yes	Widen to County standards ⁵	No
78	Kiefer Blvd	Zinfandel Dr	Sunrise Blvd	3	No	7,510	Yes ³	Widen to County standards ⁵	No

Note: Gray shading indicates changes in travel lanes or facility type that the project is responsible to provide. For all roadway segments to be widened, the project is responsible to build the entire roadway to County standards.

¹ Substandard rural roads are defined as rural, 2-lane roadway segments with travel lanes narrower than 12 feet and/or roadside shoulders narrower than 6 feet.

² Functionality impacts are triggered when a substandard rural road increases over a threshold of 6,000 ADT, or for a roadway already above 6,000 ADT, increases by more than 600 ADT.

³ The potential for an impact exists should the project generate traffic volumes on the roadway exceeding 6,000 ADT, or increasing more than 600 ADT on a roadway already above 6,000 ADT, prior to the construction of roadway improvements.

⁴ Excluding the roadway segment that is within the developed community of Independence at Mather.

⁵ The functionality impact is mitigated by improving the roadway to County standards, including widening travel lanes to 12 feet and/or widening or providing paved shoulders to 6 feet.

Red text with light gray shading indicate project impacts.

**Table TC-29: Existing Plus NewBridge
Project Summary of Impacted Roadway Segments**

ID	Roadway	Segment	
		From	To
Level of Service Impact Fully Mitigated by General Plan Lanes			
23	Elder Creek Rd	Power Inn Rd	Florin-Perkins Rd
55	Grant Line Rd	Calvine Rd	Sheldon Rd
67	Jackson Rd	South Watt Ave	Hedge Ave
69	Jackson Rd	Mayhew Rd	Bradshaw Rd
70	Jackson Rd	Bradshaw Rd	Excelsior Rd
73	Jackson Rd	Sunrise Blvd	Grant Line Rd
106	Sunrise Blvd	Kiefer Blvd	Jackson Rd
Level of Service Impact Not Fully Mitigated by General Plan Lanes			
44	Folsom Blvd	Howe Ave	Jackson Rd
62	Howe Ave	US 50	Folsom Blvd

**Table TC-30: Existing Plus NewBridge
Project Summary of Impacted Intersections**

Intersection		Alternative Mitigation
Level of Service Impact Fully Mitigated by General Plan Lanes		
29	Mayhew Road & Jackson Road	
38	Bradshaw Road & Jackson Road	
42	Happy Lane & Old Placerville Road	**
<p>¹ Alternative mitigations represent proposed mitigations beyond the General Plan, excluding designated high capacity intersections, as proposed by the County of Sacramento.</p> <p>* denotes alternative mitigations that improve operations but do not fully mitigate the impact.</p> <p>** denotes alternative mitigations that fully mitigate the impact.</p>		

**Table TC-31: Existing Plus NewBridge Project
Summary of Impacted Freeway Segments**

Direction	Location
Level of Service Impact Not Mitigated	
Eastbound US-50	Stockton Boulevard to 59th Street
	Bradshaw Road to Mather Field Road
Westbound US-50	Mather Field Road to Bradshaw Road
	Bradshaw Road to Watt Avenue
	Watt Avenue to Howe Avenue
	Howe Avenue to 65th Street
	65th Street to 59th Street
	59th Street to Stockton Boulevard
	Stockton Boulevard to SR 99 / SR 51
<i>Source: DKS Associates, 2014.</i>	

**Table TC-32: Existing Plus New Bridge Project
Summary of Impacted Freeway Ramp Junction/Weaves**

Direction	Location	Junction Type
Level of Service Impact Not Mitigated		
Eastbound US-50	Northbound Mather Field Road Slip Entrance	Weave
	Zinfandel Drive Exit	
Westbound US-50	Sunrise Boulevard Entrance	Lane Addition
<i>Source: DKS Associates, 2014.</i>		

Table TC-33: Existing Plus NewBridge Project Functionality Impact Summary

ID	Roadway	Segment	
		From	To
Functionality Impact Fully Mitigated			
15	Douglas Rd	Mather Blvd	Zinfandel Dr
16	Douglas Rd	Zinfandel Dr	Sunrise Blvd
19	Eagles Nest Rd	Kiefer Blvd	Jackson Rd
25	Elder Creek Rd	South Watt Ave	Hedge Ave
26	Elder Creek Rd	Hedge Ave	Mayhew Rd
27	Elder Creek Rd	Mayhew Rd	Bradshaw Rd
39	Florin Rd	South Watt Ave	Hedge Ave
40	Florin Rd	Hedge Ave	Mayhew Rd
41	Florin Rd	Mayhew Rd	Bradshaw Rd
50	Grant Line Rd	White Rock Rd	Douglas Rd
58	Happy Ln	Old Placerville Rd	Kiefer Blvd
70	Jackson Rd	Bradshaw Rd	Excelsior Rd
71	Jackson Rd	Excelsior Rd	Eagles Nest Rd
78	Kiefer Blvd	Zinfandel Dr	Sunrise Blvd

CEQA CUMULATIVE PLUS JACKSON CORRIDOR PROJECTS SCENARIO

The CEQA Cumulative plus Jackson Corridor Projects scenario evaluates the effects of the traffic of four developments added to CEQA Cumulative conditions. Plate TC-28 illustrates the location of the Jackson Corridor Projects:

- West Jackson Highway Master Plan (West Jackson)
- Jackson Township Specific Plan (Jackson Township)
- NewBridge Specific Plan (NewBridge)
- Mather South Specific Plan Amendment (Mather South)

PEDESTRIAN AND BICYCLE FACILITIES

The roadways within the Jackson Corridor Projects would meet County standards, which would provide sidewalks and on-street (Class II) bike lanes on all collector, arterial and thoroughfare roadways. The Jackson Corridor Projects also provide several off-street (Class I) multi-purpose trails.

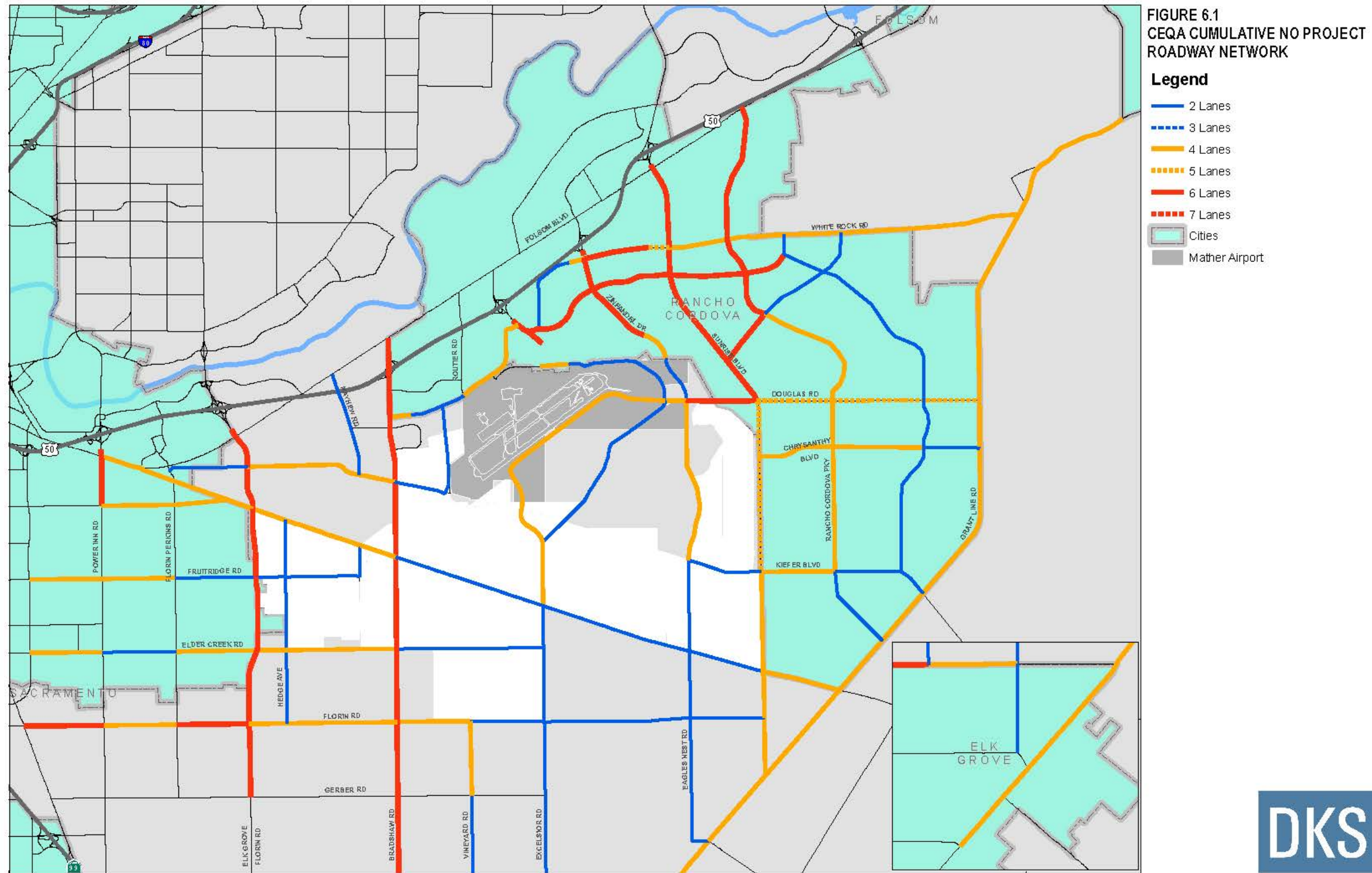
TRANSIT SYSTEM

The Jackson Corridor Projects are designed with significant amounts of higher density and mixed uses to help support transit use but transit service within walking distances of those uses is required to achieve a significant transit ridership.

An accurate estimation of transit use requires the definition of specific transit routes and frequency of service on those routes. A separate planning effort, involving staff from Sacramento County and Sacramento Regional Transit (RT), was conducted to define an appropriate transit system for the transportation analysis. That effort is described in Section 3.1.2.3 of the Traffic Study.

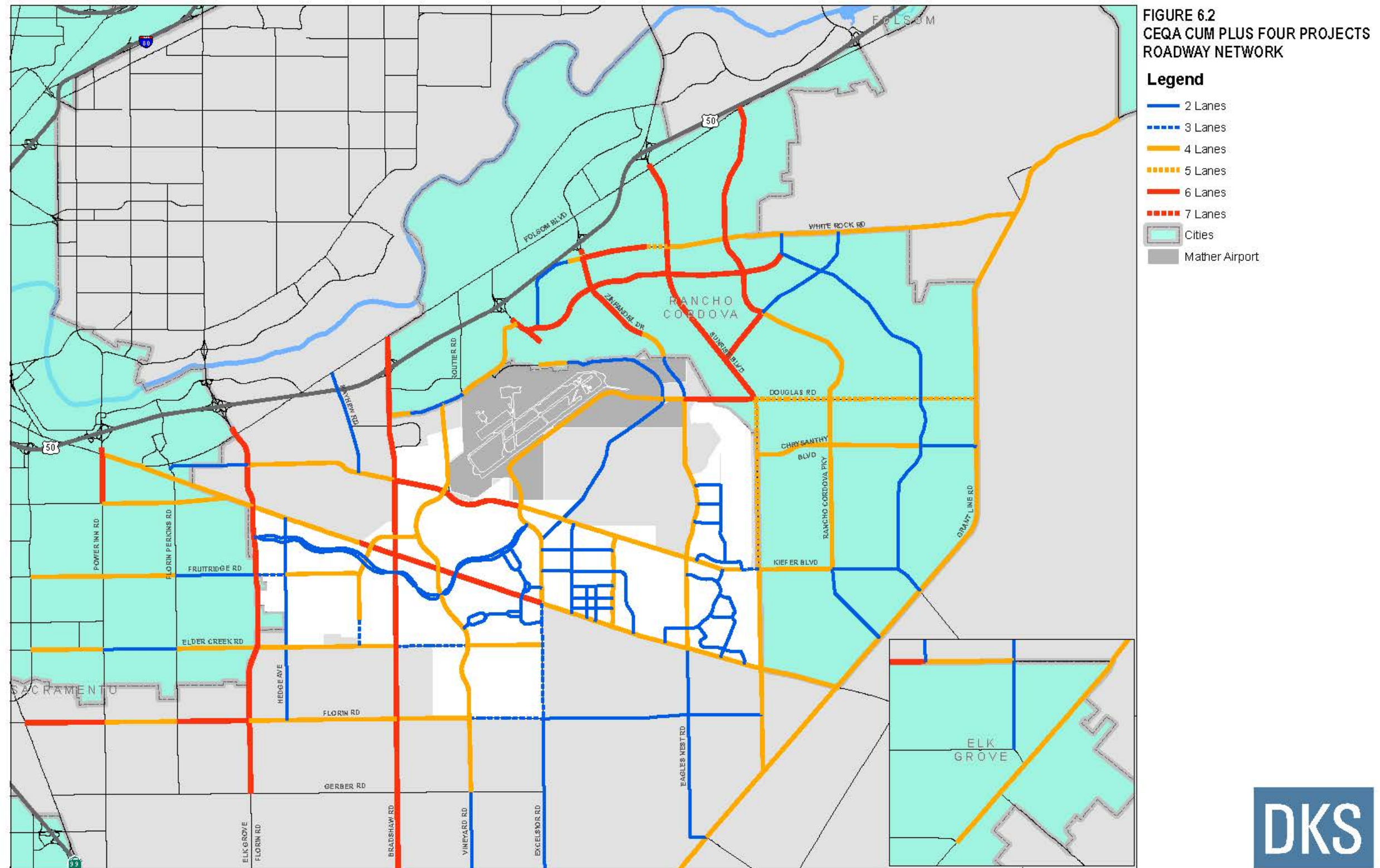
The planning effort resulted in four transit lines that would serve the Jackson Corridor Projects at a frequency of 15 minutes throughout the typical operating hours (approximately 6 AM to 8 PM) on weekdays. Plate TC-29 shows the assumed transit routes for this scenario.

Plate TC-15: CEQA Cumulative No Project Roadway Network



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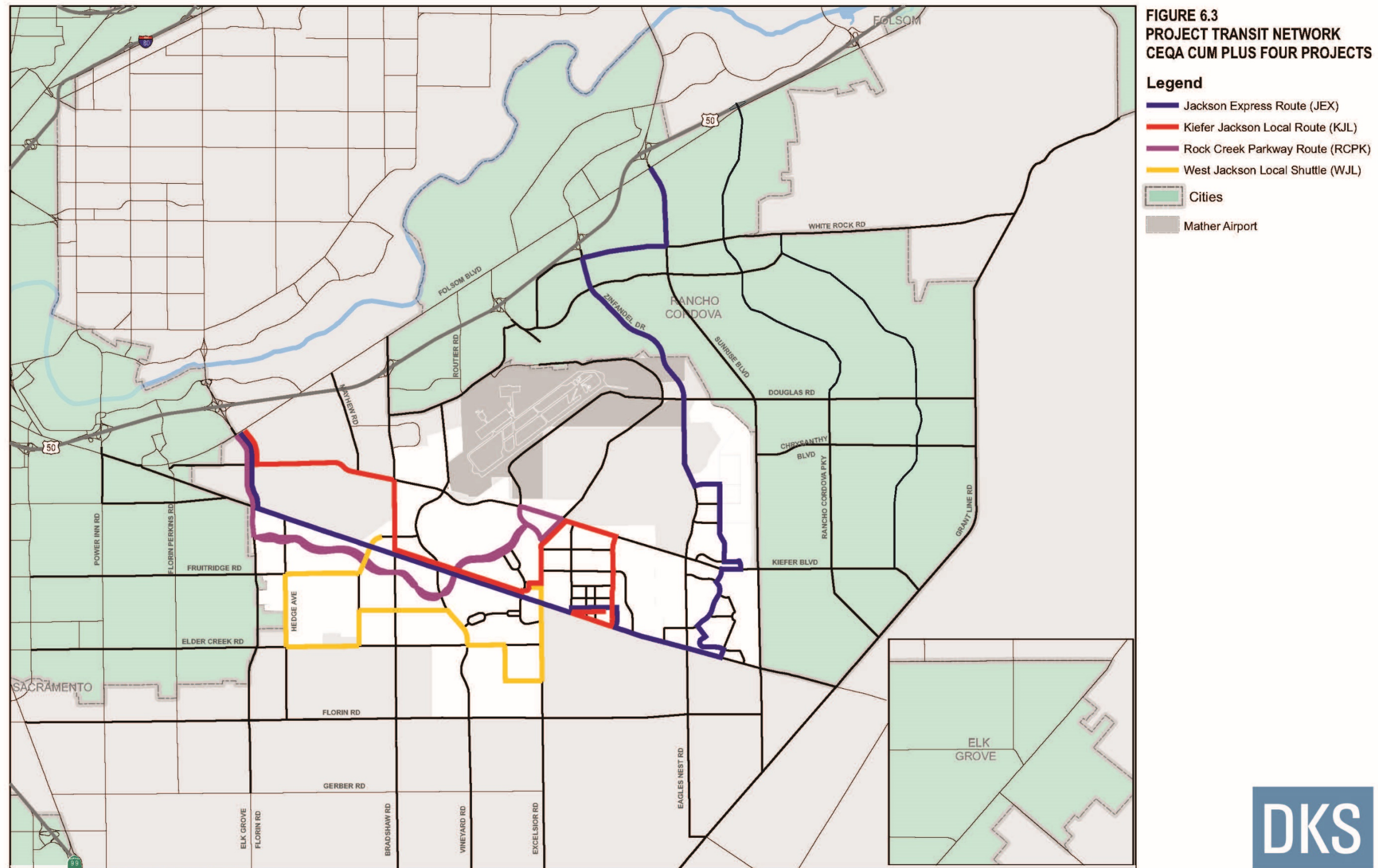
Plate TC-16: CEQA Cumulative plus Jackson Corridor Projects Roadway Network



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Plate TC-17: Project Transit Network CEQA Cumulative plus Jackson Corridor Projects



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TRIP GENERATION

The SACSIM model that has been utilized for the transportation forecasts in this analysis estimated trip generation of the Jackson Corridor Projects. Table TC-77 summarizes the person trip generation. The Jackson Corridor Projects would generate over 107,000 daily work person trip ends, and over 929,000 daily person trip ends for all trip purposes.

Table TC-78 summarizes the estimated mode choice for the CEQA cumulative with Jackson Corridor Projects scenario. Over 90 percent of all person trips are expected to be accommodated by automobile. Transit will serve about 2 percent of all trips, while walk and bike modes will accommodate about 7.2 percent of all trips. The mode choice assumes full implementation of the project's pedestrian and bicycle systems.

Table TC-79 summarizes the vehicular (auto) trip generation of the Jackson Corridor Projects. The Jackson Corridor Projects are estimated to generate over 604,000 daily vehicle trip ends. About 46,000 of the daily vehicle trip ends will be associated with trips with both an origin and destination within the individual projects, about 15 percent of the trip ends. The internal trip ends represent about 23,000 daily vehicle trips (one-half the number of internal trip ends). The Jackson Corridor Projects will generate about 512,800 external vehicle trips that have an origin or destination inside one of the Jackson Corridor Projects but the other end of the trip is outside the project from which it originated. Table TC-79 also shows the vehicle trips generated during the a.m. and p.m. peak hours.

TRIP DISTRIBUTION

The distribution of trips associated with development of the Jackson Corridor Projects was derived utilizing SACSIM, incorporating the proposed land use and access locations associated with the Jackson Corridor Projects. Trip distribution varies by land use and time period. Plate TC-30 illustrates the overall trip distribution of daily Jackson Corridor Projects trips with the CEQA Plus Jackson Corridor Projects scenario. The highest percentages of Jackson Corridor Projects traffic are accommodated on Jackson Road, Bradshaw Road, Kiefer Boulevard, and Vineyard Road.

Table TC-34: Estimated Daily Person Trip Generation (CEQA plus Jackson Corridor Projects Scenario)

Trip Purpose	Daily Person Trip Ends
Work Trips	107,188
Non-Work Trips	822,512
All Trip Purposes	929,700

Source: DKS Associates, 2014.

Table TC-35: Mode Split (CEQA Cumulative plus Jackson Corridor Projects Scenario)

Mode	Percentage of Person Trips by Trip Purpose		
	Work Trips	Non-Work Trips	All Trip Purposes
Auto - SOV	84.2%	49.8%	53.8%
Auto - HOV	9.9%	40.6%	37.1%
Transit	3.5%	1.8%	2.0%
Walk	1.6%	7.0%	6.4%
Bike	0.9%	0.8%	0.8%

Source: DKS Associates, 2014.

Table TC-36: Estimated Daily Vehicle Trip Generation (CEQA plus Jackson Corridor Projects Scenario)

Trip Type		AM Peak Hour	PM Peak Hour	Daily
Total Vehicle Trip Ends		49,555	83,827	641,649
Percent Internal Trip Ends ¹		20.5%	28.1%	24.0%
Vehicle Trips	Internal to Projects	5,072	11,762	76,943
	External to Projects	39,410	60,303	487,741
	Total	44,482	72,065	564,684

¹ Both trip ends within individual projects.

Source: DKS Associates, 2014.

Plate TC-18: CEQA plus Jackson Corridor Projects Trip Distribution

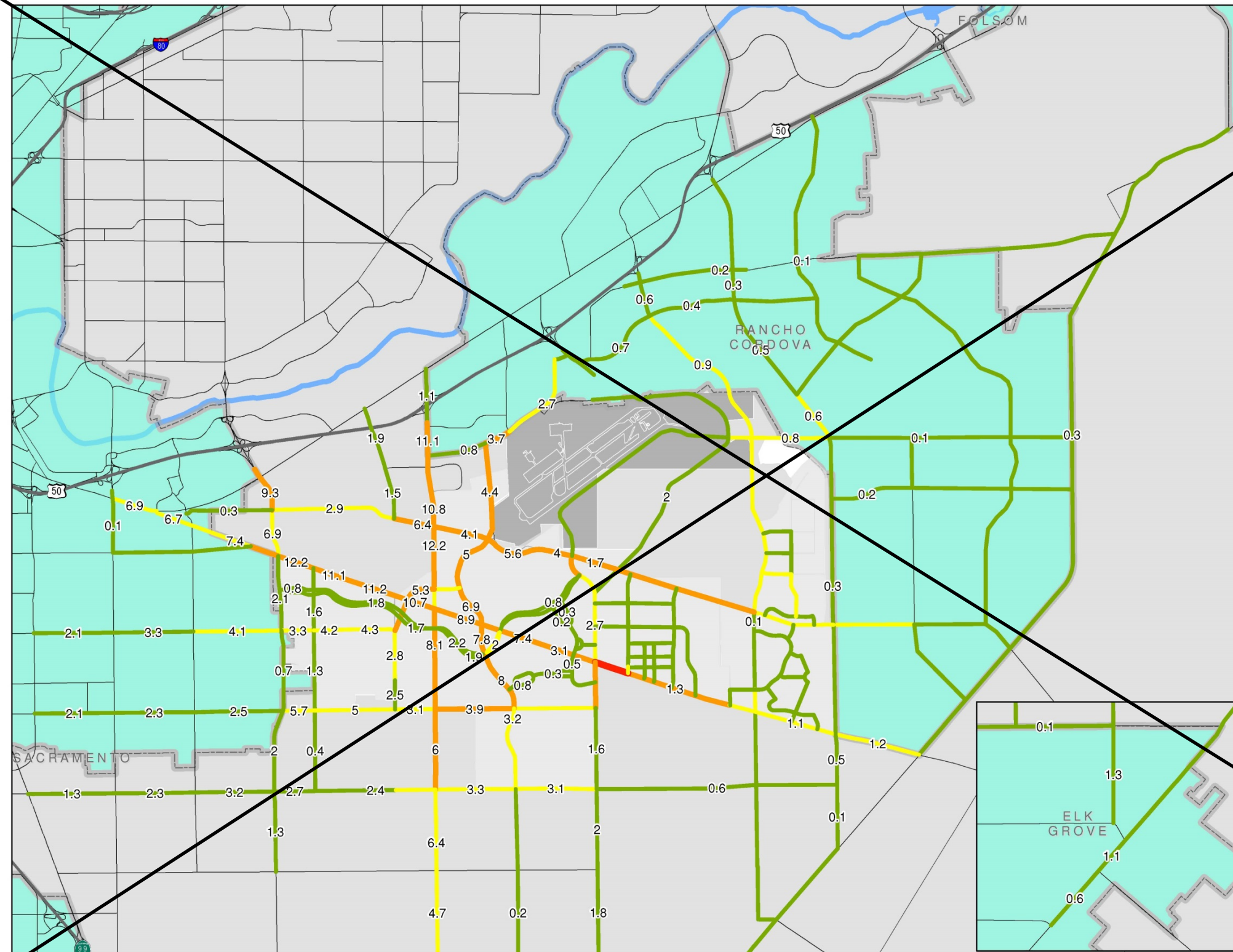


FIGURE 6.4
CEQA CUM PLUS FOUR PROJECTS
FOUR PROJECTS TRIP DISTRIBUTION

Legend

- 0.1% to 2.5%
- 2.6% to 5.0%
- 5.1% to 10.0%
- 10.0% and up
- Freeways
- Other Major Roadways
- Cities
- Mather Airport



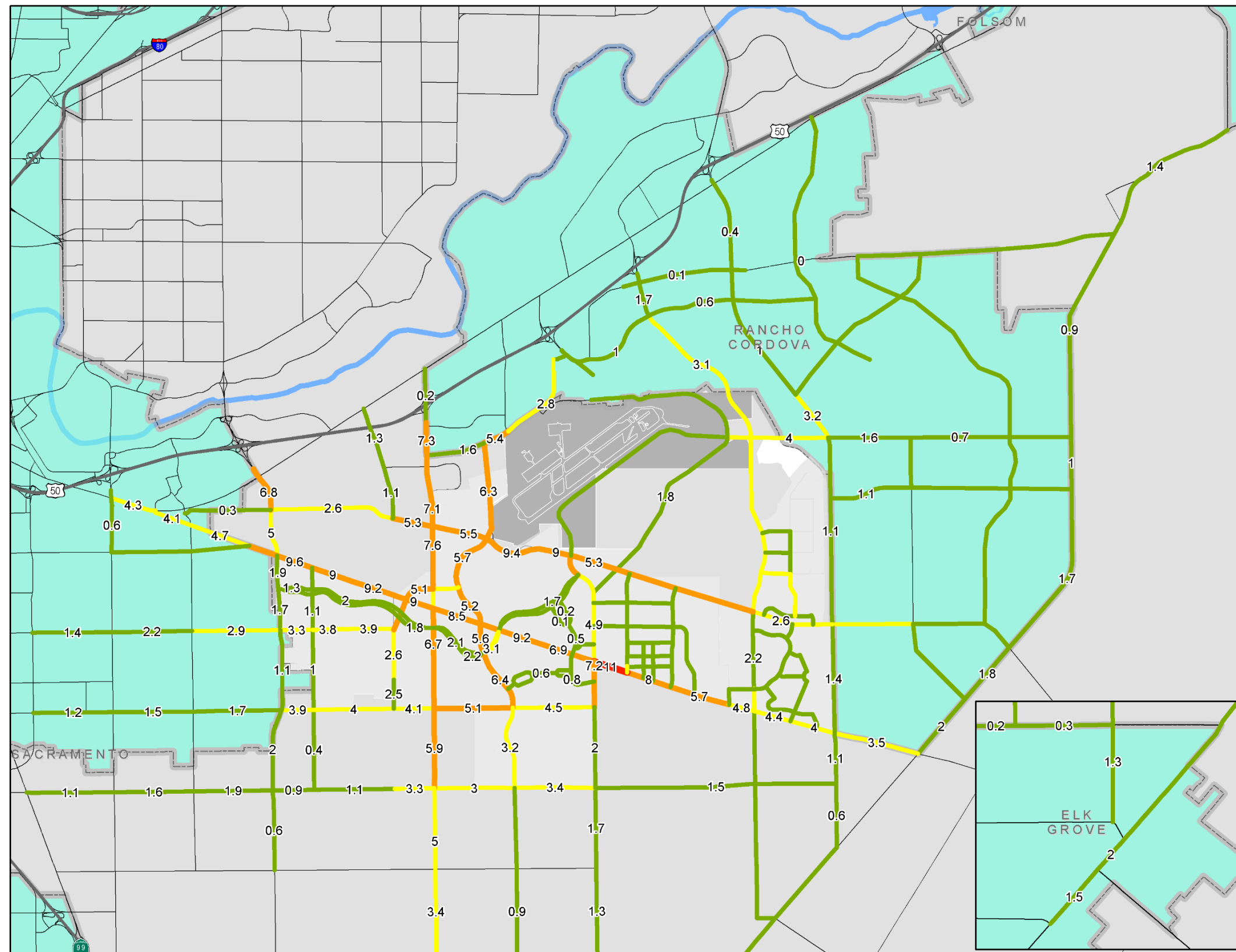


FIGURE 6.4
CEQA CUM PLUS FOUR PROJECTS
FOUR PROJECTS TRIP DISTRIBUTION

Legend

- 0.1% to 2.5%
- 2.6% to 5.0%
- 5.1% to 10.0%
- 10.0% and up
- Freeways
- Other Major Roadways
- Cities
- Mather Airport



OPERATIONS ANALYSIS AND IMPACTS

Cumulative scenario impacts are determined by comparing the traffic operating conditions associated with the Jackson Corridor Projects with the traffic operating conditions associated with the cumulative (without Jackson Corridor Projects) conditions, and comparing the change to the thresholds of significance. Plate TC-31 illustrates the resultant traffic operating conditions associated with the CEQA Cumulative (without Jackson Corridor Projects) scenario. Plate TC-32 illustrates the resultant traffic operating conditions associated with the CEQA Cumulative Plus Jackson Corridor Projects scenario.

ROADWAY SEGMENT IMPACTS

Table TC-80 summarizes the results of the operations analysis for the study area roadway segments. The table includes the number of lanes assumed with the implementation of the Jackson Corridor Projects. The shaded table cells under the “Travel Lanes” and “Facility Type” headings illustrate new roadways or widened roadways. The last column of the table shows the project(s) responsible for the increase in the number of roadway lanes. The shaded table cells under the “Level of Service” heading indicate those locations with an LOS impact.

INTERSECTION IMPACTS

Table TC-81 and Table TC-82 summarize the results of the operations analysis for the study area intersections. The tables include the implementation of intersection changes associated with the Jackson Corridor Projects. Table TC-82 illustrates the type of traffic control and number of lanes by type on each study area intersection approach. Shaded table cells indicate those locations where changes in traffic control and / or number of approach lanes by type would be fully funded by the project(s) shown in the last column. Shaded table cells in Table TC-81 illustrate those locations with an LOS impact. Detailed analysis information is included in the technical appendix.

Signal warrant analysis was conducted for all unsignalized intersections along Jackson Road, and other unsignalized intersections in close proximity to the project. The project is considered to have a significant impact at an unsignalized location if both the impact criteria in Table TC-7 are met, and one or more of the signal warrants specified in the California Manual on Uniform Traffic Control Devices (CAMUTCD) are met. Detailed signal warrant calculation sheets are included in the technical appendix. The following unsignalized intersections exhibit significant impacts and meet one or more traffic signal warrants:

- Zinfandel Drive and Woodring Drive
- Happy Lane and Old Placerville Road
- Eagles Nest Road and Florin Road

U.S. 50 FREEWAY IMPACTS

FREEWAY MAINLINE

Table TC-83 summarizes a.m. and p.m. peak hour US 50 freeway mainline operations. Details of the analysis are included in the technical appendix. The following locations exhibit significant impacts:

- Eastbound
 - Stockton Boulevard to 59th Street - a.m. and p.m. peak hours
 - Watt Avenue to Mather Field Road - a.m. peak hour
 - Zinfandel Drive to Hazel Avenue - p.m. peak hour
- Westbound
 - Watt Avenue to Howe Avenue - p.m. peak hour
 - Howe Avenue to 59th Street - a.m. and p.m. peak hours
 - 59th Street to SR 99 / SR 51 - p.m. peak hour

FREEWAY RAMP JUNCTIONS / WEAVING

Table TC-84 summarizes a.m. and p.m. peak hour freeway operations at ramp junctions and weaving areas. Details of the analysis are included in the technical appendix. The following locations exhibit significant impacts:

- Eastbound
 - 65th Street to Howe Avenue weave - a.m. and p.m. peak hours
 - Bradshaw Road exit - a.m. peak hour
 - Mather Field Road to Zinfandel Drive weave - a.m. and p.m. peak hours
 - Rancho Cordova Parkway to Hazel Avenue weave - a.m. and p.m. peak hours
- Westbound
 - Hazel Avenue to Rancho Cordova Parkway weave - a.m. and p.m. peak hours
 - Southbound Sunrise Boulevard Entrance Ramp - a.m. peak hour
 - Northbound Bradshaw Road Loop Entrance Ramp - a.m. peak hour
 - Southbound Bradshaw Road Slip Entrance Ramp - a.m. peak hour
 - Southbound Howe Avenue Slip Entrance Ramp - a.m. peak hour

FREEWAY RAMP INTERSECTION QUEUING

Table TC-85 and Table TC-86 summarize a.m. and p.m. peak hour freeway ramp intersection queuing. The following locations exhibit a significant impact:

- Eastbound
 - Exit ramp to Howe Avenue - right turn queue length exceeds available storage
- Westbound
 - Exit ramp to Rancho Cordova Parkway - left turn queue length exceeds available storage

Plate TC-19: CEQA Cumulative No Project Roadway Segment and Intersection LOS and Impacts

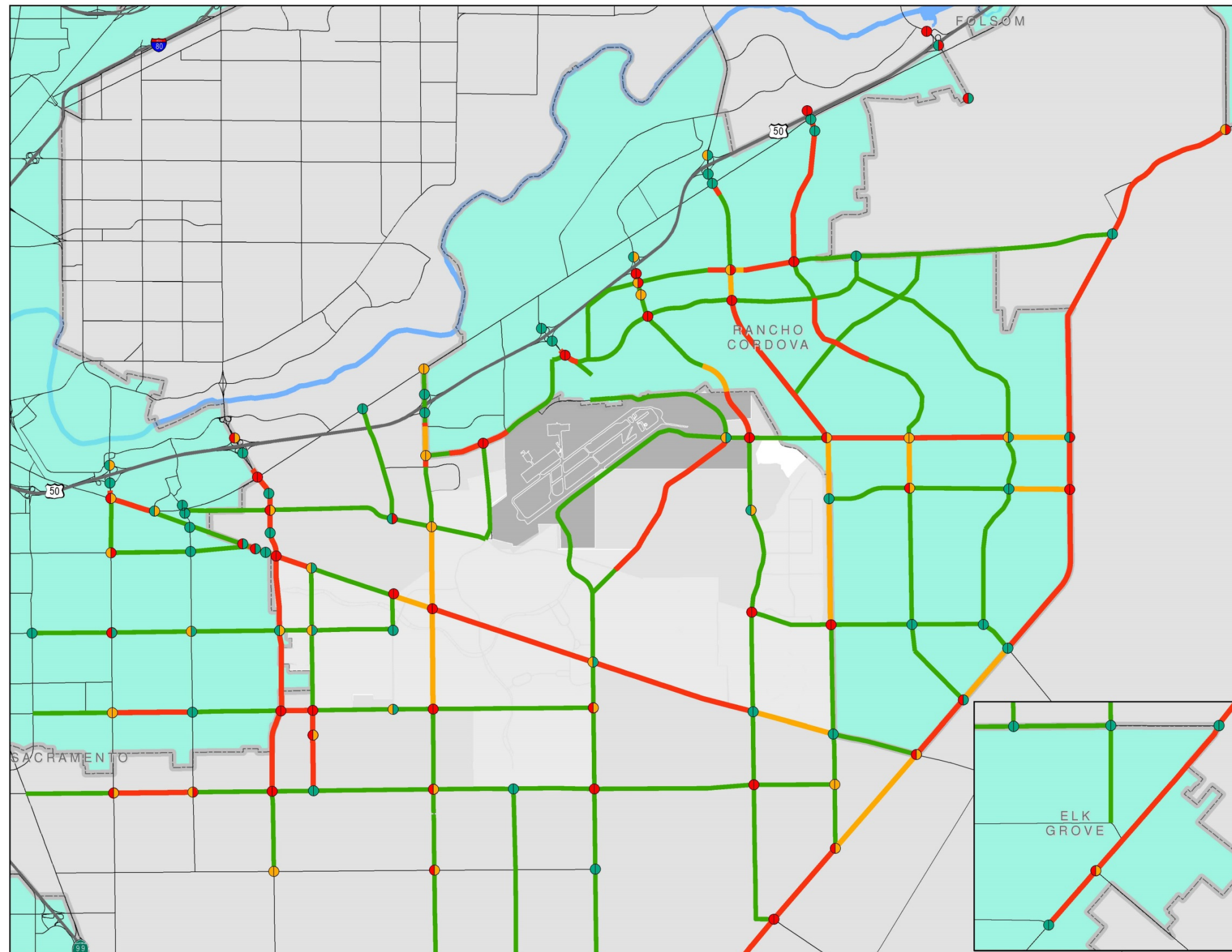


FIGURE 6.5
CEQA CUMULATIVE NO PROJECT
ROADWAY SEGMENT AND
INTERSECTION LOS AND IMPACTS

Legend

Intersections (AM Peak Hour)

- LOS A-D
- LOS E
- LOS F

Intersections (PM Peak Hour)

- LOS A-D
- LOS E
- LOS F

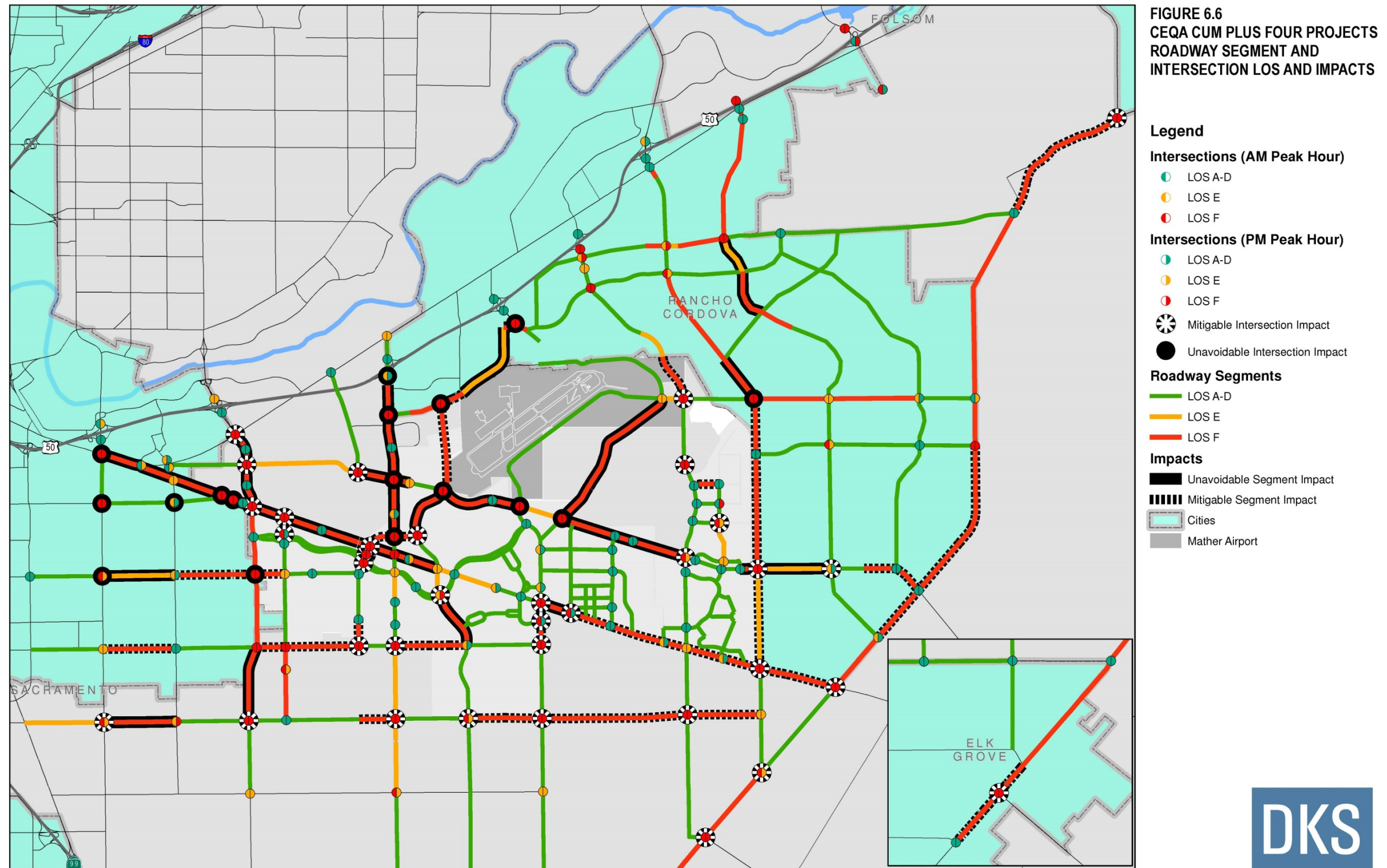
Roadway Segments

- LOS A-D
- LOS E
- LOS F

- ▭ Cities
- ▭ Mather Airport



Plate TC-20: CEQA Cumulative plus Jackson Corridor Projects Roadway Segment and Intersection LOS and Impacts



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Table TC-37: CEQA Cumulative Roadway Segment Levels of Service

ID	Roadway	Segment		CEQA Cumulative No Project					CEQA Cumulative + Jackson Corridor Projects					Project(s) Responsible for Change in Lanes
		From	To	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/ Capacity Ratio	Level of Service	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/ Capacity Ratio	Level of Service	
1	Bradshaw Rd	Folsom Blvd	US 50	6	Arterial M	27,690	0.51	A	6	Arterial M	24,810	0.46	A	
2	Bradshaw Rd	US 50	Lincoln Village Dr	6	Arterial M	66,570	1.23	F	6	Arterial M	88,900	1.65	F	
3	Bradshaw Rd	Lincoln Village Dr	Old Placerville Rd	6	Arterial M	52,770	0.98	E	6	Arterial M	81,450	1.51	F	
4	Bradshaw Rd	Old Placerville Rd	Goethe Rd	6	Arterial M	62,130	1.15	F	6	Arterial M	81,000	1.50	F	
5.1	Bradshaw Rd	Goethe Rd	Collector WJ-8	6	Arterial M	46,870	0.87	D	6	Arterial M	70,200	1.30	F	
5.2	Bradshaw Rd	Collector WJ-8	Kiefer Blvd	6	Arterial M	45,290	0.84	D	6	Arterial M	66,370	1.23	F	
6.1	Bradshaw Rd	Kiefer Blvd	Collector WJ-9	6	Arterial M	51,100	0.95	E	6	Arterial M	68,950	1.28	F	
6.2	Bradshaw Rd	Collector WJ-9	Mayhew Rd	6	Arterial M	51,960	0.96	E	6	Arterial M	68,690	1.27	F	
6.3	Bradshaw Rd	Mayhew Rd	Jackson Rd	6	Arterial M	51,930	0.96	E	6	Arterial M	43,320	0.80	D	
7.1	Bradshaw Rd	Jackson Rd	Rock Creek Pkwy	6	Arterial M	52,210	0.97	E	6	Arterial M	43,750	0.81	D	
7.2	Bradshaw Rd	Rock Creek Pkwy	Collector WJ-10	6	Arterial M	52,210	0.97	E	6	Arterial M	49,890	0.92	E	
7.3	Bradshaw Rd	Collector WJ-10	Collector WJ-11	6	Arterial M	52,380	0.97	E	6	Arterial M	47,120	0.87	D	
7.4	Bradshaw Rd	Collector WJ-11	Elder Creek Rd	6	Arterial M	52,440	0.97	E	6	Arterial M	46,560	0.86	D	
8	Bradshaw Rd	Elder Creek Rd	Florin Rd	6	Arterial M	45,030	0.83	D	6	Arterial M	50,650	0.94	E	
9	Bradshaw Rd	Florin Rd	Gerber Rd	6	Arterial M	42,410	0.79	C	6	Arterial M	52,310	0.97	E	
10	Bradshaw Rd	Gerber Rd	Calvine Rd	6	Arterial M	29,910	0.55	A	6	Arterial M	37,560	0.70	B	
11	Calvine Rd	Waterman Rd	Bradshaw Rd	6	Arterial M	16,760	0.31	A	6	Arterial M	18,490	0.34	A	
12	Calvine Rd	Bradshaw Rd	Vineyard Rd	6	Arterial M	14,540	0.27	A	6	Arterial M	14,820	0.27	A	
13	Calvine Rd	Vineyard Rd	Excelsior Rd	4	Arterial M	8,460	0.24	A	4	Arterial M	10,280	0.29	A	
14	Chrysanthy Blvd	Sunrise Blvd	Rancho Cordova Pkwy	4	Arterial M	7,980	0.22	A	4	Arterial M	12,520	0.35	A	
15	Douglas Rd	Mather Blvd	Zinfandel Dr	4	Arterial M	21,130	0.59	A	4	Arterial M	35,330	0.98	E	
16	Douglas Rd	Zinfandel Dr	Sunrise Blvd	6	Arterial M	37,070	0.69	B	6	Arterial M	48,540	0.90	D	
17	Douglas Rd	Sunrise Blvd	Rancho Cordova Pkwy	5	Arterial M	42,430	1.18	F	5	Arterial M	41,470	1.15	F	
18.1	Douglas Rd	Rancho Cordova Pkwy	Americanos Blvd	5	Arterial M	42,610	1.18	F	5	Arterial M	41,670	1.16	F	
18.2	Douglas Rd	Americanos Blvd	Grant Line Rd	5	Arterial M	33,170	0.92	E	5	Arterial M	30,940	0.86	D	
19.1	Eagles Nest Rd	Kiefer Blvd	N Bridgewater Dr	2	Arterial M	4,680	0.26	A	4	Arterial M	14,060	0.39	A	NewBridge
19.2	Eagles Nest Rd	N Bridgewater Dr	S Bridgewater Dr	2	Arterial M	4,680	0.26	A	4	Arterial M	14,270	0.40	A	NewBridge
19.3	Eagles Nest Rd	S Bridgewater Dr	Jackson Rd	2	Arterial M	4,760	0.26	A	4	Arterial M	15,420	0.43	A	NewBridge
20	Eagles Nest Rd	Jackson Rd	Florin Rd	2	Arterial M	3,620	0.20	A	2	Arterial M	9790	0.54	A	
21	Eagles Nest Rd	Florin Rd	Grant Line Rd	2	Arterial M	3,270	0.18	A	2	Arterial M	5230	0.29	A	
22	Elder Creek Rd	65th St	Power Inn Rd	4	Arterial M	24,110	0.67	B	4	Arterial M	28,230	0.78	C	
23	Elder Creek Rd	Power Inn Rd	Florin-Perkins Rd	2	Arterial M	25,310	1.41	F	2	Arterial M	28,710	1.60	F	
24	Elder Creek Rd	Florin Perkins Rd	South Watt Ave	4	Arterial M	28,080	0.78	C	4	Arterial M	31,550	0.88	D	

Table TC-80 continued														
ID	Roadway	Segment		CEQA Cumulative No Project					CEQA Cumulative + Jackson Corridor Projects					Project(s) Responsible for Change in Lanes
		From	To	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/Capacity Ratio	Level of Service	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/Capacity Ratio	Level of Service	
25	Elder Creek Rd	South Watt Ave	Hedge Ave	4	Arterial M	40,970	1.14	F	4	Arterial M	54,480	1.51	F	
26	Elder Creek Rd	Hedge Ave	Mayhew Rd	4	Arterial M	30,110	0.84	D	4	Arterial M	43,210	1.20	F	
27	Elder Creek Rd	Mayhew Rd	Bradshaw Rd	4	Arterial M	17,880	0.50	A	4	Arterial M	25,620	0.71	C	
28.1	Elder Creek Rd	Bradshaw Rd	Vineyard Rd	2	Arterial M	9,260	0.51	A	3	Arterial M	31,620	1.76	F	West Jackson
28.2	Elder Creek Rd	Vineyard Rd	Excelsior Rd	2	Arterial M	9,450	0.53	A	4	Arterial M	28,590	0.79	C	West Jackson
29	Elk Grove-Florin Rd	Florin Rd	Gerber Rd	6	Arterial M	48,360	0.90	D	6	Arterial M	46,840	0.87	D	
30.1	Excelsior Rd	Kiefer Blvd	Douglas Rd	2	Arterial M	7,500	0.42	A	2	Arterial M	12,160	0.68	B	
30.2	Excelsior Rd	Douglas Rd	Collector WJ-1/ Collector JT-1	4	Arterial M	10,890	0.30	A	4	Arterial M	30,400	0.84	D	
30.3	Excelsior Rd	Collector WJ-1/ Collector JT-1	Collector WJ-2/ Collector JT-2	4	Arterial M	11,480	0.32	A	4	Arterial M	29,620	0.82	D	
30.4	Excelsior Rd	Collector WJ-2/ Collector JT-2	Jackson Rd	4	Arterial M	11,480	0.32	A	4	Arterial M	29,840	0.83	D	
31.1	Excelsior Rd	Jackson Rd	Collector WJ-6	2	Arterial M	11,630	0.65	B	3	Arterial M	41,580	2.31	F	West Jackson
31.2	Excelsior Rd	Collector WJ-6	Elder Creek Rd	2	Arterial M	11,630	0.65	B	3	Arterial M	41,380	2.30	F	West Jackson
32	Excelsior Rd	Elder Creek Rd	Florin Rd	2	Arterial M	4,670	0.26	A	3	Arterial M	12,900	0.72	C	West Jackson
33	Excelsior Rd	Florin Rd	Gerber Rd	2	Arterial M	5,960	0.33	A	2	Arterial M	14,300	0.79	C	
34	Excelsior Rd	Gerber Rd	Calvine Rd	2	Arterial M	2,560	0.14	A	2	Arterial M	9,110	0.51	A	
35	Excelsior Rd	Calvine Rd	Sheldon Rd	2	Arterial M	3,130	0.17	A	2	Arterial M	10,290	0.57	A	
36	Florin Rd	Stockton Blvd	Power Inn Rd	6	Arterial M	42,730	0.79	C	6	Arterial M	48,790	0.90	E	
37	Florin Rd	Power Inn Rd	Florin-Perkins Rd	4	Arterial M	37,000	1.03	F	4	Arterial M	44,830	1.25	F	
38	Florin Rd	Florin-Perkins Rd	So Watt Ave/ Elk Grove Florin Rd	6	Arterial M	29,920	0.55	A	6	Arterial M	37,850	0.70	C	
39	Florin Rd	South Watt Ave	Hedge Ave	4	Arterial M	9,840	0.27	A	4	Arterial M	13,280	0.37	A	
40	Florin Rd	Hedge Ave	Mayhew Rd	4	Arterial M	10,470	0.29	A	4	Arterial M	14,700	0.41	A	
41	Florin Rd	Mayhew Rd	Bradshaw Rd	4	Arterial M	30,370	0.84	D	4	Arterial M	43,130	1.20	F	
42.1	Florin Rd	Bradshaw Rd	Vineyard Rd	4	Arterial M	19,600	0.54	A	4	Arterial M	29,540	0.82	D	
42.2	Florin Rd	Vineyard Rd	Excelsior Rd	2	Arterial M	11,450	0.64	B	3	Arterial M	28,090	1.56	F	West Jackson
43	Florin Rd	Excelsior Rd	Sunrise Blvd	2	Arterial M	14,130	0.79	C	2	Arterial M	18,580	1.03	F	
44	Folsom Blvd	Howe Ave	Jackson Rd	4	Arterial M	50,710	1.41	F	4	Arterial M	56,760	1.58	F	

Table TC-80 continued														
ID	Roadway	Segment		CEQA Cumulative No Project					CEQA Cumulative + Jackson Corridor Projects					Project(s) Responsible for Change in Lanes
		From	To	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/Capacity Ratio	Level of Service	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/Capacity Ratio	Level of Service	
45	Fruitridge Rd	65th St	Power Inn Rd	4	Arterial M	23,020	0.64	B	4	Arterial M	28,430	0.79	C	
46	Fruitridge Rd	Power Inn Rd	Florin Perkins Rd	4	Arterial M	20,330	0.56	A	4	Arterial M	32,850	0.91	E	
47	Fruitridge Rd	Florin Perkins Rd	South Watt Ave	2	Arterial M	13,930	0.77	C	2	Arterial M	29,480	1.64	F	
48	Fruitridge Rd	South Watt Ave	Hedge Ave	2	Arterial M	5,880	0.33	A	3	Arterial M	24,970	1.39	F	West Jackson
49.1	Fruitridge Rd	Hedge Ave	Collector WJ-12	2	Arterial M	2,270	0.13	A	4	Arterial M	26,870	0.75	C	West Jackson
49.2	Fruitridge Rd	Collector WJ-12	Mayhew Rd	2	Arterial M	2,250	0.13	A	4	Arterial M	27,150	0.75	C	West Jackson
50	Grant Line Rd	White Rock Rd	Douglas Rd	4	Arterial M	39,520	1.10	F	4	Arterial M	40,500	1.13	F	
51.1	Grant Line Rd	Douglas Rd	Chrysanthy Blvd	4	Arterial M	58,550	1.63	F	4	Arterial M	57,040	1.58	F	
51.2	Grant Line Rd	Chrysanthy Blvd	Kiefer Blvd	4	Arterial M	45,070	1.25	F	4	Arterial M	47,600	1.32	F	
52.1	Grant Line Rd	Kiefer Blvd	Rancho Cordova Pkwy	4	Arterial M	34,280	0.95	E	4	Arterial M	37,390	1.04	F	
52.2	Grant Line Rd	Rancho Cordova Pkwy	Jackson Rd	4	Arterial M	43,750	1.22	F	4	Arterial M	41,910	1.16	F	
53	Grant Line Rd	Jackson Rd	Sunrise Blvd	4	Arterial M	33,280	0.92	E	4	Arterial M	29,670	0.82	D	
54	Grant Line Rd	Sunrise Blvd	Calvine Rd	4	Arterial M	42,850	1.19	F	4	Arterial M	43,840	1.22	F	
55	Grant Line Rd	Calvine Rd	Sheldon Rd	4	Arterial M	36,450	1.01	F	4	Arterial M	36,830	1.02	F	
56	Grant Line Rd	Sheldon Rd	Wilton Rd	4	Arterial M	40,680	1.13	F	4	Arterial M	46,230	1.28	F	
57	Grant Line Rd	Wilton Rd	Bond Rd	4	Arterial M	36,130	1.00	F	4	Arterial M	40,920	1.14	F	
58	Happy Ln	Old Placerville Rd	Kiefer Blvd	2	Arterial M	4,110	0.23	A	4	Arterial M	51,220	1.42	F	West Jackson
59.1	Hedge Ave	Jackson Rd	Rock Creek Pkwy	2	Arterial M	7,240	0.40	A	2	Arterial M	11,810	0.66	B	
59.2	Hedge Ave	Rock Creek Pkwy	Fruitridge Rd	2	Arterial M	7,360	0.41	A	2	Arterial M	8,590	0.48	A	
60	Hedge Ave	Fruitridge Rd	Elder Creek Rd	2	Arterial M	8,520	0.47	A	2	Arterial M	9,680	0.54	A	
61	Hedge Ave	Elder Creek Rd	Florin Rd	2	Arterial M	22,680	1.26	F	2	Arterial M	22,180	1.23	F	
62	Howe Ave	US 50	Folsom Blvd	6	Arterial M	67,100	1.24	F	6	Arterial M	72,510	1.34	F	
63	International Dr	Mather Field Rd	Zinfandel Dr	6	Arterial M	48,300	0.89	D	6	Arterial M	47,490	0.88	D	
64	International Dr	Zinfandel Dr	Sunrise Blvd	6	Arterial M	35,780	0.66	B	6	Arterial M	41,510	0.77	C	
65	Jackson Rd	Folsom Blvd	Florin Perkins Rd	4	Arterial M	30,560	0.85	D	4	Arterial M	36,540	1.02	F	
66.1	Jackson Rd	Florin Perkins Rd	14th Ave	4	Arterial M	31,230	0.87	D	4	Arterial M	45,880	1.27	F	
66.2	Jackson Rd	14th Ave	Rock Creek Pkwy	4	Arterial M	40,490	1.12	F	4	Arterial M	64,740	1.80	F	
66.3	Jackson Rd	Rock Creek Pkwy	Aspen 1 Dwy	4	Arterial M	34,850	0.97	E	4	Arterial M	61,240	1.70	F	

Table TC-80 continued														
ID	Roadway	Segment		CEQA Cumulative No Project					CEQA Cumulative + Jackson Corridor Projects					Project(s) Responsible for Change in Lanes
		From	To	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/Capacity Ratio	Level of Service	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/Capacity Ratio	Level of Service	
66.4	Jackson Rd	Aspen 1 Dwy	South Watt Ave	4	Arterial M	32,550	0.90	E	4	Arterial M	58,860	1.64	F	
67	Jackson Rd	South Watt Ave	Hedge Ave	4	Arterial M	38,450	1.07	F	4	Arterial M	69,380	1.93	F	
68.1	Jackson Rd	Hedge Ave	Collector WJ-3	4	Arterial M	31,030	0.86	D	4	Arterial M	62,190	1.73	F	
68.2	Jackson Rd	Collector WJ-3	Mayhew Rd	4	Arterial M	30,930	0.86	D	4	Arterial M	62,890	1.75	F	
69	Jackson Rd	Mayhew Rd	Bradshaw Rd	4	Arterial M	33,880	0.94	E	6	Arterial M	63,070	1.17	F	West Jackson
70.1	Jackson Rd	Bradshaw Rd	Collector WJ-4	2	Rural Hwy	23,080	1.01	F	6	Arterial M	60,480	1.12	F	West Jackson
70.2	Jackson Rd	Collector WJ-4	Happy Ln	2	Rural Hwy	23,160	1.01	F	6	Arterial M	57,380	1.06	F	West Jackson
70.3	Jackson Rd	Happy Ln	Rock Creek Pkwy	2	Rural Hwy	23,010	1.00	F	6	Arterial M	50,740	0.94	E	West Jackson
70.4	Jackson Rd	Rock Creek Pkwy	Collector WJ-5	2	Rural Hwy	23,010	1.00	F	6	Arterial M	52,830	0.98	E	West Jackson
70.5	Jackson Rd	Collector WJ-5	Collector WJ-6	2	Rural Hwy	23,030	1.01	F	6	Arterial M	43,720	0.81	D	West Jackson
70.6	Jackson Rd	Collector WJ-6	Excelsior Rd	2	Rural Hwy	23,030	1.01	F	6	Arterial M	43,760	0.81	D	West Jackson
71.1	Jackson Rd	Excelsior Rd	Collector JT-3	2	Rural Hwy	23,230	1.01	F	4	Arterial M	62,780	1.74	F	Jackson Township
71.2	Jackson Rd	Collector JT-3	Tree View Ln	2	Rural Hwy	23,250	1.02	F	4	Arterial M	48,960	1.36	F	Jackson Township
71.3	Jackson Rd	Tree View Ln	Collector JT-4	2	Rural Hwy	23,210	1.01	F	4	Arterial M	42,560	1.18	F	Jackson Township
71.4	Jackson Rd	Collector JT-4	Eagles Nest Rd	2	Rural Hwy	23,230	1.01	F	4	Arterial M	39,060	1.09	F	Jackson Township
72.1	Jackson Rd	Eagles Nest Rd	Rockbridge Dr	2	Rural Hwy	21,990	0.96	E	4	Arterial M	39,660	1.10	F	NewBridge
72.2	Jackson Rd	Rockbridge Dr	Sunrise Blvd	2	Rural Hwy	22,730	0.99	E	4	Arterial M	39,710	1.10	F	NewBridge
73	Jackson Rd	Sunrise Blvd	Grant Line Rd	4	Arterial M	31,990	0.89	D	4	Arterial M	46,130	1.28	F	
74	Kiefer Blvd	Florin Perkins Rd	South Watt Ave	2	Arterial M	3,340	0.19	A	2	Arterial M	5,630	0.31	A	
75	Kiefer Blvd	South Watt Ave	Mayhew Rd	4	Arterial M	21,590	0.60	A	4	Arterial M	34,100	0.95	E	
76	Kiefer Blvd	Mayhew Rd	Bradshaw Rd	4	Arterial M	13,420	0.37	A	4	Arterial M	47,090	1.31	F	
77.1	Kiefer Blvd	Bradshaw Rd	Collector WJ-14	2	Arterial M	5,950	0.33	A	6	Arterial M	56,300	1.04	F	West Jackson
77.2	Kiefer Blvd	Collector WJ-14	Happy Ln	2	Arterial M	5,020	0.28	A	6	Arterial M	47,880	0.89	D	West Jackson
78.1	Kiefer Blvd	Eagles Nest Rd	W Collector MS-1	2	Arterial M	10,170	0.57	A	4	Arterial M	32,550	0.90	E	NewBridge; Mather South
78.2	Kiefer Blvd	W Collector MS-1	Northbridge Dr	2	Arterial M	10,170	0.57	A	4	Arterial M	26,230	0.73	C	NewBridge; Mather South
78.3	Kiefer Blvd	Northbridge Dr	E Collector MS-1	2	Arterial M	10,170	0.57	A	4	Arterial M	27,040	0.75	C	NewBridge; Mather South
78.4	Kiefer Blvd	E Collector MS-1	Sunrise Blvd	2	Arterial M	10,120	0.56	A	3	Arterial M	37,390	2.08	F	NewBridge
79	Kiefer Blvd	Sunrise Blvd	Rancho Cordova Pkwy	4	Arterial M	20,550	0.57	A	4	Arterial M	33,880	0.94	E	

Table TC-80 continued														
ID	Roadway	Segment		CEQA Cumulative No Project					CEQA Cumulative + Jackson Corridor Projects					Project(s) Responsible for Change in Lanes
		From	To	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/Capacity Ratio	Level of Service	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/Capacity Ratio	Level of Service	
80	Mather Blvd / Norden Ave	Von Karman St	Bleckely St	4	Arterial M	14,490	0.40	A	4	Arterial M	13,660	0.38	A	
81	Mather Blvd	Bleckely St	Femoyer St	4	Arterial M	14,490	0.40	A	4	Arterial M	13,660	0.38	A	
82	Mather Blvd	Femoyer St	Douglas Rd	2	Arterial M	14,560	0.81	D	2	Arterial M	13,780	0.77	C	
83	Mather Blvd-Excelsior Rd	Douglas Rd	Kiefer Blvd	2	Res Collector F	10,400	1.30	F	2	Res Collector F	15,750	1.97	F	
84	Mather Field Rd	US 50	Rockingham Dr	6	Arterial M	65,380	1.21	F	6	Arterial M	63,340	1.17	F	
85	Mather Field Rd	Rockingham Dr	International Dr	6	Arterial M	71,670	1.33	F	6	Arterial M	72,360	1.34	F	
86	Mather Field Rd	International Dr	Peter A McCuen Blvd	6	Arterial M	15,890	0.29	A	6	Arterial M	16,140	0.30	A	
87	Mayhew Rd	Folsom Blvd	Goethe Rd	2	Arterial M	7,270	0.40	A	2	Arterial M	15,600	0.87	D	
88	Mayhew Rd	Goethe Rd	Kiefer Blvd	2	Arterial M	10,720	0.60	A	2	Arterial M	13,910	0.77	C	
89.1	Mayhew Rd	Jackson Rd	Rock Creek Pkwy	2	Arterial L	2,070	0.14	A	4	Arterial M	52,530	1.46	F	West Jackson
89.2	Mayhew Rd	Rock Creek Pkwy	Fruitridge Rd	2	Arterial L	2,070	0.14	A	4	Arterial M	51,240	1.42	F	West Jackson
90	Old Placerville Rd	Bradshaw Rd	Granby Dr	4	Arterial M	29,940	0.83	D	4	Arterial M	26,590	0.74	C	
91	Old Placerville Rd	Granby Dr	Happy Ln	2	Arterial M	26,640	1.48	F	2	Arterial M	24,810	1.38	F	
92	Old Placerville Rd	Happy Ln	Routier Rd	2	Arterial M	22,800	1.27	F	2	Arterial M	53,710	2.98	F	
93	Old Placerville Rd	Routier Rd	Rockingham Dr	4	Arterial M	24,320	0.68	B	4	Arterial M	34,690	0.96	E	
94	Power Inn Rd	Folsom Blvd	14th Ave	6	Arterial M	43,300	0.80	D	6	Arterial M	47,750	0.88	D	
95	Rockingham Dr	Old Placerville Rd	Mather Field Rd	4	Arterial M	31,910	0.89	D	4	Arterial M	38,480	1.07	F	
96	South Watt Ave	Folsom Blvd	Kiefer Blvd	6	Arterial M	69,300	1.28	F	6	Arterial M	84,250	1.56	F	
97	South Watt Ave	Kiefer Blvd	Jackson Rd	6	Arterial M	67,640	1.25	F	6	Arterial M	71,600	1.33	F	
98.1	South Watt Ave	Jackson Rd	Rock Creek Pkwy	6	Arterial M	61,230	1.13	F	6	Arterial M	61,350	1.14	F	
98.2	South Watt Ave	Rock Creek Pkwy	Fruitridge Rd	6	Arterial M	64,370	1.19	F	6	Arterial M	62,690	1.16	F	
99	South Watt Ave	Fruitridge Rd	Elder Creek Rd	6	Arterial M	61,380	1.14	F	6	Arterial M	58,250	1.08	F	
100	South Watt Ave	Elder Creek Rd	Florin Rd	6	Arterial M	55,240	1.02	F	6	Arterial M	59,790	1.11	F	
101	Sunrise Blvd	US 50	Folsom Blvd	7	Arterial M	64,480	1.19	F	7	Arterial M	61,860	1.15	F	
102	Sunrise Blvd	Folsom Blvd	Trade Center Dr	6	Arterial M	61,120	1.13	F	6	Arterial M	59,050	1.09	F	
103	Sunrise Blvd	Trade Center Dr	White Rock Rd	6	Arterial M	38,420	0.71	C	6	Arterial M	36,750	0.68	B	
104.1	Sunrise Blvd	White Rock Rd	International Dr	6	Arterial M	49,390	0.91	E	6	Arterial M	48,490	0.90	D	
104.2	Sunrise Blvd	International Dr	Rio Del Oro Pkwy	6	Arterial M	54,460	1.01	F	6	Arterial M	54,560	1.01	F	
104.3	Sunrise Blvd	Rio Del Oro Pkwy	Douglas Rd	6	Arterial M	54,050	1.00	F	6	Arterial M	65,850	1.22	F	
105	Sunrise Blvd	Douglas Rd	Kiefer Blvd	5	Arterial M	34,810	0.97	E	5	Arterial M	37,890	1.05	F	
106	Sunrise Blvd	Kiefer Blvd	Jackson Rd	4	Arterial M	30,020	0.83	D	4	Arterial M	33,310	0.93	E	

Table TC-80 continued														
ID	Roadway	Segment		CEQA Cumulative No Project					CEQA Cumulative + Jackson Corridor Projects					Project(s) Responsible for Change in Lanes
		From	To	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/ Capacity Ratio	Level of Service	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/ Capacity Ratio	Level of Service	
107	Sunrise Blvd	Jackson Rd	Florin Rd	4	Arterial M	28,360	0.79	C	4	Arterial M	31,600	0.88	D	
108	Sunrise Blvd	Florin Rd	Grant Line Rd	4	Arterial M	14,980	0.42	A	4	Arterial M	18,080	0.50	A	
109	Vineyard Rd	Gerber Rd	Calvine Rd	2	Arterial M	8,060	0.45	A	2	Arterial M	12,470	0.69	B	
110	Watt Ave	US 50	Folsom Blvd	6	Arterial H	98,100	1.64	F	6	Arterial H	108,540	1.81	F	
111	White Rock Rd	International Rd	Quality Dr	2	Arterial M	5,420	0.30	A	2	Arterial M	5,450	0.30	A	
112	White Rock Rd	Quality Dr	Zinfandel Dr	4	Arterial M	18,180	0.51	A	4	Arterial M	17,860	0.50	A	
113	White Rock Rd	Zinfandel Dr	Kilgore Rd	6	Arterial M	31,720	0.59	A	6	Arterial M	31,340	0.58	A	
114	White Rock Rd	Kilgore Rd	Sunrise Blvd	5	Arterial M	40,230	1.12	F	5	Arterial M	39,340	1.09	F	
115	White Rock Rd	Sunrise Blvd	Fitzgerald Rd	4	Arterial M	34,000	0.94	E	4	Arterial M	34,260	0.95	E	
116.1	White Rock Rd	Fitzgerald Rd	Rancho Cordova Pkwy	4	Arterial M	56,150	1.56	F	4	Arterial M	54,910	1.53	F	
116.2	White Rock Rd	Rancho Cordova Pkwy	Americanos Blvd	4	Arterial M	22,070	0.61	B	4	Arterial M	20,920	0.58	A	
116.3	White Rock Rd	Americanos Blvd	Grant Line Rd	4	Arterial M	15,780	0.44	A	4	Arterial M	17,180	0.48	A	
117	White Rock Rd	Grant Line Rd	Prairie City Rd	4	Arterial M	53,790	1.49	F	4	Arterial M	55,730	1.55	F	
118	Zinfandel Dr	US 50	White Rock Rd	7	Arterial M	82,720	1.53	F	7	Arterial M	82,400	1.53	F	
119	Zinfandel Dr	White Rock Rd	International Rd	6	Arterial M	41,490	0.77	C	6	Arterial M	43,750	0.81	D	
120	Zinfandel Dr	International Rd	Baroque Dr	6	Arterial M	32,810	0.61	B	6	Arterial M	33,990	0.63	B	
121	Zinfandel Dr	Baroque Dr	City Limit	4	Arterial M	32,810	0.91	E	4	Arterial M	33,990	0.94	E	
122	Zinfandel Dr	City Limit	Douglas Rd	2	Arterial M	32,810	1.82	F	2	Arterial M	33,990	1.89	F	
123.1	Zinfandel Dr	Douglas Rd	Collector MS-2	4	Arterial M	15,160	0.42	A	4	Arterial M	31,690	0.88	D	
123.2	Zinfandel Dr	Collector MS-2	Collector MS-3	4	Arterial M	12,370	0.34	A	4	Arterial M	26,460	0.74	C	
123.3	Zinfandel Dr	Collector MS-3	Collector MS-4	4	Arterial M	12,370	0.34	A	4	Arterial M	23,420	0.65	B	
123.4	Zinfandel Dr	Collector MS-4	Kiefer Blvd	4	Arterial M	12,370	0.34	A	4	Arterial M	24,910	0.69	B	
124	14th Ave	Power Inn Rd	Florin Perkins Rd	4	Arterial M	15,990	0.44	A	4	Arterial M	28,970	0.80	D	
125	14th Ave	Florin Perkins Rd	Jackson Rd	4	Arterial M	9,290	0.26	A	4	Arterial M	18,880	0.52	A	
126	Chrysanthy Blvd	Rancho Cordova Pkwy	Americanos Blvd	4	Arterial M	21,980	0.61	B	4	Arterial M	21,520	0.60	A	
127	Chrysanthy Blvd	Americanos Blvd	Grant Line Rd	2	Arterial M	16,580	0.92	E	2	Arterial M	15,490	0.86	D	
128	Douglas Rd (Extension)	Mather Blvd	Kiefer Blvd	4	Arterial M	3,580	0.10	A	4	Arterial M	18,650	0.52	A	
129	International Dr	Sunrise Blvd	Rancho Cordova Pkwy	6	Arterial M	31,190	0.58	A	6	Arterial M	32,150	0.60	A	
130	International Dr	Rancho Cordova Pkwy	Americanos Blvd	6	Arterial M	19,510	0.36	A	6	Arterial M	18,160	0.34	A	
131	Kiefer Blvd	Rancho Cordova Pkwy	Americanos Blvd	2	Arterial M	3,730	0.21	A	2	Arterial M	9,130	0.51	A	
132	Kiefer Blvd	Americanos Blvd	Grant Line Rd	2	Arterial M	10,160	0.56	A	2	Arterial M	18,810	1.05	F	
133	Rancho Cordova Pkwy	US 50	Easton Valley Pkwy	6	Arterial M	70,300	1.30	F	6	Arterial M	69,460	1.29	F	
134	Rancho Cordova Pkwy	Easton Valley Pkwy	White Rock Rd	6	Arterial M	72,290	1.34	F	6	Arterial M	72,010	1.33	F	

Table TC-80 continued														
ID	Roadway	Segment		CEQA Cumulative No Project					CEQA Cumulative + Jackson Corridor Projects					Project(s) Responsible for Change in Lanes
		From	To	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/Capacity Ratio	Level of Service	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/Capacity Ratio	Level of Service	
316	Rock Creek Pkwy	Collector WJ-7	Happy Ln/ Vineyard Rd						2	Arterial M	12,410	0.69	B	West Jackson
317	Rock Creek Pkwy	Happy Ln/ Vineyard Rd	Jackson Rd						2	Arterial M	15,150	0.84	D	West Jackson
318	Rock Creek Pkwy	Jackson Rd	Excelsior Rd						2	Arterial M	13,520	0.75	C	West Jackson
319	Vineyard Rd	Rock Creek Pkwy	Elder Creek Rd						4	Arterial M	39,590	1.10	F	West Jackson
320	Vineyard Rd	Elder Creek Rd	Florin Rd						4	Arterial M	20,790	0.58	A	West Jackson
321	Collector WJ-16	Rock Creek Pkwy	Collector WJ-6						2	Res Collector F	620	0.08	A	West Jackson
322	Collector WJ-17	Rock Creek Pkwy	Collector WJ-6						2	Res Collector F	1,160	0.15	A	West Jackson
323	Collector WJ-6	Collector WJ-16/WJ-17	Jackson Rd						2	Res Collector F	3,780	0.47	C	West Jackson
324	Collector WJ-6	Jackson Rd	Excelsior Rd						2	Res Collector F	3,770	0.47	C	West Jackson
325	Collector WJ-2	Excelsior Rd	Collector WJ-6						2	Arterial M	4,410	0.25	A	West Jackson
326	Collector WJ-18	Vineyard Rd	Collector WJ-19/ WJ-20						2	Arterial M	4,130	0.23	A	West Jackson
327	Collector WJ-19	Collector WJ-18	Collector WJ-21						2	Arterial M	1,430	0.08	A	West Jackson
328	Collector WJ-20	Collector WJ-18	Collector WJ-21						2	Res Collector F	3,310	0.41	C	West Jackson
329	Collector WJ-21	Collector WJ-19/ WJ-20	Collector WJ-6						2	Res Collector F	2,800	0.35	B	West Jackson
400	Collector JT-1	Excelsior Rd	Collector JT-3						2	Res Collector F	4,430	0.55	C	Jackson Township
401	Collector JT-1	Collector JT-3	Tree View Ln						2	Res Collector F	1,850	0.23	B	Jackson Township
402	Collector JT-3	Kiefer Blvd	Collector JT-1						2	Res Collector F	2,630	0.33	B	Jackson Township
403	Collector JT-3	Collector JT-1	Collector JT-6						2	Res Collector F	2,480	0.31	B	Jackson Township
404	Collector JT-3	Collector JT-6	Collector JT-5						2	Res Collector F	3,400	0.43	C	Jackson Township
405	Collector JT-3	Collector JT-5	Jackson Rd						2	Res Collector F	18,370	2.30	F	Jackson Township
406	Collector JT-4	Jackson Rd	Bridgewater Dr						2	Arterial M	3,760	0.21	A	Jackson Township
407	Collector JT-5	Collector JT-3	Tree View Ln						2	Arterial M	9,070	0.50	A	Jackson Township

Table TC-80 continued														
ID	Roadway	Segment		CEQA Cumulative No Project					CEQA Cumulative + Jackson Corridor Projects					Project(s) Responsible for Change in Lanes
		From	To	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/Capacity Ratio	Level of Service	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/Capacity Ratio	Level of Service	
408	Collector JT-6	Excelsior Rd	Collector JT-3						2	Res Collector F	4,370	0.55	C	Jackson Township
409	Collector JT-6	Collector JT-3	Tree View Ln						2	Res Collector F	960	0.12	A	Jackson Township
410	Kiefer Blvd	Excelsior Rd	Tree View Ln						4	Arterial M	38,470	1.07	F	Jackson Township
411	Tree View Ln	Kiefer Blvd	Collector JT-1						4	Arterial M	11,620	0.32	A	Jackson Township
412	Tree View Ln	Collector JT-1	Collector JT-6						4	Arterial M	11,590	0.32	A	Jackson Township
413	Tree View Ln	Collector JT-6	Collector JT-5						4	Arterial M	11,350	0.32	A	Jackson Township
414	Tree View Ln	Collector JT-5	Jackson Rd						4	Arterial M	7,680	0.21	A	Jackson Township
415	Collector JT-7	Collector JT-3	Tree View Ln						2	Arterial M	1,650	0.09	A	Jackson Township
416	Collector JT-8	Collector JT-3	Tree View Ln						2	Arterial M	1,880	0.10	A	Jackson Township
417	Collector JT-9	Jackson Rd	Collector JT-8						2	Arterial M	4,320	0.24	A	Jackson Township
418	Collector JT-10	Jackson Rd	Collector JT-8						2	Arterial M	1,570	0.09	A	Jackson Township
419	Collector JT-6	Tree View Ln	Jackson Rd						2	Res Collector F	1,490	0.19	A	Jackson Township
500	S Bridgewater Dr	Collector JT-4	Eagles Nest Rd						2	Res Collector F	4,820	0.60	D	NewBridge
501	S Bridgewater Dr	Eagles Nest Rd	Northbridge Dr						2	Res Collector F	4,480	0.56	C	NewBridge
502	N Bridgewater Dr	Northbridge Dr	Eagles Nest Rd						2	Res Collector F	1,170	0.15	A	NewBridge
503	Northbridge Dr	Kiefer Blvd	Bridgewater Dr						2	Arterial M	3,480	0.19	A	NewBridge
504	Street A	S Bridgewater Dr	Street B						2	Res Collector F	1,690	0.21	B	NewBridge
505	Street B	S Bridgewater Dr	Street A						2	Res Collector F	1,320	0.17	A	NewBridge
506	Rockbridge Dr	Street B	Stonebridge Dr						2	Res Collector F	1,690	0.21	B	NewBridge
507	Rockbridge Dr	Stonebridge Dr	Jackson Rd						2	Arterial M	6,600	0.37	A	NewBridge
508	Stonebridge Dr	S Bridgewater Dr	Rockbridge Dr						2	Arterial M	2,660	0.15	A	NewBridge
509	Stonebridge Dr	Rockbridge Dr	Jackson Rd						2	Res Collector F	3,830	0.48	C	NewBridge
600	W Collector MS-1	Kiefer Blvd	Collector MS-5						2	Arterial M	6,040	0.34	A	Mather South
601	E Collector MS-1	Collector MS-5	Kiefer Blvd						2	Arterial M	11,720	0.65	B	Mather South

Table TC-80 continued														
ID	Roadway	Segment		CEQA Cumulative No Project					CEQA Cumulative + Jackson Corridor Projects					Project(s) Responsible for Change in Lanes
		From	To	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/Capacity Ratio	Level of Service	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/Capacity Ratio	Level of Service	
602	Collector MS-2	Eagles Nest Rd	Collector MS-5						2	Res Collector F	9,980	1.25	F	Mather South
603	Collector MS-3	Eagles Nest Rd	Collector MS-5						2	Arterial M	6,730	0.37	A	Mather South
604	Collector MS-4	Eagles Nest Rd	Collector MS-5						2	Arterial M	12,560	0.70	B	Mather South
605	Collector MS-5	Collector MS-1	Collector MS-4						2	Arterial M	17,760	0.99	E	Mather South
606	Collector MS-5	Collector MS-4	Collector MS-3						2	Arterial M	4,870	0.27	A	Mather South
607	Collector MS-5	Collector MS-3	Collector MS-2						2	Arterial M	1,590	0.09	A	Mather South

Note: Gray shading indicates changes in travel lanes or facility type that the project is responsible to provide.

Bold values do not meet LOS policy. Red values with light gray shading indicate project impacts.

¹ The following classifications are used to determine daily roadway capacity:

Arterial L - Arterial, Low Access Control

Arterial M - Arterial, Moderate Access Control

Arterial H - Arterial, High Access Control Rural

Hwy - Rural 2-lane Highway

Rural S - Rural 2-lane Road, 24'-36' of pavement, Paved Shoulders

Rural NS - Rural 2-lane Road, 24'-36' of pavement, No Shoulders Res

Collector F - Residential Collector with Frontage

Res Collector NF – Residential Collector with No Frontage

Table TC-38: CEQA Cumulative plus Jackson Corridor Projects Intersection Levels of Service

Intersection	AM Peak Hour							PM Peak Hour						
	CEQA Cumulative No Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact	CEQA Cumulative No Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact
	Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
1 Howe Avenue & College Town Drive/US 50 WB Ramps	Signal	D	42.0	Signal	C	34.3	No	Signal	E	55.6	Signal	E	60.8	No
2 Howe Avenue & US 50 EB Ramps	Signal	C	32.4	Signal	D	52.5	No	Signal	B	17.8	Signal	C	21.5	No
3 Power Inn Road/Howe Avenue & Folsom Blvd	Signal	F	82.4	Signal	F	103.3	Yes	Signal	E	67.2	Signal	F	91.6	Yes
4 Power Inn Road & 14th Avenue	Signal	E	75.1	Signal	F	227.8	Yes	Signal	F	86.5	Signal	F	149.2	Yes
5 Power Inn Road & Fruitridge Road	Signal	F	116.2	Signal	F	118.6	No	Signal	D	50.4	Signal	E	60.8	Yes
6 Jackson Road/Notre Dame Dr. & Folsom Blvd.	Signal	D	41.2	Signal	D	45.9	No	Signal	E	55.1	Signal	E	75.3	No
7 Florin Perkins Road/Julliard Dr. & Folsom Boulevard	Signal	D	35.2	Signal	E	60.1	No	Signal	D	40.7	Signal	D	42.3	No
8 Florin Perkins Road & Kiefer Blvd.	Two-way stop	A	2.0	Two-way stop	A	3.4	No	Two-way stop	A	2.7	Two-way stop	A	5.2	No
	<i>Westbound Left Turn</i>	<i>C</i>	<i>17.1</i>		<i>D</i>	<i>25.9</i>			<i>C</i>	<i>20.0</i>		<i>E</i>	<i>37.8</i>	
	<i>Westbound Right Turn</i>	<i>B</i>	<i>11.8</i>		<i>B</i>	<i>14.5</i>			<i>B</i>	<i>11.1</i>		<i>C</i>	<i>15.0</i>	
	<i>Southbound Left Turn</i>	<i>A</i>	<i>9.5</i>		<i>B</i>	<i>10.9</i>			<i>B</i>	<i>10.2</i>		<i>B</i>	<i>13.4</i>	
9 Florin Perkins Road & Jackson Road	Signal	D	50.3	Signal	E	66.6	No	Signal	D	49.0	Signal	E	59.3	No
10 Florin Perkins Road & Fruitridge Road	Signal	E	58.8	Signal	E	57.8	No	Signal	D	54.5	Signal	D	49.9	No
11 Florin Perkins Road & Elder Creek Road	Signal	D	35.7	Signal	C	33.3	No	Signal	D	38.6	Signal	D	42.2	No
12 Watt Avenue & Folsom Blvd.	Signal	F	174.1	Signal	F	196.0	Yes	Signal	F	139.4	Signal	F	217.7	Yes
13 S. Watt Ave. & Reith Ct/Manlove Road	Signal	D	37.8	Signal	D	35.5	No	Signal	C	20.2	Signal	C	32.2	No
14 S. Watt Avenue & Kiefer Blvd.	Signal	F	82.7	Signal	F	118.0	Yes	Signal	E	76.6	Signal	F	90.7	Yes

Table TC-81 continued														
Intersection	AM Peak Hour							PM Peak Hour						
	CEQA Cumulative No Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact	CEQA Cumulative No Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact
	Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
15 S. Watt Avenue & Canberra Dr.	Signal	B	18.2	Signal	B	18.4	No	Signal	B	10.6	Signal	B	10.6	No
16 S. Watt Avenue & Jackson Road	Signal	F	140.9	Signal	F	246.9	Yes	Signal	F	102.2	Signal	F	207.8	Yes
17 S. Watt Avenue & Fruitridge Road	Signal	D	46.8	Signal	F	159.8	Yes	Signal	E	79.2	Signal	F	174.2	Yes
18 S. Watt Avenue & Elder Creek Road	Signal	F	324.5	Signal	F	165.7	No	Signal	F	232.8	Signal	F	162.4	No
20 Elk Grove Florin Road/S. Watt Ave. & Florin Road	Signal	F	199.4	Signal	F	302.3	Yes	Signal	F	160.8	Signal	F	204.3	Yes
21 Elk Grove Florin Road & Gerber Road	Signal	E	63.3	Signal	E	72.8	No	Signal	E	70.8	Signal	E	73.5	No
23 Hedge Avenue & Jackson Road	Signal	E	56.3	Signal	F	214.4	Yes	Signal	C	29.7	Signal	F	121.0	Yes
24 Hedge Avenue & Fruitridge Road	All-way stop	E	43.7	Signal	E	72.0	No	All-way stop	D	28.5	Signal	E	70.5	No
25 Hedge Avenue & Elder Creek Road	Signal	F	150.1	Signal	F	155.0	No	Signal	F	148.0	Signal	F	140.5	No
26 Hedge Avenue & Tokay Lane	Two-way stop	A	0.5	Two-way stop	A	0.4	No	Two-way stop	A	0.2	Two-way stop	A	0.2	No
	<i>Northbound Left Turn</i>	A	0.0		A	0.0			A	0.0		A	0.0	
	<i>Southbound Left Turn</i>	B	11.0		B	10.8			A	9.3		A	9.3	
	<i>Eastbound</i>	F	102.1		F	99.5			E	47.9		E	45.4	
	<i>Westbound</i>	F	54.2		F	52.3			E	39.0		E	37.1	
27 Hedge Avenue & Florin Road	Signal	C	32.6	Signal	B	15.5	No	Signal	C	23.9	Signal	A	9.1	No
28 Mayhew Road & Kiefer Boulevard	Signal	D	55.0	Signal	F	133.5	Yes	Signal	F	95.1	Signal	F	84.1	No

Table TC-81 continued															
Intersection		AM Peak Hour						PM Peak Hour							
		CEQA Cumulative No Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact	CEQA Cumulative No Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact
		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
29	Mayhew Road & Jackson Road	Two-way stop	A	1.9	Signal	F	145.8	Yes	Two-way stop	A	3.0	Signal	F	129.4	Yes
	<i>Northbound Through - Left Turn</i>		F	125.0						F	>300				
	<i>Northbound Right Turn</i>		C	15.6						C	18.4				
	<i>Southbound</i>		F	107.1						F	>300				
	<i>Eastbound Left Turn</i>		B	13.4						B	11.1				
	<i>Westbound Left Turn</i>		B	11.5						C	18.0				
30	Mayhew Road & Fruitridge Road	Two-way stop	A	5.9	Signal	D	36.3	No	Two-way stop	A	3.3	Signal	D	42.3	No
	<i>Northbound Left Turn</i>		A	0.0						A	7.5				
	<i>Eastbound</i>		A	9.7						A	9.3				
31	Mayhew Road & Elder Creek Road	Signal	E	76.4	Signal	F	297.4	Yes	Signal	C	27.3	Signal	F	211.5	Yes
32	Woodring Drive & Zinfandel Drive	Two-way stop	A	2.1	Two-way stop	E	40.8	Yes	Two-way stop	A	2.2	Two-way stop	C	20.8	Yes
	<i>Eastbound</i>		C	21.5		F	>300			E	38.5		F	>300	
	<i>Northbound Left Turn</i>		A	8.0		B	12.6			B	10.6		B	14.8	
33	Bradshaw Road & Folsom Blvd.	Signal	E	56.6	Signal	E	55.8	No	Signal	E	70.1	Signal	E	60.2	No
34	Bradshaw Road & US 50 WB Ramps	Signal	B	10.5	Signal	B	13.1	No	Signal	B	12.1	Signal	C	32.3	No
35	Bradshaw Road & US 50 EB Ramps	Signal	D	35.3	Signal	E	68.7	Yes	Signal	B	14.4	Signal	D	40.2	No
36	Bradshaw Road & Old Placerville Road	Signal	E	78.4	Signal	F	89.9	Yes	Signal	E	66.1	Signal	F	88.7	Yes
37	Bradshaw Road & Kiefer Boulevard	Signal	E	65.5	Signal	F	180.8	Yes	Signal	E	61.7	Signal	F	197.9	Yes
38	Bradshaw Road & Jackson Road	Signal	F	188.2	Signal	F	147.0	No	Signal	F	184.2	Signal	F	149.8	No
39	Bradshaw Road & Elder Creek Road	Signal	F	127.5	Signal	F	172.5	Yes	Signal	F	105.3	Signal	F	155.7	Yes

Table TC-81 continued															
Intersection		AM Peak Hour						PM Peak Hour							
		CEQA Cumulative No Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact	CEQA Cumulative No Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact
		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
40	Bradshaw Road & Florin Road	Signal	F	127.5	Signal	F	128.0	No	Signal	E	66.1	Signal	F	95.5	Yes
41	Bradshaw Road & Gerber Road	Signal	F	108.6	Signal	F	87.6	No	Signal	E	59.1	Signal	E	66.0	No
42	Happy Lane & Old Placerville Road	Two-way stop	E	47.0	Two-way stop	F	181.0	Yes	Two-way stop	A	9.8	Two-way stop	F	192.1	Yes
	<i>Northbound Left Turn</i>		F	>300		F	>300			F	>300		F	>300	
	<i>Northbound Right Turn</i>		F	>300		F	>300			E	38.3		F	>300	
	<i>Westbound Left Turn</i>		C	15.6		F	>300			B	14.8		F	>300	
43	Happy Lane & Kiefer Boulevard	Free Turn			Signal	F	125.0	Yes	Free Turn			Signal	F	98.2	Yes
44	Excelsior Road & Kiefer Boulevard	West Jackson/Jackson Township Project Int.			Signal	F	148.2	Yes	West Jackson/Jackson Township Project Int.			Signal	F	83.6	Yes
45	Excelsior Road & Jackson Road	Signal	E	60.4	Signal	F	357.8	Yes	Signal	D	54.4	Signal	F	274.1	Yes
46	Excelsior Road & Elder Creek Road	Two-way stop	F	102.9	Signal	F	126.6	Yes	Two-way stop	C	24.1	Signal	F	120.1	Yes
	<i>Northbound Left Turn</i>		A	7.9						A	8.0				
	<i>Eastbound</i>		F	>300						E	44.0				
47	Excelsior Road & Florin Road	All-way stop	F	61.6	Signal	F	212.0	Yes	All-way stop	F	67.7	Signal	F	169.6	Yes
48	Excelsior Road & Gerber Road/Birch Ranch Drive	All-way stop	C	15.8	All-way stop	E	46.1	No	All-way stop	B	11.1	All-way stop	E	39.8	No
49	Mather Field Road & US 50 WB Ramps	Signal	B	18.0	Signal	C	23.0	No	Signal	B	12.9	Signal	B	15.2	No
50	Mather Field Road & US 50 EB Ramps	Signal	C	20.5	Signal	C	20.3	No	Signal	C	22.5	Signal	B	18.6	No
51	Mather Field Road & Rockingham Drive	Signal	F	158.8	Signal	F	271.4	Yes	Signal	F	118.7	Signal	F	144.7	Yes
52	Mather Boulevard & Douglas Road	Signal	E	56.0	Signal	E	58.6	No	Signal	D	48.7	Signal	E	64.8	No

Table TC-81 continued															
Intersection		AM Peak Hour						PM Peak Hour							
		CEQA Cumulative No Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact	CEQA Cumulative No Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact
		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
53	Zinfandel Drive & US 50 WB Ramps	Signal	D	53.8	Signal	B	17.7	No	Signal	E	60.8	Signal	D	48.3	No
54	Zinfandel Drive & US 50 EB Ramps/Gold Center Drive	Signal	F	121.0	Signal	F	118.7	No	Signal	F	117.6	Signal	F	81.2	No
55	Zinfandel Drive & White Rock Road	Signal	E	75.9	Signal	E	78.0	No	Signal	F	132.1	Signal	F	130.8	No
56	Zinfandel Drive & Data Drive	Signal	E	69.3	Signal	E	69.0	No	Signal	E	56.9	Signal	E	57.8	No
57	Zinfandel Drive & International Dr	Signal	F	83.3	Signal	F	83.6	No	Signal	F	99.8	Signal	F	89.0	No
58	Zinfandel Drive & Douglas Road	Signal	F	152.7	Signal	F	273.9	Yes	Signal	F	84.5	Signal	F	273.2	Yes
59	Eagles Nest Road/Zinfandel Drive & Kiefer Boulevard	Two-way stop	F	51.5	Signal	F	86.3	Yes	Two-way stop	E	49.8	Signal	E	61.2	No
	<i>Westbound</i>		F	91.1						F	182.9				
	<i>Southbound Left Turn</i>		A	8.1						A	9.2				
60	Eagles Nest Road & Jackson Road	Signal	C	30.4	Signal	E	62.7	No	Signal	C	34.2	Signal	E	64.0	No
61	Eagles Nest Road & Florin Road	Two-way stop	F	194.9	Two-way stop	F	>300	Yes	Two-way stop	F	83.9	Two-way stop	F	>300	Yes
	<i>Northbound</i>		F	>300		F	>300			F	>300		F	>300	
	<i>Southbound</i>		F	>300		F	>300			F	>300		F	>300	
	<i>Eastbound Left Turn</i>		B	10.3		B	11.6			A	8.4		A	0.0	
	<i>Westbound Left Turn</i>		A	0.0		A	0.0			A	9.4		A	0.0	
62	Sunrise Boulevard & US 50 WB Ramps	Signal	E	68.6	Signal	E	72.1	No	Signal	C	23.4	Signal	C	23.8	No
63	Sunrise Boulevard & US 50 EB Ramps	Signal	B	12.0	Signal	B	11.7	No	Signal	B	19.7	Signal	B	15.7	No
64	Sunrise Boulevard & Folsom Boulevard	Signal	D	52.1	Signal	D	54.6	No	Signal	D	51.6	Signal	D	52.7	No

Table TC-81 continued															
Intersection		AM Peak Hour							PM Peak Hour						
		CEQA Cumulative No Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact	CEQA Cumulative No Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact
		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
65	Sunrise Boulevard & White Rock Road	Signal	E	70.0	Signal	E	71.4	No	Signal	F	128.2	Signal	F	131.9	No
66	Sunrise Boulevard & International Drive/Monier Circle	Signal	F	115.2	Signal	F	116.7	No	Signal	F	82.6	Signal	E	77.2	No
67	Sunrise Boulevard & Douglas Road	Signal	F	142.9	Signal	F	230.7	Yes	Signal	E	75.5	Signal	F	115.4	Yes
68	Sunrise Boulevard & Chrysanthy Boulevard	Signal	D	49.8	Signal	D	47.1	No	Signal	B	11.4	Signal	C	20.6	No
69	Sunrise Boulevard & Kiefer Boulevard	Signal	F	157.5	Signal	F	443.8	Yes	Signal	F	133.4	Signal	F	167.2	Yes
70	Sunrise Boulevard & Jackson Road	Signal	D	48.8	Signal	F	109.7	Yes	Signal	D	49.2	Signal	F	89.0	Yes
71	Sunrise Boulevard & Florin Road	Signal	E	78.7	Signal	E	71.8	No	Signal	E	67.1	Signal	E	78.8	No
72	Sheldon Lake Drive/Sunrise Boulevard & Grant Line Road	Signal	F	149.2	Signal	F	188.1	Yes	Signal	E	72.0	Signal	E	79.3	No
73	Hazel Avenue & Tributary Point Drive/US 50 WB Off-ramp	Signal	F	157.9	Signal	F	156.2	No	Signal	F	115.7	Signal	F	119.5	No
74	Hazel Avenue & US 50 EB Ramps	Signal	B	16.9	Signal	B	17.4	No	Signal	F	83.4	Signal	F	82.6	No
76	Prairie City Road & White Rock Road	Signal	E	77.7	Signal	F	96.4	Yes	Signal	F	133.7	Signal	F	137.2	No
77	Grant Line Road & White Rock Road	Signal	C	30.0	Signal	C	34.2	No	Signal	D	41.1	Signal	D	39.0	No
78	Grant Line Road & Douglas Road	Signal	D	51.8	Signal	D	48.3	No	Signal	F	103.0	Signal	E	79.7	No
79	Grant Line Road & Kiefer Boulevard	Signal	C	21.2	Signal	B	19.8	No	Signal	C	22.7	Signal	C	26.2	No
80	Grant Line Road & Jackson Road	Signal	F	104.0	Signal	F	140.0	Yes	Signal	E	58.9	Signal	F	83.0	Yes

Table TC-81 continued															
Intersection		AM Peak Hour							PM Peak Hour						
		CEQA Cumulative No Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact	CEQA Cumulative No Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact
		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
81	Watt Avenue & US-50 EB Ramps	Signal	C	24.5	Signal	C	28.5	No	Signal	B	19.3	Signal	B	19.0	No
82	Watt Avenue & US-50 WB Ramps	Signal	F	81.4	Signal	E	76.2	No	Signal	E	57.1	Signal	E	57.2	No
83	Mayhew Rd & Folsom Blvd.	Signal	C	23.6	Signal	C	34.6	No	Signal	C	26.8	Signal	C	30.9	No
84	65th Street Expy & Fruitridge Road	Signal	D	43.5	Signal	D	44.9	No	Signal	D	43.4	Signal	D	49.8	No
85	Power Inn Road & Elder Creek Road	Signal	E	71.2	Signal	E	75.9	No	Signal	E	55.4	Signal	E	65.2	No
86	Power Inn Road & Florin Rd	Signal	F	99.3	Signal	F	118.5	Yes	Signal	E	72.7	Signal	E	79.0	No
87	Florin Perkins Road & Florin Rd	Signal	E	55.8	Signal	E	77.3	No	Signal	F	107.4	Signal	F	112.0	No
88	Bradshaw Rd & Calvine Rd	Signal	D	49.6	Signal	D	50.2	No	Signal	C	34.5	Signal	D	44.2	No
89	Vineyard Rd & Calvine Rd	Signal	C	32.0	Signal	D	35.3	No	Signal	C	34.0	Signal	D	36.0	No
90	Excelsior Road & Calvine Rd	Signal	C	21.6	Signal	D	35.0	No	Signal	C	21.7	Signal	C	27.7	No
91	Grant Line Rd & Eagles Nest Rd/Sloughhouse Rd	Signal	F	369.2	Signal	F	358.4	No	Signal	F	314.5	Signal	F	343.5	Yes
92	Grant Line Rd & Calvine Rd	Signal	D	42.4	Signal	D	47.6	No	Signal	D	40.9	Signal	D	51.2	No
93	Grant Line Rd & Dwy/Wilton Rd	Signal	F	85.4	Signal	F	89.1	No	Signal	E	79.3	Signal	F	103.6	Yes
94	Grant Line Rd & Bond Rd/Wrangler Dr	Signal	D	54.9	Signal	D	48.3	No	Signal	D	48.0	Signal	D	47.0	No
95	Florin Perkins Road & 14th Avenue	Signal	D	54.3	Signal	E	67.6	Yes	Signal	D	37.3	Signal	D	54.3	No

Table TC-81 continued														
Intersection	AM Peak Hour							PM Peak Hour						
	CEQA Cumulative No Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact	CEQA Cumulative No Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact
	Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
96 Jackson Road & 14th Avenue	Signal	F	96.3	Signal	F	166.5	Yes	Signal	C	33.3	Signal	F	115.4	Yes
97 Rock Creek Pkwy & Jackson Road	Signal	F	89.0	Signal	F	201.5	Yes	Signal	D	49.9	Signal	F	188.2	Yes
98 Aspen 1 Access Road & Jackson Road	Signal	C	29.7	Signal	C	25.6	No	Signal	D	39.2	Signal	C	23.3	No
99 Rancho Cordova Pkwy & US-50 WB Ramps	Signal	F	147.4	Signal	F	149.2	No	Signal	F	119.8	Signal	F	102.6	No
100 Rancho Cordova Pkwy & US-50 EB Ramps	Signal	D	53.7	Signal	C	26.7	No	Signal	D	44.4	Signal	D	40.2	No
101 Rancho Cordova Pkwy & Easton Valley Pkwy	Signal	C	30.9	Signal	D	51.2	No	Signal	D	50.3	Signal	D	50.8	No
102 Rancho Cordova Pkwy & White Rock Road	Signal	F	229.8	Signal	F	221.4	No	Signal	F	135.6	Signal	F	135.6	No
103 Rancho Cordova Pkwy & Douglas Road	Signal	E	65.6	Signal	E	64.6	No	Signal	E	60.8	Signal	E	58.5	No
104 Rancho Cordova Pkwy & Chrysanthy Boulevard/Chrysanthy Blvd	Signal	F	106.8	Signal	F	102.9	No	Signal	E	68.0	Signal	E	64.2	No
105 Rancho Cordova Pkwy & Kiefer Blvd	Signal	D	49.4	Signal	E	71.1	Yes	Signal	C	34.2	Signal	D	52.4	No
106 Rancho Cordova Pkwy & Grant Line Road	Signal	F	87.1	Signal	E	66.3	No	Signal	D	46.7	Signal	D	53.7	No
107 Americanos Blvd & White Rock Road	Signal	B	15.0	Signal	B	13.6	No	Signal	C	21.0	Signal	B	18.9	No
108 Americanos Blvd & Douglas Road	Signal	E	61.4	Signal	E	61.7	No	Signal	D	43.1	Signal	D	41.0	No
109 Americanos Blvd & Chrysanthy Blvd	Signal	D	41.6	Signal	D	35.1	No	Signal	D	37.3	Signal	D	35.8	No
110 Americanos Blvd & Kiefer Blvd	Signal	A	8.8	Signal	B	15.2	No	Signal	B	11.0	Signal	B	18.6	No

Table TC-81 continued															
Intersection		AM Peak Hour							PM Peak Hour						
		CEQA Cumulative No Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact	CEQA Cumulative No Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact
		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
111	Grant Line Road & Chrysanthy Blvd	Signal	F	125.9	Signal	F	114.9	No	Signal	F	112.9	Signal	F	111.3	No
112	Hazel Avenue & Easton Valley Pkwy	Signal	F	188.9	Signal	F	170.7	No	Signal	C	26.4	Signal	C	26.5	No
200	Excelsior Road & Collector WJ-1/Collector JT-1	West Jackson/Jackson Township Project Int.			Signal	E	62.6	No	West Jackson/Jackson Township Project Int.			Signal	D	53.1	No
201	Excelsior Road & Collector WJ-2/Collector JT-2	West Jackson/Jackson Township Project Int.			Signal	E	75.4	No	West Jackson/Jackson Township Project Int.			Signal	D	53.6	No
202	W Collector MS-1 & Kiefer Boulevard	Mather South Project Int.			Signal	C	27.0	No	Mather South Project Int.			Signal	B	19.2	No
203	Northbridge Dr & Kiefer Boulevard	NewBridge Project Int.			Signal	B	15.9	No	NewBridge Project Int.			Signal	C	22.5	No
204	E Collector MS-1 & Kiefer Boulevard	Mather South Project Int.			Signal	B	12.4	No	Mather South Project Int.			Signal	C	23.8	No
300	Collector WJ-3 & Jackson Road	West Jackson Project Int.			Signal	D	52.2	No	West Jackson Project Int.			Signal	C	29.0	No
301	Collector WJ-4 & Jackson Road	West Jackson Project Int.			Signal	D	42.1	No	West Jackson Project Int.			Signal	E	76.4	No
302	Happy Lane & Jackson Road	West Jackson Project Int.			Signal	E	60.7	No	West Jackson Project Int.			Signal	E	61.4	No
303	Rock Creek Pkwy & Jackson Road	West Jackson Project Int.			Signal	D	45.8	No	West Jackson Project Int.			Signal	D	42.6	No
304	Collector WJ-5 & Jackson Road	West Jackson Project Int.			Signal	E	72.5	No	West Jackson Project Int.			Signal	D	39.2	No
305	Collector WJ-6 & Jackson Road	West Jackson Project Int.			Signal	D	38.6	No	West Jackson Project Int.			Signal	D	44.3	No
306	Excelsior Road & Collector WJ-6	West Jackson Project Int.			Signal	F	109.6	Yes	West Jackson Project Int.			Signal	D	44.9	No
307	S. Watt Avenue & Rock Creek Pkwy	West Jackson Project Int.			Signal	C	22.6	No	West Jackson Project Int.			Signal	C	20.3	No

Table TC-81 continued															
Intersection		AM Peak Hour					PM Peak Hour								
		CEQA Cumulative No Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact	CEQA Cumulative No Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact
		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
308	Hedge Avenue & Rock Creek Pkwy WB	West Jackson Project Int.			Roundabout	F	77.3	Yes	West Jackson Project Int.			Roundabout	C	17.0	No
309	Hedge Avenue & Rock Creek Pkwy EB	West Jackson Project Int.			Roundabout	C	16.0	No	West Jackson Project Int.			Roundabout	B	11.1	No
310	Mayhew Road & Rock Creek Pkwy WB	West Jackson Project Int.			Roundabout	F	341.2	Yes	West Jackson Project Int.			Roundabout	F	348.9	Yes
311	Mayhew Road & Rock Creek Pkwy EB	West Jackson Project Int.			Roundabout	F	254.9	Yes	West Jackson Project Int.			Roundabout	F	204.0	Yes
312	Bradshaw Road & Rock Creek Pkwy	West Jackson Project Int.			Signal	E	79.5	No	West Jackson Project Int.			Signal	E	76.7	No
313	Collector WJ-7 & Rock Creek Pkwy	West Jackson Project Int.			Signal	B	18.1	No	West Jackson Project Int.			Signal	B	16.7	No
314	Vineyard Road/Happy Lane & Rock Creek Pkwy	West Jackson Project Int.			Signal	E	56.0	No	West Jackson Project Int.			Signal	F	88.7	Yes
315	Douglas Road & Rock Creek Pkwy	West Jackson Project Int.			Signal	D	42.2	No	West Jackson Project Int.			Signal	D	41.3	No
316	Bradshaw Road & Collector WJ-8	West Jackson Project Int.			Signal	D	46.1	No	West Jackson Project Int.			Signal	C	27.7	No
317	Bradshaw Road & Collector WJ-9	West Jackson Project Int.			Signal	E	57.9	No	West Jackson Project Int.			Signal	D	41.4	No
318	Bradshaw Road & Mayhew Road	West Jackson Project Int.			Signal	F	185.3	Yes	West Jackson Project Int.			Signal	F	132.9	Yes
319	Bradshaw Road & Collector WJ-10	West Jackson Project Int.			Signal	B	10.5	No	West Jackson Project Int.			Signal	C	30.6	No
320	Bradshaw Road & Collector WJ-11	West Jackson Project Int.			Signal	B	14.0	No	West Jackson Project Int.			Signal	C	30.6	No
321	Collector WJ-12 & Fruitridge Road	West Jackson Project Int.			Signal	C	31.3	No	West Jackson Project Int.			Signal	D	46.9	No
322	Mayhew Road & Collector WJ-13	West Jackson Project Int.			Signal	B	17.0	No	West Jackson Project Int.			Signal	C	20.8	No

Table TC-81 continued															
Intersection		AM Peak Hour					PM Peak Hour								
		CEQA Cumulative No Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact	CEQA Cumulative No Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact
		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
323	Collector WJ-14 & Kiefer Boulevard	West Jackson Project Int.			Signal	E	59.1	No	West Jackson Project Int.			Signal	E	69.2	No
324	Collector WJ-15 & Kiefer Boulevard	West Jackson Project Int.			Signal	D	41.9	No	West Jackson Project Int.			Signal	C	29.5	No
325	Douglas Road & Kiefer Boulevard	West Jackson Project Int.			Signal	F	223.6	Yes	West Jackson Project Int.			Signal	F	141.7	Yes
326	Happy Lane & Mayhew Road	West Jackson Project Int.			Roundabout	F	277.4	Yes	West Jackson Project Int.			Roundabout	F	204.6	Yes
327	Vineyard Road & Elder Creek Road	West Jackson Project Int.			Signal	E	77.7	No	West Jackson Project Int.			Signal	D	51.3	No
328	Vineyard Road & Florin Road	Signal	B	11.2	Signal	F	104.2	Yes	Signal	B	12.6	Signal	E	55.9	No
400	Collector JT-3 & Jackson Road	Jackson Township Project Int.			Signal	F	88.1	Yes	Jackson Township Project Int.			Signal	D	49.8	No
401	Tree View Lane & Jackson Road	Jackson Township Project Int.			Signal	C	27.0	No	Jackson Township Project Int.			Signal	A	8.9	No
402	Collector JT-4 & Jackson Road	Jackson Township Project Int.			Signal	E	77.3	No	Jackson Township Project Int.			Signal	B	17.4	No
403	Tree View Lane & Collector JT-5	Jackson Township Project Int.			Signal	B	19.1	No	Jackson Township Project Int.			Signal	C	21.3	No
404	Tree View Lane & Collector JT-6	Jackson Township Project Int.			Signal	B	10.1	No	Jackson Township Project Int.			Signal	B	18.2	No
405	Tree View Lane & Collector JT-1	Jackson Township Project Int.			Signal	C	29.2	No	Jackson Township Project Int.			Signal	C	26.3	No
406	Tree View Lane & Kiefer Boulevard	Jackson Township Project Int.			Signal	B	18.6	No	Jackson Township Project Int.			Signal	B	19.1	No
407	HS/MS Dwy & Kiefer Boulevard	Jackson Township Project Int.			Signal	C	34.6	No	Jackson Township Project Int.			Signal	C	34.7	No
500	Rockbridge Dr & Jackson Road	NewBridge Project Int.			Signal	E	75.4	No	NewBridge Project Int.			Signal	C	20.7	No

Table TC-81 continued																	
Intersection		AM Peak Hour						PM Peak Hour									
		CEQA Cumulative No Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact	CEQA Cumulative No Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact		
		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)			
501	Eagles Nest Road & N Bridgewater Dr	NewBridge Project Int.			Signal	A	7.4	No	NewBridge Project Int.			Signal	B	10.6	No		
502	Eagles Nest Road & S Bridgewater Dr	NewBridge Project Int.			Signal	C	31.8	No	NewBridge Project Int.			Signal	C	27.8	No		
600	Zinfandel Drive & Collector MS-2	Mather South Project Int.			Signal	B	18.4	No	Mather South Project Int.			Signal	D	45.4	No		
601	Zinfandel Drive & Collector MS-3	Mather South Project Int.			Signal	C	32.5	No	Mather South Project Int.			Signal	B	15.9	No		
602	Zinfandel Drive & Collector MS-4	Mather South Project Int.			Signal	D	51.3	No	Mather South Project Int.			Signal	C	24.8	No		
603	Collector MS-5 & Collector MS-2	Mather South Project Int.			All-way stop	B	11.7	No	Mather South Project Int.			All-way stop	B	12.8	No		
604	Collector MS-5 & Collector MS-3	Mather South Project Int.			Two-way stop	B	11.4	No	Mather South Project Int.			Two-way stop	C	19.2	No		
	<i>Northbound Left Turn</i>					A	7.5								A	8.1	
	<i>Southbound Left Turn</i>					A	0.0								A	0.0	
	<i>Eastbound</i>					B	12.7								F	56.1	
	<i>Westbound</i>					C	17.6								E	45.5	
605	Collector MS-5 & Collector MS-4	Mather South Project Int.			All-way stop	F	55.5	Yes	Mather South Project Int.			All-way stop	E	43.1	No		
606	Collector MS-5 & W Collector MS-1/E Collector MS-1	Mather South Project Int.			All-way stop	E	40.3	No	Mather South Project Int.			All-way stop	E	41.4	No		

Note: Gray shading represents changes in traffic control for which the project is responsible to pay a fair share.
Bold values do not meet LOS policy. **Red** values with light gray shading indicate project impacts.

Table TC-39: CEQA Cumulative and CEQA Cumulative plus FOUR PROJECTS Intersection Geometrics

Intersection	Traffic Control		CEQA Cumulative Lane Geometrics				CEQA Cumulative Plus FOUR PROJECTS Lane Geometrics				Project(s) Responsible for Change
	CEQA Cumulative	CEQA Cumulative Plus FOUR PROJECTS	NB Approach	SB Approach	EB Approach	WB Approach	NB Approach	SB Approach	EB Approach	WB Approach	
1 Howe Avenue & College Town Drive/US 50 WB Ramps	Signal	Signal	↑↑↑↗	↘↓↓↓↓	↖↗↗	↖↖↖↗↗	↑↑↑↗	↘↓↓↓↓	↖↗↗	↖↖↖↗↗	
2 Howe Avenue & US 50 EB Ramps	Signal	Signal	↑↑↑↗	↘↓↓↓	↖↗↗		↑↑↑↗	↘↓↓↓	↖↗↗		
3 Power Inn Road/Howe Avenue & Folsom Blvd	Signal	Signal	↖↖↑↑↑↗	↘↓↓↓↓↖↖	↖↖↑↗	↖↖↑↑↗↗	↖↖↑↑↑↗	↘↓↓↓↓↖↖	↖↖↑↗	↖↖↑↑↗↗	
4 Power Inn Road & 14th Avenue	Signal	Signal	↖↑↑↗	↘↓↓↓↖	↖↑↗	↖↑↗	↖↑↑↗	↘↓↓↓↖	↖↑↗	↖↑↗	
5 Power Inn Road & Fruitridge Road	Signal	Signal	↖↖↑↗	↘↓↓↖↖	↖↑↗	↖↑↑↗	↖↖↑↗	↘↓↓↖↖	↖↑↗	↖↑↑↗	
6 Jackson Road/Notre Dame Dr. & Folsom Blvd.	Signal	Signal	↖↖↗	↘↖	↖↑↑↗	↖↑↑↗	↖↖↗	↘↖	↖↑↑↗	↖↑↑↗	
7 Florin Perkins Road/Julliard Dr. & Folsom Boulevard	Signal	Signal	↖↖↗	↘↖	↖↑↑↗	↖↑↗	↖↖↗	↘↖	↖↑↑↗	↖↑↗	
8 Florin Perkins Road & Kiefer Blvd.	Two-way stop	Two-way stop	↑↗	↓↓↖		↖	↑↗	↓↓↖		↖	
9 Florin Perkins Road & Jackson Road	Signal	Signal	↖↑↑↗	↘↓↓↖	↖↑↑↗	↖↑↗	↖↑↑↗	↘↓↓↖	↖↑↑↗	↖↑↗	
10 Florin Perkins Road & Fruitridge Road	Signal	Signal	↖↑↑↗	↘↓↓↖	↖↑↑↗	↖↑↗	↖↑↑↗	↘↓↓↖	↖↑↑↗	↖↑↗	
11 Florin Perkins Road & Elder Creek Road	Signal	Signal	↖↑↑↗	↘↓↓↖	↖↑↑↗	↖↑↑↗	↖↑↑↗	↘↓↓↖	↖↑↑↗	↖↑↑↗	
12 Watt Avenue & Folsom Blvd.	Signal	Signal	↖↖↑↑↑↗	↘↓↓↓↓↖↖	↖↖↑↑↗	↖↖↑↑↗	↖↖↑↑↑↗	↘↓↓↓↓↖↖	↖↖↑↑↗	↖↖↑↑↗	
13 S. Watt Ave. & Reith Ct/Manlove Road	Signal	Signal	↖↑↑↑↗	↘↓↓↖	↖	↖↗↗	↖↑↑↑↗	↘↓↓↖	↖	↖↗↗	
14 S. Watt Avenue & Kiefer Blvd.	Signal	Signal	↖↖↑↑↑↗	↘↓↓↖↖	↖↖↑↑↗	↖↖↑↑↗	↖↖↑↑↑↗	↘↓↓↖↖	↖↖↑↑↗	↖↖↑↑↗	
15 S. Watt Avenue & Canberra Dr.	Signal	Signal	↑↑↗	↓↓↖		↖	↑↑↗	↓↓↖		↖	
16 S. Watt Avenue & Jackson Road	Signal	Signal	↖↖↑↑↑↗	↘↓↓↓↓↖↖	↖↖↑↑↗	↖↖↑↑↗	↖↖↑↑↑↗	↘↓↓↓↓↖↖	↖↖↑↑↗	↖↖↑↑↗	West Jackson
17 S. Watt Avenue & Fruitridge Road	Signal	Signal	↖↑↑↑↗	↘↓↓↓↖	↖↑↗	↖↗	↖↑↑↑↗	↘↓↓↓↖	↖↑↗	↖↑↗	West Jackson
18 S. Watt Avenue & Elder Creek Road	Signal	Signal	↖↖↑↑↑↗	↘↓↓↓↓↖↖	↖↖↑↗	↖↑↑↗	↖↖↑↑↑↗	↘↓↓↓↓↖↖	↖↖↑↗	↖↑↑↗	
20 Elk Grove Florin Road/S. Watt Ave. & Florin Road	Signal	Signal	↖↖↑↑↑↗	↘↓↓↓↓↖↖	↖↑↑↗	↖↑↑↗	↖↖↑↑↑↗	↘↓↓↓↓↖↖	↖↑↑↗	↖↑↑↗	
21 Elk Grove Florin Road & Gerber Road	Signal	Signal	↖↖↑↑↑↗	↘↓↓↓↓↖↖	↖↖↑↑↗	↖↖↑↑↗	↖↖↑↑↑↗	↘↓↓↓↓↖↖	↖↖↑↑↗	↖↖↑↑↗	
23 Hedge Avenue & Jackson Road	Signal	Signal	↖↗	↘↖	↖↑↑↗	↖↑↑↗	↖↗	↘↖	↖↑↗	↖↑↗	West Jackson
24 Hedge Avenue & Fruitridge Road	All-way stop	Signal	↖	↘↖	↖	↖	↖↑↗	↘↖	↖↑↗	↖↑↗	West Jackson
25 Hedge Avenue & Elder Creek Road	Signal	Signal	↖↑↗	↘↓↓↖	↖↑↗	↖↑↗	↖↑↗	↘↓↓↖	↖↑↗	↖↑↗	
26 Hedge Avenue & Tokay Lane	Two-way stop	Two-way stop	↖	↘↖	↖	↖	↖	↘↖	↖	↖	
27 Hedge Avenue & Florin Road	Signal	Signal	↖	↘↖	↖↑↗	↖↑↗	↖	↘↖	↖↑↗	↖↑↗	
28 Mayhew Road & Kiefer Boulevard	Signal	Signal	↖↑↗	↘↓↓↖	↖↑↗	↖↑↗	↖↑↗	↘↓↓↖	↖↑↗	↖↑↗	

Intersection	Traffic Control		CEQA Cumulative Lane Geometrics				CEQA Cumulative Plus FOUR PROJECTS Lane Geometrics				Project(s) Responsible for Change
	CEQA Cumulative	CEQA Cumulative Plus FOUR PROJECTS	NB Approach	SB Approach	EB Approach	WB Approach	NB Approach	SB Approach	EB Approach	WB Approach	
29 Mayhew Road & Jackson Road	Two-way stop	Signal	↘ ↗	↖ ↗	↘ ↗ ↘ ↗	↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗ ↘ ↗	↘ ↗ ↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	West Jackson
30 Mayhew Road & Fruitridge Road	Two-way stop	Signal	↘	↖ ↗	↘ ↗		↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗		West Jackson
31 Mayhew Road & Elder Creek Road	Signal	Signal	↘ ↗	↖ ↗	↘ ↗	↘ ↗	↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	West Jackson
32 Zinfandel Drive & Woodring Drive	Two-way stop	Two-way stop	↘ ↗	↖ ↗	↘ ↗		↘ ↗	↖ ↗	↘ ↗		
33 Bradshaw Road & Folsom Blvd.	Signal	Signal	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	
34 Bradshaw Road & US 50 WB Ramps	Signal	Signal	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗		↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗		↘ ↗ ↘ ↗	
35 Bradshaw Road & US 50 EB Ramps	Signal	Signal	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗		↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗		
36 Bradshaw Road & Old Placerville Road	Signal	Signal	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	
37 Bradshaw Road & Kiefer Boulevard	Signal	Signal	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	West Jackson
38 Bradshaw Road & Jackson Road	Signal	Signal	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	West Jackson
39 Bradshaw Road & Elder Creek Road	Signal	Signal	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	West Jackson
40 Bradshaw Road & Florin Road	Signal	Signal	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	
41 Bradshaw Road & Gerber Road	Signal	Signal	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	
42 Happy Lane & Old Placerville Road	Two-way stop	Two-way stop	↘ ↗		↘ ↗	↘ ↗	↘ ↗		↘ ↗	↘ ↗	
43 Happy Lane & Kiefer Boulevard		Signal		↘ ↗	↘ ↗		↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	West Jackson
44 Excelsior Road & Kiefer Boulevard	Two-way stop	Signal	↘ ↗	↘ ↗		↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	West Jackson; Jackson Township
45 Excelsior Road & Jackson Road	Signal	Signal	↘ ↗	↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	West Jackson; Jackson Township
46 Excelsior Road & Elder Creek Road	Two-way stop	Signal	↘ ↗	↘ ↗	↘ ↗		↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗		West Jackson
47 Excelsior Road & Florin Road	All-way stop	Signal	↘ ↗	↘ ↗	↘ ↗	↘ ↗	↘ ↗	↘ ↗	↘ ↗	↘ ↗	West Jackson
48 Excelsior Road & Gerber Road/Birch Ranch Drive	All-way stop	All-way stop	↘ ↗	↘ ↗	↘ ↗	↘ ↗	↘ ↗	↘ ↗	↘ ↗	↘ ↗	
49 Mather Field Road & US 50 WB Ramps	Signal	Signal	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗		↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗		↘ ↗ ↘ ↗	
50 Mather Field Road & US 50 EB Ramps	Signal	Signal	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗		↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗		
51 Mather Field Road & Rockingham Drive	Signal	Signal	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	
52 Mather Boulevard & Douglas Road	Signal	Signal		↘ ↗	↘ ↗ ↘ ↗	↘ ↗		↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	
53 Zinfandel Drive & US 50 WB Ramps	Signal	Signal	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗		↘ ↗ ↘ ↗	↘ ↗ ↘ ↗	↘ ↗ ↘ ↗		↘ ↗ ↘ ↗	

Intersection	Traffic Control		CEQA Cumulative Lane Geometrics				CEQA Cumulative Plus FOUR PROJECTS Lane Geometrics				Project(s) Responsible for Change
	CEQA Cumulative	CEQA Cumulative Plus FOUR PROJECTS	NB Approach	SB Approach	EB Approach	WB Approach	NB Approach	SB Approach	EB Approach	WB Approach	
54 Zinfandel Drive & US 50 EB Ramps/Gold Center Drive	Signal	Signal	↑↑↑↵	↵↓↓↓	↵↵↵↵	↵↵	↑↑↑↵	↵↓↓↓	↵↵↵↵	↵↵	
55 Zinfandel Drive & White Rock Road	Signal	Signal	↵↵↑↑↵	↵↓↓↓↵↵	↵↵↑↑↵	↵↵↑↵↵	↵↵↑↑↵	↵↓↓↓↵↵	↵↵↑↑↵	↵↵↑↵↵	
56 Zinfandel Drive & Data Drive	Signal	Signal	↵↑↑↵	↵↓↓↓↵	↵↵	↵↵↵	↵↑↑↵	↵↓↓↓↵	↵↵	↵↵↵	
57 Zinfandel Drive & International Dr	Signal	Signal	↵↵↑↑↑↵	↵↓↓↓↵↵	↵↵↑↑↵	↵↵↑↑↑↵	↵↵↑↑↑↵	↵↓↓↓↵↵	↵↵↑↑↵	↵↵↑↑↑↵	
58 Zinfandel Drive & Douglas Road	Signal	Signal	↵↵	↵↓↓↵	↵↑↵	↵↵↑↑↵	↵↵	↵↓↓↵	↵↑↵	↵↵↑↑↵	
59 Eagles Nest Road/Zinfandel Drive & Kiefer Boulevard	Two-way stop	Signal	↑↵	↓↓↵		↵	↵↵↑↑↵	↵↓↓↵	↵↵↑↑↵	↵↵↑↑↵	NewBridge; Mather South
60 Eagles Nest Road & Jackson Road	Signal	Signal	↵↵	↵↵	↵↵	↵↵	↵↑↵	↵↓↓↵	↵↵↑↵	↵↑↑↵	NewBridge
61 Eagles Nest Road & Florin Road	Two-way stop	Two-way stop	↵↵	↵↵	↵↵	↵↵	↵↵	↵↵	↵↵	↵↵	
62 Sunrise Boulevard & US 50 WB Ramps	Signal	Signal	↑↑↑↵	↵↓↓↓		↵↵↵↵	↑↑↑↵	↵↓↓↓		↵↵↵↵	
63 Sunrise Boulevard & US 50 EB Ramps	Signal	Signal	↑↑↑↑↵	↵↓↓↓	↵↵↵↵		↑↑↑↑↵	↵↓↓↓	↵↵↵↵		
64 Sunrise Boulevard & Folsom Boulevard	Signal	Signal	↵↵↑↑↑↑↵	↵↓↓↓↵↵	↵↵↑↑↵	↵↵↑↵↵	↵↵↑↑↑↑↵	↵↓↓↓↵↵	↵↵↑↑↵	↵↵↑↵↵	
65 Sunrise Boulevard & White Rock Road	Signal	Signal	↵↵↑↑↑↵	↵↓↓↓↵↵	↵↵↑↑↵	↵↵↑↑↑↵	↵↵↑↑↑↵	↵↓↓↓↵↵	↵↵↑↑↵	↵↵↑↑↑↵	
66 Sunrise Boulevard & International Drive/Monier Circle	Signal	Signal	↵↵↑↑↑↵	↵↓↓↓↵↵	↵↵↑↑↑↵	↵↵↑↑↑↵	↵↵↑↑↑↵	↵↓↓↓↵↵	↵↵↑↑↑↵	↵↵↑↑↑↵	
67 Sunrise Boulevard & Douglas Road	Signal	Signal	↵↵↑↑↑↵	↵↓↓↓↵↵	↵↵↑↑↵	↵↵↑↑↑↵	↵↵↑↑↑↵	↵↓↓↓↵↵	↵↵↑↑↵	↵↵↑↑↑↵	
68 Sunrise Boulevard & Chrysanthy Boulevard	Signal	Signal	↑↑↑↵	↓↓↵↵		↵↵	↑↑↑↵	↓↓↵↵		↵↵	
69 Sunrise Boulevard & Kiefer Boulevard	Signal	Signal	↵↑↑↵	↵↓↓↵	↵↵	↵↵	↵↑↑↵	↵↓↓↵	↵↵↑↑↵	↵↵	NewBridge; Mather South
70 Sunrise Boulevard & Jackson Road	Signal	Signal	↵↵↑↑↵	↵↓↓↵↵	↵↵↑↑↵	↵↵↑↑↵	↵↵↑↑↵	↵↓↓↵↵	↵↵↑↑↵	↵↵↑↑↵	
71 Sunrise Boulevard & Florin Road	Signal	Signal	↵↑↑	↵↓	↵		↵↑↑	↵↓	↵		
72 Sheldon Lake Drive/Sunrise Boulevard & Grant Line Road	Signal	Signal	↵↵	↵↵	↵↑↑↵	↵↑↵	↵↵	↵↵	↵↑↑↵	↵↑↵	
73 Hazel Avenue & Tributary Point Drive/US 50 WB Off-ramp	Signal	Signal	↵↵↑↑↑	↵↓↓↓	↵	↵↵↵	↵↵↑↑↑	↵↓↓↓	↵	↵↵↵	
74 Hazel Avenue & US 50 EB Ramps	Signal	Signal	↑↑↑↵	↵↓↓↓	↵↵↵↵		↑↑↑↵	↵↓↓↓	↵↵↵↵		
75 Hazel Avenue & Folsom Boulevard											
76 Prairie City Road & White Rock Road	Signal	Signal		↵↵	↵↵↑↑	↑↑↵		↵↵	↵↵↑↑	↑↑↵	
77 Grant Line Road & White Rock Road	Signal	Signal	↵↑↑	↵↓	↵↵		↵↑↑	↵↓	↵↵		
78 Grant Line Road & Douglas Road	Signal	Signal	↵↵↑↑	↵↓	↵↵		↵↵↑↑	↵↓	↵↵		

Intersection	Traffic Control		CEQA Cumulative Lane Geometrics				CEQA Cumulative Plus FOUR PROJECTS Lane Geometrics				Project(s) Responsible for Change
	CEQA Cumulative	CEQA Cumulative Plus FOUR PROJECTS	NB Approach	SB Approach	EB Approach	WB Approach	NB Approach	SB Approach	EB Approach	WB Approach	
79 Grant Line Road & Kiefer Boulevard	Signal	Signal	↖↖↑↑↗	↘↓↓↓↖	↖↖↑↗	↖↑↗	↖↖↑↑↗	↘↓↓↓↖	↖↖↑↗	↖↑↗	
80 Grant Line Road & Jackson Road	Signal	Signal	↖↖↑↑↗	↘↓↓↓↖↖	↖↖↑↑↗	↖↖↑↑↗	↖↖↑↑↗	↘↓↓↓↖↖	↖↖↑↑↗	↖↖↑↑↗	
81 Watt Avenue & US-50 EB Ramps	Signal	Signal	↑↑↑↑↗	↘↓↓↓↖	↖↖↗		↑↑↑↑↗	↘↓↓↓↖	↖↖↗		
82 Watt Avenue & US-50 WB Ramps	Signal	Signal	↑↑↗↗	↘↓↓↓↖↖		↖↖↗↗	↑↑↗↗	↘↓↓↓↖↖		↖↖↗↗	
83 Mayhew Rd & Folsom Blvd.	Signal	Signal	↖↖↗		↑↑↗	↖↑↑	↖↖↗		↑↑↗	↖↑↑	
84 65th Street Expy & Fruitridge Road	Signal	Signal	↖↑↑↗	↘↓↓↓↖	↖↑↑	↖↑↑↗	↖↑↑↗	↘↓↓↓↖	↖↑↑	↖↑↑↗	
85 Power Inn Road & Elder Creek Road	Signal	Signal	↖↑↗	↘↓↓↖	↖↑↑↗	↖↑↗	↖↑↗	↘↓↓↖	↖↑↑↗	↖↑↗	
86 Power Inn Road & Florin Rd	Signal	Signal	↖↑↗	↘↓↓↓↖	↖↑↑↗	↖↑↑↑↗	↖↑↗	↘↓↓↓↖	↖↑↑↗	↖↑↑↑↗	
87 Florin Perkins Road & Florin Rd	Signal	Signal	↖↑↑↗	↘↓↓↓↖	↖↑↗	↖↑↑↗	↖↑↑↗	↘↓↓↓↖	↖↑↗	↖↑↑↗	
88 Bradshaw Rd & Calvine Rd	Signal	Signal	↖↖↑↗	↘↓↓↓↖↖	↖↖↑↑↑↗	↖↖↑↑↑↗	↖↖↑↗	↘↓↓↓↖↖	↖↖↑↑↑↗	↖↖↑↑↑↗	
89 Vineyard Rd & Calvine Rd	Signal	Signal	↗	↘↖↖	↖↑↗	↖↑↗	↗	↘↖↖	↖↑↗	↖↑↗	
90 Excelsior Road & Calvine Rd	Signal	Signal	↖↑↗	↘↓↓↖	↖↑↗	↖↑↗	↖↑↗	↘↓↓↖	↖↑↗	↖↑↗	
91 Grant Line Rd & Eagles Nest Rd/Sloughhouse Rd	Signal	Signal	↖↑↑↗	↘↓↓↖	↗	↖↗	↖↑↑↗	↘↓↓↖	↗	↖↗	
92 Grant Line Rd & Calvine Rd	Signal	Signal	↖↑↑	↘↓↓	↖↗		↖↑↑	↘↓↓	↖↗		
93 Grant Line Rd & Dwy/Wilton Rd	Signal	Signal	↖↑↗	↘↓↓↖	↖↗	↖↗	↖↑↗	↘↓↓↖	↖↗	↖↗	
94 Grant Line Rd & Bond Rd/Wrangler Dr	Signal	Signal	↖↑↗	↘↓↓↓↖	↖↗	↗	↖↑↗	↘↓↓↓↖	↖↗	↗	
95 Florin Perkins Road & 14th Avenue	Signal	Signal	↖↖↑↑↗	↘↓↓↓↖↖	↖↖↑↑↗	↖↖↑↑↗	↖↖↑↑↗	↘↓↓↓↖↖	↖↖↑↑↗	↖↖↑↑↗	
96 Jackson Road & 14th Avenue	Signal	Signal		↖↖	↖↑↑	↑↑↗		↖↖	↖↑↑	↑↑↗	
97 Rock Creek Pkwy & Jackson Road	Signal	Signal	↖↑↗	↘↓↓↖	↖↑↗	↖↑↗	↖↑↗	↘↓↓↖	↖↑↗	↖↑↗	
98 Aspen 1 Access Road & Jackson Road	Signal	Signal	↖↗		↑↗	↖↑↑	↖↗		↑↗	↖↑↑	
99 Rancho Cordova Pkwy & US-50 WB Ramps	Signal	Signal	↖↖			↖↖	↖↖			↖↖	
100 Rancho Cordova Pkwy & US-50 EB Ramps	Signal	Signal	↑↗↗	↓↓↖	↗↗		↑↗↗	↓↓↖	↗↗		
101 Rancho Cordova Pkwy & Easton Valley Pkwy	Signal	Signal	↑↑↑↗	↓↓↓↖↖		↖↖↗	↑↑↑↗	↓↓↓↖↖		↖↖↗	
102 Rancho Cordova Pkwy & White Rock Road	Signal	Signal	↖↖↑↑↑↗	↘↓↓↓↖↖	↖↖↑↑↗	↖↖↑↑↗	↖↖↑↑↑↗	↘↓↓↓↖↖	↖↖↑↑↗	↖↖↑↑↗	
103 Rancho Cordova Pkwy & Douglas Road	Signal	Signal	↖↖↑↑↗	↘↓↓↓↖↖	↖↖↑↑↑↗	↖↖↑↑↑↗	↖↖↑↑↗	↘↓↓↓↖↖	↖↖↑↑↑↗	↖↖↑↑↑↗	
104 Rancho Cordova Pkwy & Chrysanthy Boulevard/Chrysanthy Blvd	Signal	Signal	↖↖↑↑↗	↘↓↓↓↖↖	↖↖↑↑↗	↖↖↑↑↗	↖↖↑↑↗	↘↓↓↓↖↖	↖↖↑↑↗	↖↖↑↑↗	

Intersection	Traffic Control		CEQA Cumulative Lane Geometrics				CEQA Cumulative Plus FOUR PROJECTS Lane Geometrics				Project(s) Responsible for Change
	CEQA Cumulative	CEQA Cumulative Plus FOUR PROJECTS	NB Approach	SB Approach	EB Approach	WB Approach	NB Approach	SB Approach	EB Approach	WB Approach	
105 Rancho Cordova Pkwy & Kiefer Blvd	Signal	Signal	↖↑↗	↘↓↙	↖↑↗	↖↑↗	↖↑↗	↘↓↙	↖↑↗	↖↑↗	
106 Rancho Cordova Pkwy & Grant Line Road	Signal	Signal		↘↙	↖↑↑	↑↑↗		↘↙	↖↑↑	↑↑↗	
107 Americanos Blvd & White Rock Road	Signal	Signal	↖↗		↑↑↗	↖↖↑↑	↖↗		↑↑↗	↖↖↑↑	
108 Americanos Blvd & Douglas Road	Signal	Signal	↖↑↗	↘↓↙	↖↑↑↗	↖↑↑↗	↖↑↗	↘↓↙	↖↑↑↗	↖↑↑↗	
109 Americanos Blvd & Chrysanthy Blvd	Signal	Signal	↖↗	↘↙	↖↑↗	↖↗	↖↗	↘↙	↖↑↗	↖↗	
110 Americanos Blvd & Kiefer Blvd	Signal	Signal		↖↗	↖	↗		↖↗	↖	↗	
111 Grant Line Road & Chrysanthy Blvd	Signal	Signal	↖↑↑↗	↘↓↓↙↙	↖↗	↖↑↗	↖↑↑↗	↘↓↓↙↙	↖↗	↖↑↗	
112 Hazel Avenue & Easton Valley Pkwy	Signal	Signal	↖↑↗	↘↓↙↙	↖↖↑↑↗	↖↑↑↗	↖↑↗	↘↓↙↙	↖↖↑↑↗	↖↑↑↗	
200 Excelsior Road & Collector WJ-1/Collector JT-1		Signal					↖↑↗	↘↓↙	↖↑↗	↖↑↗	West Jackson; Jackson Township
201 Excelsior Road & Collector WJ-2/Collector JT-2		Signal					↖↑↗	↘↓↙	↖↑↗	↖↑↗	West Jackson; Jackson Township
202 W Collector MS-1 & Kiefer Boulevard		Signal						↘↙	↖↖↑↑	↑↗	NewBridge; Mather South
203 Northbridge Dr & Kiefer Boulevard		Signal					↖↗		↑↗	↖↑↑	NewBridge; Mather South
204 E Collector MS-1 & Kiefer Boulevard		Signal						↘↙	↖↑↑	↑↑↗	NewBridge; Mather South
300 Collector WJ-3 & Jackson Road		Signal					↖↗		↑↗	↖↑↑	West Jackson
301 Collector WJ-4 & Jackson Road		Signal					↖↑↗	↘↓↙	↖↑↑↗	↖↑↑↗	West Jackson
302 Happy Lane & Jackson Road		Signal					↖↖↑↑↗	↘↓↓↙↙	↖↖↑↑↑↗	↖↖↑↑↑↗	West Jackson
303 Rock Creek Pkwy & Jackson Road		Signal					↖↑↗	↘↓↙	↖↖↑↑↗	↖↖↑↑↗	West Jackson
304 Collector WJ-5 & Jackson Road		Signal					↖↑↗	↘↓↙	↖↑↑↗	↖↑↑↗	West Jackson
305 Collector WJ-6 & Jackson Road		Signal					↖↑↗	↘↓↙	↖↑↑↗	↖↑↑↗	West Jackson
306 Excelsior Road & Collector WJ-6		Signal					↖↑	↘↓	↖↗		West Jackson
307 S. Watt Avenue & Rock Creek Pkwy		Signal					↑↑↗	↓↓↓↙↙		↖↗	West Jackson
308 Hedge Avenue & Rock Creek Pkwy WB		Roundabout					↖	↘		↗	West Jackson
309 Hedge Avenue & Rock Creek Pkwy EB		Roundabout					↑↗	↓↙	↖↗		West Jackson
310 Mayhew Road & Rock Creek Pkwy WB		Roundabout					↖↑	↘↓		↗	West Jackson

Intersection	Traffic Control		CEQA Cumulative Lane Geometrics				CEQA Cumulative Plus FOUR PROJECTS Lane Geometrics				Project(s) Responsible for Change
	CEQA Cumulative	CEQA Cumulative Plus FOUR PROJECTS	NB Approach	SB Approach	EB Approach	WB Approach	NB Approach	SB Approach	EB Approach	WB Approach	
311 Mayhew Road & Rock Creek Pkwy EB		Roundabout					↑ ↓	↓ ↓	↘ ↗		West Jackson
312 Bradshaw Road & Rock Creek Pkwy		Signal					↘ ↑ ↑ ↓	↓ ↓ ↓ ↓	↘ ↑ ↗	↘ ↑ ↗	West Jackson
313 Collector WJ-7 & Rock Creek Pkwy		Signal					↘	↗	↘	↘	West Jackson
314 Vineyard Road/Happy Lane & Rock Creek Pkwy		Signal					↘ ↑ ↓	↓ ↓ ↓	↘ ↑ ↗	↘ ↑ ↗	West Jackson
315 Douglas Road & Rock Creek Pkwy		Signal					↘ ↑ ↑	↓ ↓	↘ ↗		West Jackson
316 Bradshaw Road & Collector WJ-8		Signal					↑ ↑ ↓	↓ ↓ ↓ ↓		↘ ↗	West Jackson
317 Bradshaw Road & Collector WJ-9		Signal					↑ ↑ ↓	↓ ↓ ↓ ↓		↘ ↗	West Jackson
318 Bradshaw Road & Mayhew Road		Signal					↘ ↘ ↑ ↑ ↑ ↗	↓ ↓ ↓ ↓ ↓ ↓	↘ ↘ ↑ ↑ ↗	↘ ↘ ↑ ↑ ↗	West Jackson
319 Bradshaw Road & Collector WJ-10		Signal					↘ ↑ ↑ ↑	↓ ↓ ↓	↘ ↗		West Jackson
320 Bradshaw Road & Collector WJ-11		Signal					↘ ↑ ↑ ↑	↓ ↓ ↓	↘ ↗		West Jackson
321 Collector WJ-12 & Fruitridge Road		Signal					↘ ↑ ↗	↓ ↓ ↓	↘ ↑ ↓	↘ ↑ ↓	West Jackson
322 Mayhew Road & Collector WJ-13		Signal					↘ ↑ ↑	↓ ↓	↘ ↗		West Jackson
323 Collector WJ-14 & Kiefer Boulevard		Signal					↘ ↗	↓ ↓ ↓	↘ ↑ ↑ ↓	↘ ↑ ↑ ↓	West Jackson
324 Collector WJ-15 & Kiefer Boulevard		Signal						↓ ↓	↘ ↘ ↑ ↑ ↑	↑ ↑ ↓	West Jackson
325 Douglas Road/Shopping Center Dwy & Kiefer Boulevard		Signal					↘ ↘ ↑ ↗	↓ ↓ ↓	↘ ↑ ↑ ↑ ↗	↘ ↘ ↑ ↑ ↗	West Jackson
326 Happy Lane & Mayhew Road		Roundabout					↘ ↑	↓ ↓	↘ ↗		West Jackson
327 Vineyard Road & Elder Creek Road		Signal					↘ ↘ ↑ ↑ ↗	↓ ↓ ↓ ↓ ↓ ↓	↘ ↘ ↑ ↑ ↗	↘ ↘ ↑ ↑ ↗	West Jackson
328 Vineyard Road & Florin Road	Signal	Signal	↘ ↘ ↗		↑ ↗	↘ ↑	↘ ↘ ↑ ↑ ↗	↓ ↓ ↓ ↓ ↓ ↓	↘ ↘ ↑ ↗	↘ ↘ ↑ ↑ ↗	West Jackson
400 Collector JT-3 & Jackson Road		Signal						↓ ↓	↘ ↘ ↑ ↑	↑ ↑ ↓	Jackson Township
401 Tree View Lane & Jackson Road		Signal						↓ ↓ ↓	↘ ↘ ↑ ↑	↑ ↑ ↗	Jackson Township
402 Collector JT-4 & Jackson Road		Signal						↓ ↓	↘ ↑ ↑	↑ ↓	Jackson Township
403 Tree View Lane & Collector JT-5		Signal					↘ ↑ ↓	↓ ↓ ↓	↘ ↑ ↗	↘ ↑ ↗	Jackson Township
404 Tree View Lane & Collector JT-6		Signal					↘ ↑ ↓	↓ ↓ ↓	↘ ↑ ↗	↘ ↑ ↗	Jackson Township
405 Tree View Lane & Collector JT-1		Signal					↘ ↑ ↓	↓ ↓ ↓	↘ ↑ ↗	↘ ↑ ↗	Jackson Township
406 Tree View Lane & Kiefer Boulevard		Signal					↘ ↘ ↗		↑ ↑ ↗	↘ ↘ ↑ ↑	Jackson Township
407 HS/MS Dwy & Kiefer Boulevard		Signal					↘ ↗		↑ ↓	↘ ↑ ↑	Jackson Township

Intersection		Traffic Control		CEQA Cumulative Lane Geometrics				CEQA Cumulative Plus FOUR PROJECTS Lane Geometrics				Project(s) Responsible for Change
		CEQA Cumulative	CEQA Cumulative Plus FOUR PROJECTS	NB Approach	SB Approach	EB Approach	WB Approach	NB Approach	SB Approach	EB Approach	WB Approach	
500	Rockbridge Dr & Jackson Road		Signal						↘ ↙	↘ ↑ ↑	↑ ↘	NewBridge
501	Zinfandel Drive & N Bridgewater Dr		Signal					↑ ↘	↓ ↓ ↘		↘ ↘	NewBridge
502	Zinfandel Drive & S Bridgewater Dr		Signal					↘ ↑ ↘	↘ ↓ ↘	↘ ↑ ↘	↘ ↑ ↘	NewBridge
600	Zinfandel Drive & Collector MS-2		Signal					↑ ↘	↓ ↓ ↘		↘ ↘	Mather South
601	Zinfandel Drive & Collector MS-3		Signal					↑ ↘	↓ ↓ ↘		↘ ↘	Mather South
602	Zinfandel Drive & Collector MS-4		Signal					↑ ↘	↓ ↓ ↘		↘ ↘	Mather South
603	Collector MS-5 & Collector MS-2		All-way stop					↘	↗	↘	↘	Mather South
604	Collector MS-5 & Collector MS-3		Two-way stop					↘	↗	↘	↘	Mather South
605	Collector MS-5 & Collector MS-4		All-way stop					↘	↗	↘	↘	Mather South
606	Collector MS-5 & W Collector MS-1/E Collector MS-1		All-way stop						↘ ↙	↘ ↑	↑ ↘	Mather South

Table TC-40: CEQA Cumulative plus Jackson Corridor Projects Peak Hour Freeway Mainline Level of Service

Direction	Location	MTP Cumulative				MTP Cumulative plus Jackson Corridor Projects			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Volume	LOS	Volume	LOS	Volume	LOS	Volume	LOS
Eastbound US-50	SR 99 / SR 51 to Stockton Blvd	8,778	D	8,638	D	9,385	D	8,839	D
	Stockton Blvd to 59 th Street	8,188	F	7,819	F	8,702	F	7,978	F
	59 th St to 65 th St	7,646	D	7,343	D	8,152	E	7,464	D
	65 th St to Howe Ave	8,029	D	7,667	D	8,350	D	7,706	D
	Howe Ave to Watt Ave	7,220	C	6,672	C	7,399	C	6,603	C
	Watt Avenue to Bradshaw Rd	9,656	F	8,982	E	9,963	F	9,077	E
	Bradshaw Rd to Mather Field Rd	9,485	F	9,052	C	9,496	F	9,069	C
	Mather Field Rd to Zinfandel Rd	9,094	D	8,767	D	9,132	D	8,895	D
	Zinfandel Dr to Sunrise Blvd	6,314	C	6,370	F	6,384	C	6,543	F
	Sunrise Blvd to Rancho Cordova Pkwy	5,809	C	5,878	F	5,850	C	6,056	F
Rancho Cordova Pkwy to Hazel Ave	7,142	D	6,636	F	7,229	D	6,892	F	
Westbound US-50	Hazel Ave to Rancho Cordova Pkwy	5,378	B	5,162	C	5,639	B	5,168	C
	Rancho Cordova Pkwy to Sunrise Blvd	6,919	C	4,366	B	7,087	C	4,367	B
	Sunrise Blvd to Zinfandel Dr	8,607	D	5,233	B	8,817	D	5,341	B
	Zinfandel Dr to Mather Field Rd	9,513	D	7,406	C	9,550	D	7,364	C
	Mather Field Rd to Bradshaw Rd	9,597	F	8,720	D	9,505	F	8,509	D
	Bradshaw Rd to Watt Ave	9,008	F	7,882	D	8,892	F	8,155	E
	Watt Ave to Howe Ave	7,897	F	5,892	F	7,574	F	6,154	F
	Howe Ave to 65 th St	8,782	F	8,070	F	8,880	F	8,388	F
	65 th St to 59 th St	8,822	F	7,978	F	8,932	F	8,324	F
	59 th St to Stockton Blvd	9,698	D	8,294	F	9,795	D	8,712	F
Stockton Blvd to SR 99/ SR 51	10,176	E	9,674	F	10,262	E	9,963	F	

Bold values denote level of service "F" conditions. **Red shaded** values indicate project impacts.
Source: DKS Associates, 2014.

Table TC-41: CEQA Cumulative plus Jackson Corridor Projects Peak Hour Freeway Ramp Junction/Weaving LOS

Direction	Location	Junction Type	CEQA Cumulative				CEQA Cumulative Plus Jackson Corridor Projects			
			A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
			Ramp Volume	LOS	Ramp Volume	LOS	Ramp Volume	LOS	Ramp Volume	LOS
East-bound US 50	Northbound 65th Street Slip Entrance	Weave	946	F	778	F	953	F	701	F
	Howe Avenue / Hornet Drive Exit		2,093		2,125		2,176		2,265	
	Southbound Howe Avenue Loop Entrance	One-Lane Merge	754	D	1,336	D	730	D	1,291	D
	Northbound Howe Avenue Slip Entrance	One-Lane Merge	619	D	541	D	523	D	564	D
	Watt Avenue Exit	Two-Lane Diverge	1,523	B	1,707	B	1,495	B	1,535	A
	Southbound Watt Avenue Loop Entrance	One-Lane Merge	1,612	D	1,365	C	1,506	D	1,218	C
	Northbound Watt Avenue Slip Entrance	One-Lane Merge	675	D	591	C	700	D	656	C
	Bradshaw Road Exit	Two-Lane Diverge	2,068	F	1,624	B	2,336	F	1,826	C
	Southbound Bradshaw Road Loop Entrance	One-Lane Merge	270	D	426	D	257	D	500	D
	Northbound Bradshaw Road Slip Entrance	One-Lane Merge	1,480	D	1,027	D	1,492	D	1,152	C

Table TC-84 continued										
Direction	Location	Junction Type	CEQA Cumulative				CEQA Cumulative Plus Jackson Corridor Projects			
			A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
			Ramp Volume	LOS	Ramp Volume	LOS	Ramp Volume	LOS	Ramp Volume	LOS
East-bound US 50	Mather Field Road Exit	Two-Lane Diverge	1,493	B	1,536	B	1,480	B	1,502	B
	Southbound Mather Field Road Loop Entrance	One-Lane Merge	246	C	211	C	242	C	168	C
	Northbound Mather Field Road Slip Entrance	Weave	434	F	897	F	472	F	1,061	F
	Zinfandel Drive Exit		3,088		1,866		3,084		1,811	
	Southbound Zinfandel Drive Loop Entrance	One-Lane Merge	186	C	178	C	183	C	148	C
	Northbound Zinfandel Drive Slip Entrance	Lane Addition	648	A	707	B	712	B	783	B
	Sunrise Boulevard Exit	Major Diverge	1,903	C	2,318	C	1,926	C	2,406	C
	Sunrise Boulevard Entrance	Lane Addition / Weave	1,228	C	1,134	C	1,192	B	1,168	C
	Rancho Cordova Parkway Exit	Major Diverge / Weave	367		780		322	C	776	
	Rancho Cordova Parkway Entrance	Weave	1,778	F	1,742	F	1,764	F	1,811	F
	Hazel Avenue Exit		1,913		2,615		1,943		2,706	

Table TC-84 continued										
Direction	Location	Junction Type	CEQA Cumulative				CEQA Cumulative Plus Jackson Corridor Projects			
			A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
			Ramp Volume	LOS	Ramp Volume	LOS	Ramp Volume	LOS	Ramp Volume	LOS
East-bound US 50	Hazel Avenue Entrance	Weave	1,159	D	2,167	F	1,063	D	2,099	D
	Aerojet Road Exit		593		200		606		180	
West-bound US 50	Hazel Avenue Exit	Two-Lane Diverge	1,098	B	1,027	B	1,043	B	1,045	C
	Northbound Hazel Avenue Loop Entrance	One-Lane Merge	72	B	434	B	93	B	434	C
	Southbound Hazel Avenue Slip Entrance	Weave	2,300	F	2,265	F	2,369	F	2,306	F
	Rancho Cordova Parkway Exit		1,816		2,224		1,868		2,206	
	Rancho Cordova Parkway Entrance	Lane Addition / Weave	1,455	C	1,181	B	1,380	C	1,128	B
	Sunrise Boulevard Exit	Major Diverge / Weave	728		739	C	744		713	C
	Northbound Sunrise Boulevard Loop Entrance	Lane Addition	172	A	274	A	172	A	218	A
	Southbound Sunrise Boulevard Slip Entrance	Lane Addition	2,323	F	1,517	C	2,366	F	1,653	C
	Zinfandel Drive Exit	One-Lane Diverge	1,395	E	1,173	D	1,372	E	1,257	D

Table TC-84 continued										
Direction	Location	Junction Type	CEQA Cumulative				CEQA Cumulative Plus Jackson Corridor Projects			
			A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
			Ramp Volume	LOS	Ramp Volume	LOS	Ramp Volume	LOS	Ramp Volume	LOS
West-bound US 50	Northbound Zinfandel Drive Loop Entrance	Lane Addition	897	C	1,439	D	790	C	1,321	C
	Southbound Zinfandel Drive Slip Entrance	One-Lane Merge	1,587	D	646	B	1,401	D	656	B
	Mather Field Road Exit	One-Lane Drop	1,344	E	835	C	1,564	D	953	C
	Northbound Mather Field Road Loop Entrance	One-Lane Merge	623	C	1,187	C	510	C	1,189	C
	Southbound Mather Field Road Slip Entrance	One-Lane Merge	306	C	528	C	420	C	434	B
	Bradshaw Road Exit	Two-Lane Diverge	1,555	C	1,753	B	1,778	C	1,818	B
	Northbound Bradshaw Road Loop Entrance	One-Lane Merge	993	F	912	D	1,336	F	1,616	D
	Southbound Bradshaw Road Slip Entrance	One-Lane Merge	385	F	862	D	392	F	868	D
	Watt Avenue Exit	Major Diverge	1,558	E	1,109	D	1,417	E	980	D
	Northbound Watt Avenue Loop Entrance	One-Lane Merge	764	D	1,128	D	706	D	1,064	D
	Southbound Watt Avenue Slip Entrance	Lane Addition	1,127	D	1,062	C	850	D	967	D
	Howe Avenue Exit	Major Diverge	1,885	E	1,701	E	1,659	E	1,725	D

Table TC-84 continued										
Direction	Location	Junction Type	CEQA Cumulative				CEQA Cumulative Plus Jackson Corridor Projects			
			A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
			Ramp Volume	LOS	Ramp Volume	LOS	Ramp Volume	LOS	Ramp Volume	LOS
West-bound US 50	Northbound Howe Avenue Loop Entrance	One-Lane Merge	598	D	542	D	599	D	548	D
	Southbound Howe Avenue Slip Entrance	One-Lane Merge	678	F	708	C	786	F	637	C

Bold values denote level of service "F" conditions.
Red shaded values indicate project impacts.
Source: DKS Associates, 2014.

Table TC-42: CEQA Cumulative Peak Hour Freeway Ramp Termini Queuing

Direction	US 50 Exit Ramp	Available Storage Length (feet/lane)			Maximum Que Length (feet/lane)					
					AM Peak Hour			PM Peak Hour		
		L	T	R	L	T	R	L	T	R
Eastbound US-50	Howe Ave	765	-	765	108	-	618	129	-	325
	Watt Ave	1,500	-	1,500	193	-	376	352	-	346
	Bradshaw Rd	1,250	-	1,250	137	-	505	153	-	281
	Mather Field Rd	1,385	-	1,385	126	-	365	205	-	427
	Zinfandel Dr	1,025	1,025	1,025	157	1,437	1,300	402	379	963
	Sunrise Blvd	1,695	-	1,695	119	-	211	192	-	114
	Rancho Cordova Pkwy	-	-	1,850	-	-	237	-	-	409
	Hazel Ave	1,310	-	1,310	307	-	23	720	-	19
Westbound US-50	Hazel Ave	1,995		1,995	287		917	310		719
	Rancho Cordova Pkwy	1,065	-	-	1,677	-	-	1,236	-	-
	Sunrise Blvd	1,540	-	1,540	58	-	152	15	-	350
	Zinfandel Dr	1,065	-	1,065	717	-	134	140	-	203
	Mather Field Rd	1,335	-	1,335	330	-	301	333	-	328
	Bradshaw Rd	1,330	-	1,330	198	-	136	330	-	71
	Watt Ave	1,480	-	1,480	256	-	814	199	-	696
	Howe Ave	1,355	1,355	1,355	86	412	671	202	412	668

Bold values exceed storage capacity.

L = left turn movement, T = through movement, R = right turn movement

Source: DKS Associates, 2014.

Table TC-43: CEQA Cumulative plus Jackson Corridor Projects Peak Hour Freeway Ramp Termini Queuing

Direction	US 50 Exit Ramp	Available Storage Length (feet/lane)			Maximum Que Length (feet/lane)					
					AM Peak Hour			PM Peak Hour		
		L	T	R	L	T	R	L	T	R
Eastbound US-50	Howe Ave	765	-	765	129	-	893	162	-	454
	Watt Ave	1,500	-	1,500	210	-	450	239	-	310
	Bradshaw Rd	1,250	-	1,250	172	-	1,248	118	-	727
	Mather Field Rd	1,385	-	1,385	161	-	389	257	-	323
	Zinfandel Dr	1,025	1,025	1,025	156	1,403	1,298	614	340	546
	Sunrise Blvd	1,695	-	1,695	124	-	192	223	-	100
	Rancho Cordova Pkwy	-	-	1,850	-	-	358	-	-	406
	Hazel Ave	1,310	-	1,310	306	-	29	814	-	22
Westbound US-50	Hazel Ave	1,995		1,995	308		843	332		710
	Rancho Cordova Pkwy	1,065	-	-	1,527	-	-	1,683	-	-
	Sunrise Blvd	1,540	-	1,540	60	-	153	31	-	340
	Zinfandel Dr	1,065	-	1,065	485	-	71	188	-	177
	Mather Field Rd	1,335	-	1,335	546	-	431	313	-	363
	Bradshaw Rd	1,330	-	1,330	336	-	122	363	-	65
	Watt Ave	1,480	-	1,480	269	-	754	219	-	667
	Howe Ave	1,355	1,355	1,355	43	412	629	208	412	810

Red shaded values indicate project impacts.

L = left turn movement, T = through movement, R = right turn movement

Source: DKS Associates, 2014.

PEDESTRIAN AND BICYCLE FACILITY IMPACTS

The Jackson Corridor Projects would not remove any existing or planned pedestrian facility that is planned in the Bikeway Master Plan. The Jackson Corridor Projects would add pedestrian and bicycle demands within the Jackson Corridor Projects sites and to and from nearby land uses. Specific information on improvements to on- and off-site bicycle and pedestrian facilities is not available at this time. Because the Jackson Corridor Projects would add demand for pedestrian and bicycle facilities that may not be available, the impact of the Jackson Corridor Projects on pedestrian and bicycle circulation is potentially significant.

TRANSIT SYSTEM IMPACTS

Public transit would not be provided to the sites of the Jackson Corridor Projects under CEQA Cumulative scenario without development of the Jackson Corridor Projects. In the preparation of this analysis, a transit system to serve the Jackson Corridor Projects was developed. However, the timing and implementation of the transit system were uncertain at the time of the Traffic Study completion. The Jackson Corridor Projects would increase demands for public transit facilities. Therefore, the impact of the Jackson Corridor Projects on the transit system is potentially significant.

FUNCTIONALITY IMPACTS

Table TC-87 summarizes the results of the rural roadway segment functionality analysis. Plate TC-33 illustrates the resultant functionality impacts. The table includes the number of lanes assumed with the implementation of the Jackson Corridor Projects, which in many cases is greater than the number of lanes in the existing condition. The shaded table cells under the “Travel Lanes” heading illustrates new roadways and widened roadways that are assumed part of the Jackson Corridor Projects. The “Substandard?” heading indicates whether or not a roadway meets the County standards of 12-foot lanes and 6-foot shoulders. If the Jackson Corridor Projects make improvements to a roadway segment such as widening, they would be required to reconstruct the entire substandard roadway segment to County standards. The shaded table cells under the “Functionality Impact?” heading indicate those locations with a functionality impact.

As stated above, the traffic analysis assumed that the Jackson Corridor Projects would construct a number of travel lanes on roadway segments that are internal to or on the boundary of the Jackson Corridor Projects, and the entire roadway segment would be reconstructed to County standards at that time. The timing of implementation of such additional traffic lanes on these internal or boundary roadway segments will affect whether or not impacts would exist at some time prior to full build out of the Jackson Corridor Projects.

Table TC-44: CEQA Cumulative plus Jackson Corridor Projects Functionality Impacts

ID	Roadway	Segment		Jurisdiction	Existing Substandard Roadways				CEQA Cumulative + Jackson Corridor Projects			
		From	To		Travel Lanes	Pavement (ft)	Substandard? ¹	Existing Volume	Travel Lanes	Facility Type ¹	Forecasted Volume	Functionality Impact? ²
15	Douglas Rd	Mather Blvd	Zinfandel Dr	County	2	23	Yes	6,635	4	Arterial M	35,330	Yes ³
16	Douglas Rd	Zinfandel Dr	Sunrise Blvd	Rancho Cordova/County	2	23	Yes	8,369	6	Arterial M	48,540	Yes ³
19	Eagles Nest Rd	Kiefer Blvd	Jackson Rd	County	2	20	Yes	740	4	Arterial M	15,420	Yes ³
20	Eagles Nest Rd	Jackson Rd	Florin Rd	County	2	<21	Yes	517	2	Arterial M	9,790	Yes
21	Eagles Nest Rd	Florin Rd	Grant Line Rd	County	2	<21	Yes	189	2	Arterial M	5,230	No
25	Elder Creek Rd	South Watt Ave	Hedge Ave	County	2	23	Yes	5,576	4	Arterial M	54,480	Yes ³
26	Elder Creek Rd	Hedge Ave	Mayhew Rd	County	2	23	Yes	5,797	4	Arterial M	43,210	Yes ³
27	Elder Creek Rd	Mayhew Rd	Bradshaw Rd	County	2	23	Yes	5,355	4	Arterial M	25,620	Yes ³
28	Elder Creek Rd	Bradshaw Rd	Excelsior Rd	County	2	23	Yes	2,158	3	Arterial M	31,620	Yes ³
30	Excelsior Rd	Kiefer Blvd	Jackson Rd	County	2	22	Yes	3,716	2	Arterial M	30,400	Yes
31	Excelsior Rd	Jackson Rd	Elder Creek Rd	County	2	<21	Yes	5,075	3	Arterial M	41,380	Yes ³
32	Excelsior Rd	Elder Creek Rd	Florin Rd	County	2	<21	Yes	4,203	3	Arterial M	12,900	Yes ³
33	Excelsior Rd	Florin Rd	Gerber Rd	County	2	<21	Yes	5,423	2	Arterial M	14,300	Yes
34	Excelsior Rd	Gerber Rd	Calvine Rd	County	2	<21	Yes	4,229	2	Arterial M	9,110	Yes
39	Florin Rd	South Watt Ave	Hedge Ave	County	2	22	Yes	7,718	4	Arterial M	13,280	Yes ³
40	Florin Rd	Hedge Ave	Mayhew Rd	County	2	22	Yes	6,312	4	Arterial M	14,700	Yes ³
41	Florin Rd	Mayhew Rd	Bradshaw Rd	County	2	22	Yes	6,317	4	Arterial M	43,130	Yes ³
42	Florin Rd	Bradshaw Rd	Excelsior Rd	County	2	22	Yes	3,478	4	Arterial M	29,540	Yes ³
43	Florin Rd	Excelsior Rd	Sunrise Blvd	County	2	22	Yes	3,835	2	Arterial M	18,580	Yes
48	Fruitridge Rd	South Watt Ave	Hedge Ave	City of Sacramento/County	2	22	Yes	2,890	3	Arterial M	24,970	Yes ³
49	Fruitridge Rd	Hedge Ave	Mayhew Rd	County	2	22	Yes	1,790	4	Arterial M	27,150	Yes ³
50	Grant Line Rd	White Rock Rd	Douglas Rd	Rancho Cordova/County	2	22	Yes	7,189	4	Arterial M	40,500	Yes ³
58	Happy Ln	Old Placerville Rd	Kiefer Blvd	County	2	22	Yes	4,635	4	Arterial M	51,220	Yes ³
59	Hedge Ave	Jackson Rd	Fruitridge Rd	County	2	22	Yes	3,061	2	Arterial M	11,810	Yes
60	Hedge Ave	Fruitridge Rd	Elder Creek Rd	City of Sacramento/County	2	22	Yes	3,737	2	Arterial M	9,680	Yes
61	Hedge Ave	Elder Creek Rd	Florin Rd	County	2	22	Yes	2,722	2	Arterial M	22,180	Yes

Table TC-87 continued												
ID	Roadway	Segment		Jurisdiction	Existing Substandard Roadways				CEQA Cumulative + Jackson Corridor Projects			
		From	To		Travel Lanes	Pavement (ft)	Substandard? ¹	Existing Volume	Travel Lanes	Facility Type ¹	Forecasted Volume	Functionality Impact? ²
70	Jackson Rd	Bradshaw Rd	Excelsior Rd	County	2	26	Yes	13,030	6	Arterial M	60,480	Yes ³
71	Jackson Rd	Excelsior Rd	Eagles Nest Rd	County	2	26	Yes	10,478	4	Arterial M	62,780	Yes ³
74	Kiefer Blvd	Florin Perkins Rd	South Watt Ave	City of Sacramento/County	2	22	Yes	4,616	2	Arterial M	5,630	No
77	Kiefer Blvd	Bradshaw Rd	Happy Ln	County	2	22	Yes	4,618	6	Arterial M	56,300	Yes ³
78	Kiefer Blvd	Zinfandel Dr	Sunrise Blvd	County	2	22	Yes	656	3	Arterial M	37,390	Yes ³
83	Mather Blvd-Excelsior Rd ⁴	Douglas Rd	Kiefer Blvd	County	2	22	Yes	6,751	2	Res Collector F	15,750	Yes
89	Mayhew Rd	Jackson Rd	Fruitridge Rd	County	2	22	Yes	1,616	4	Arterial M	52,530	Yes ³
116	White Rock Rd	Fitzgerald Rd	Grant Line Rd	Rancho Cordova/County	2	20	Yes	2,490	4	Arterial M	54,910	Yes ³
123	Zinfandel Dr	Douglas Rd	Kiefer Blvd	County	2	<21	Yes	2,848	4	Arterial M	31,690	Yes ³

Note: Gray shading indicates changes in travel lanes or facility type that the project is responsible to provide. For all roadway segments to be widened, the project is responsible to build the entire roadway to County standards.

¹ Substandard rural roads are defined as rural, 2-lane roadway segments with travel lanes narrower than 12 feet and/or roadside shoulders narrower than 6 feet.

² Functionality impacts are triggered when a substandard rural road increases over a threshold of 6,000 ADT, or for a roadway already above 6,000 ADT, increases by more than 600 ADT.

³ The potential for an impact exists should the project generate traffic volumes on the roadway exceeding 6,000 ADT, or increasing more than 600 ADT on a roadway already above 6,000 ADT, prior to the construction of roadway improvements.

⁴ Excluding the roadway segment that is within the developed community of Independence at Mather.

⁵ The functionality impact is mitigated by improving the roadway to County standards, including widening travel lanes to 12 feet and/or widening or providing paved shoulders to 6 feet.

Plate TC-21: CEQA Cumulative plus Jackson Corridor Projects Functionality Impacts

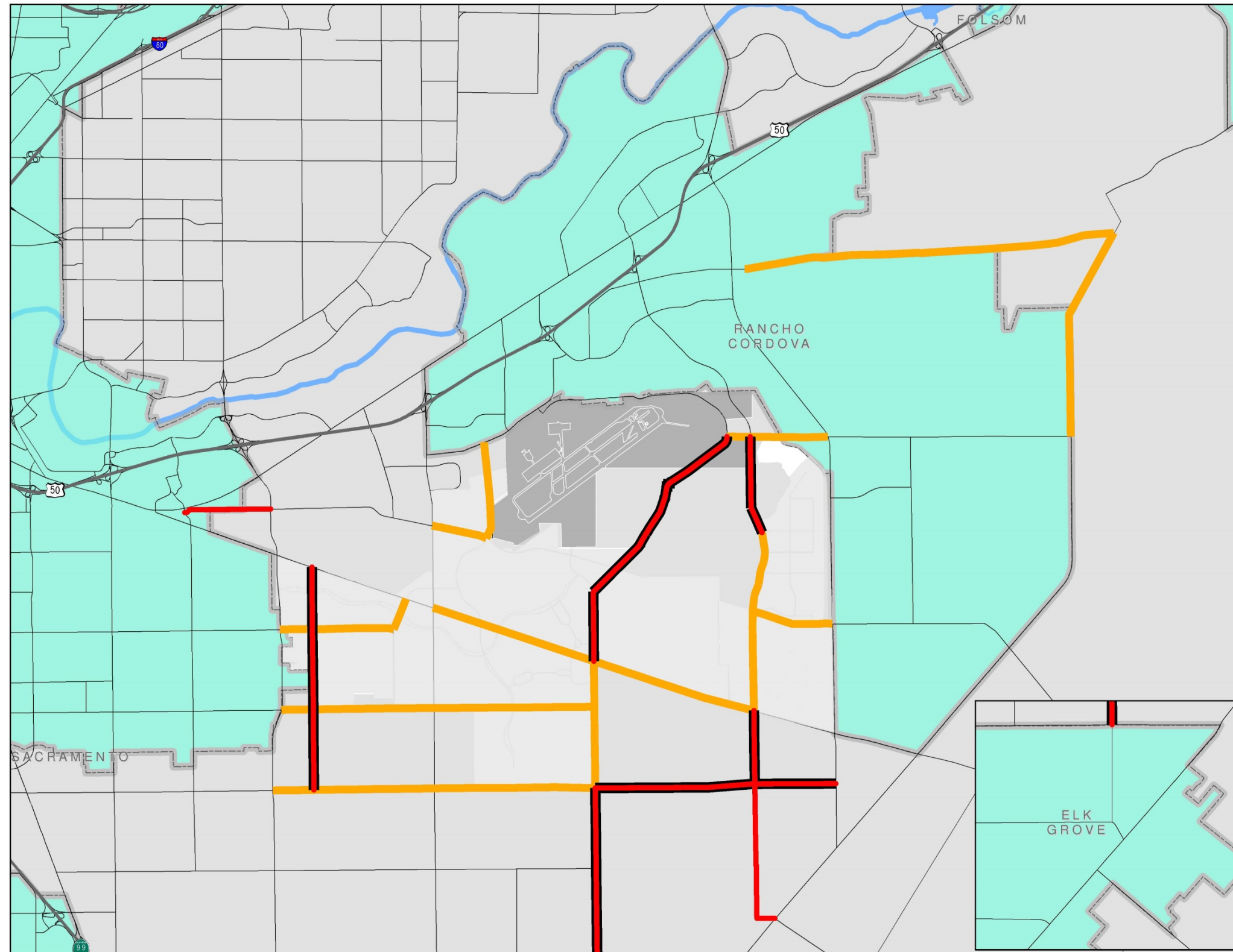


FIGURE 6.7
CEQA CUM PLUS FOUR PROJECTS
FUNCTIONALITY IMPACTS

- Legend**
- Substandard Roadways
 - Functionality Impact
 - Functionality Impact if Roadway is Not Already Improved
 - Cities
 - Mather Airport



*CEQA CUMULATIVE PLUS JACKSON CORRIDOR PROJECTS MITIGATION***ROADWAY SEGMENT MITIGATION**

Table TC-88 summarizes the results of the operations analysis for the study area roadway segments with mitigation. Where feasible, the number of roadway lanes was increased to mitigate the impact. However, the increased number of lanes could not exceed the maximum General Plan designations of the appropriate jurisdictions. The shaded table cells under the “Travel Lanes” and “Facility Type” headings illustrate widened roadways for mitigation purposes, which would be the responsibility of the Jackson Corridor Projects to fund. The NewBridge project would contribute a fair share. The shaded table cells under the “Level of Service” heading indicate those locations that would continue to have LOS impacts after mitigation. The table also includes the constraint that precluded full mitigation of the LOS impact.

The “LOS Impact with Mitigation?” column shows whether there is still an LOS impact after the mitigation measure is applied. In other words, this column shows whether a mitigation measure successfully mitigates the impact or not. In several locations where the improvements allowed under the General Plan would not mitigate an LOS impact, the County has proposed alternative mitigation measures, which are shown in the “Alternative Mitigation” column. These alternative mitigation measures will either fully mitigate the impact or substantially reduce the level of impact.

INTERSECTION MITIGATION

Table TC-89 and Table TC-90 summarize the results of the operations analysis for the study area intersections with mitigation. However, the increased number of lanes on each approach does not exceed the County’s standard number of approach lanes. Shaded table cells in Table TC-90 indicate those locations where changes in traffic control and / or number of approach lanes by type have been made to mitigate impacts, which would be the responsibility of the Jackson Corridor Projects to fund. The NewBridge project would contribute a fair share. The shaded table cells in Table TC-89 under the “Level of Service” heading indicate those locations with an LOS impact after mitigation. Table TC-90 also identifies those intersections that would continue to have LOS impacts after mitigation, along with the constraint that precluded full mitigation. Detailed analysis information is included in the technical appendix.

The “LOS Impact with Mitigation?” column shows whether there is still an LOS impact after the mitigation measure is applied. In other words, this column shows whether a mitigation measure successfully mitigates the impact or not. In several locations where the LOS impact could not be mitigated by implementing the County’s standard number of approach lanes, the County has proposed alternative mitigation measures, which are shown in the “Alternative Mitigation” column. These generally include providing additional turn lanes, carrying an additional through lane past the intersection, or designating the intersection as a High Capacity Intersection. These alternative mitigation measures will either fully mitigate the impact or substantially reduce the level of impact.

HIGH CAPACITY INTERSECTIONS

Three intersections are currently designated as “High Capacity Intersections” on the County’s General Plan: Watt Avenue & Folsom Boulevard, Watt Avenue & Kiefer Boulevard, and Watt Avenue & Jackson Road. At two intersections on Bradshaw Road where an LOS impact could not be mitigated by implementing the County’s standard number of approach lanes, the County has proposed alternative mitigation measures by designating those two intersections as High Capacity Intersections: Bradshaw Road & Mayhew Road and Bradshaw Road & Jackson Road.

A high capacity intersection would utilize special treatments to increase the capacity of the intersection so as to reduce congestion and travel delay. Since each intersection could have unique travel movements, volumes and existing context sensitive conditions, the special treatments utilized at each high capacity intersection will be selected to meet the specific needs of each intersection. The range of special treatments is quite wide, ranging from the restriction of certain turning movements to various combinations that could include grade separating certain movements. While the field of traffic engineering is ever expanding and evolving resulting in the use of new technologies and treatments, special treatments such as the following could be utilized at a high capacity intersection:

- Restricting turning movements
- Median U-turns
- Roundabouts
- Split intersections
- Quadrant roadway intersections
- Bowtie intersections
- Directional flyovers
- Center turn overpass
- Grade separated Roundabout
- Diverging diamond grade separation
- Compact diamond grade separation
- Single point urban grade separation
- Traditional urban grade separation

The County has conducted conceptual engineering to define potential improvements at the three study area intersections on Watt Avenue that are currently designated as “High Capacity Intersections” on the County’s General Plan. These are:

- At the **Watt Avenue & Folsom Boulevard** intersection, the County proposes an ultimate configuration involving grade separation of the northbound and southbound through movements of Watt Avenue. Access to and from Folsom Boulevard would be accomplished via on and off-ramps from the left lanes of Watt Avenue to a single signalized intersection. A bus rapid transit (BRT) lane along Watt Avenue would also intersect Folsom Boulevard at the traffic signal. This design is consistent with the recommendations of the South Watt Area Transportation Study (SWATS) dated November 1, 2002 and approved by the Board of Supervisors on November 26, 2002, and with the planning study for the

State Route 16 (Jackson Road) Corridor Study (Fehr & Peers, 2012). It should be noted that the State Route 16 study has only had a staff-level review done by Caltrans, Sacramento County Department of Transportation, City of Rancho Cordova, and City of Sacramento. Other equivalent mitigation measures may be selected to the satisfaction of the Department of Transportation to mitigate the project's impact.

- At the **Watt Avenue & Kiefer Boulevard** intersection, the County proposes a tight diamond interchange as the ultimate improvement. The through movements (and BRT lane) on Watt Avenue would be grade separated from Kiefer Boulevard. Access to and from Kiefer Boulevard would be accomplished via on and off-ramps at two signalized intersections along Kiefer Boulevard. This design is proposed in the planning study prepared for *State Route 16 (Jackson Road) Corridor Study* (Fehr & Peers, 2012). It should be noted that the State Route 16 study has only had a staff-level review done by Caltrans, Sacramento County Department of Transportation, City of Rancho Cordova, and City of Sacramento. Other equivalent mitigation measures may be selected to the satisfaction of the Department of Transportation to mitigate the project's impact.
- At the **Watt Avenue & Jackson Road** intersection, the County proposes a standard six-by-six signalized intersection (two left-turn lanes, three through lanes, and one right-turn lane, on each approach) with three modifications. 1) The southbound left-turn movement would be grade separated; 2) The westbound right-turn movement would be grade separated; and 3) Three northbound left-turn lanes are proposed. This configuration represents an enhanced version of Alternative 6 in the planning study prepared for *State Route 16 (Jackson Road) Corridor Study* (Fehr and Peers, 2012). It should be noted that the State Route 16 study has only had a staff-level review done by Caltrans, Sacramento County Department of Transportation, City of Rancho Cordova, and City of Sacramento. Other equivalent mitigation measures may be selected to the satisfaction of the Department of Transportation to mitigate the project's impact.

At the two new proposed “High Capacity Intersections” along Bradshaw Road, the ultimate configurations have not been defined. A number of improvement options involving one or more of the special treatments identified above could be defined that would mitigate the LOS impact at these locations. Since each of these intersections have unique travel movements, volumes and existing context sensitive conditions (potential environmental issues, right-of-way, physical constraints, etc.), the special treatments utilized at each location will need to be studied to select the treatments that mitigate the LOS impact, while avoiding or minimizing other impacts. At Bradshaw Road & Mayhew Road, heavy southbound right turns and westbound left turns suggest that a combination of triple left-turn lanes, dual right-turn lanes and/or overlap phasing may be effective. A high conflicting northbound and southbound volume suggests that grade separating one or more movements may also be necessary to fully mitigate the LOS impact. At Bradshaw Road & Jackson Road, the critical movements are the conflicting through volumes on all approaches. Grade separating either the Bradshaw Road or

Jackson Road through movements is likely the only option that would mitigate the LOS impact at this location.

PROJECTS U.S. 50 FREEWAY MITIGATION

According to Caltrans' US-50 Transportation Concept Report (TCR) and Corridor System Management Plan (CSMP), all mainline freeway lanes of the 8-lane ultimate facility (4 lanes in each direction) have already been built, with the exception of the segment between Zinfandel Drive and Sunrise Boulevard (where 6 of the 8 ultimate lanes exist today). With the exception of this segment, capacity improvements to widen the freeway mainline are precluded by the ultimate configuration in the TCR/CSMP. The TCR/CSMP does conceptualize other projects that will benefit the US-50 corridor without adding additional mainline travel lanes. These improvements generally fall into one of three categories:

- Intelligent transportation systems (ITS) and integrated corridor management (ICM) projects. Some examples may include ramp metering and multimodal improvements.
- Improvements to parallel local facilities. Such projects are expected to reduce travel demand on US-50.
- Future HOV lanes and auxiliary lanes. These projects would extend, or bridge gaps in, the existing HOV and auxiliary lane network. Constructing these lanes is permissible even when further widening of the mainline is not allowable, and is consistent with the ultimate configuration in the TCR/CSMP.

The Jackson Corridor Projects shall participate in one or more of these alternative improvements that could directly reduce the severity of the project's impact and/or provide operational benefits to the US-50 corridor in general.

US-50 EASTBOUND ALTERNATIVE IMPROVEMENTS

To lessen the impact to the eastbound US-50 mainline between Stockton Boulevard and 59th Street, the project may pay a fair share toward the construction of:

- Ramp meter improvements (Caltrans ITS/OPS Project List)

To lessen the impact to the eastbound US-50 weave between 65th Street and Howe Avenue, the project may pay a fair share toward the construction of:

- Ramp meter improvements (Caltrans ITS/OPS Project List)
- Widen 65th Street to 5 lanes from US-50 to Broadway (2035 SACOG MTP)

To lessen the impact to the eastbound US-50 mainline between Watt Avenue and Mather Field Road, and to the Bradshaw Road exit, and to the weave between Mather Field Road and Zinfandel Drive, the project may pay a fair share toward the construction of:

- Auxiliary lanes between Bradshaw Road and Mather Field Road (2035 SACOG MTP)

- An interchange modification of US-50 at Mather Field Road (2035 SACOG MTP)

To lessen the impact to the eastbound US-50 mainline between Zinfandel Drive and Hazel Avenue, and to the weave between Rancho Cordova Parkway and Hazel Avenue, the project may pay a fair share toward the construction of:

- Auxiliary lanes between Zinfandel Drive and Sunrise Boulevard (2035 SACOG MTP)
- Auxiliary lanes between Sunrise Boulevard and Hazel Avenue (2035 SACOG MTP)
- Widen Sunrise Boulevard to 6 lanes with special treatments, including intersection improvements at White Rock Road, Folsom Boulevard, Coloma Road, Gold Express Drive, and Gold Country Boulevard (2035 SACOG MTP)
- A new interchange at Rancho Cordova Parkway, including a 4-lane arterial from US-50 to White Rock Road (2035 SACOG MTP)
- Multi-modal corridor improvements and interchange improvements at Hazel Avenue (2035 SACOG MTP)

US-50 WESTBOUND ALTERNATIVE IMPROVEMENTS

To lessen the impact to the westbound US-50 weave between Hazel Avenue and Rancho Cordova Parkway, the project may pay a fair share toward the construction of:

- Multi-modal corridor improvements and interchange improvements at Hazel Avenue (2035 SACOG MTP)
- Auxiliary lanes between Hazel Avenue and Rancho Cordova Parkway (2035 SACOG MTP)

To lessen the impact to the westbound US-50 on-ramp at Sunrise Boulevard, the project may pay a fair share toward the construction of:

- Auxiliary lanes between Sunrise Boulevard and Zinfandel Drive (2035 SACOG MTP)
- A transition lane from the Sunrise Boulevard slip off-ramp to the Sunrise Boulevard slip on-ramp (2035 SACOG MTP)

To lessen the impact to the westbound US-50 mainline between Mather Field Road and Bradshaw Road, and to the SB Bradshaw Road slip on-ramp, the project may pay a fair share toward the construction of:

- Auxiliary lanes between Mather Field Road and Bradshaw Road (2035 SACOG MTP)
- An interchange modification of US-50 at Mather Field Road (2035 SACOG MTP)

To lessen the impact to the westbound US-50 mainline between Watt Avenue and SR-51/SR-99, and to the SB Howe Avenue slip on-ramp, the project may pay a fair share toward the construction of:

- Bus/HOV lanes from Watt Avenue to Downtown Sacramento (2035 SACOG MTP)
- Replacement of existing communication lines with fiber optics to improve performance between SR-51/SR-99 and Watt Avenue (2013 10-Year SHOPP Plan)
- Auxiliary lane between the NB Howe Avenue on-ramp and the SB Howe Avenue on-ramp (2035 SACOG MTP)
- Ramp meter improvements (Caltrans ITS/OPS Project List)

Table TC-45: CEQA Cumulative plus Jackson Corridor Projects Roadway Segment Mitigations

ID	Roadway	Segment		CEQA Cumulative + Jackson Corridor Projects					Mitigated CEQA Cumulative + Jackson Corridor Projects						
		From	To	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/ Capacity Ratio	Level of Service	Travel Lanes	Facility Type ¹	Volume / Capacity Ratio	Level of Service	LOS Impact with Mitigation?	Alternative Mitigation ²	Constraint if Full Mitigation Not Possible
2	Bradshaw Rd	US 50	Lincoln Village Dr	6	Arterial M	88,900	1.65	F	6	Arterial M	1.65	F	Yes		Maximum General Plan lanes
3	Bradshaw Rd	Lincoln Village Dr	Old Placerville Rd	6	Arterial M	81,450	1.51	F	6	Arterial M	1.51	F	Yes		Maximum General Plan lanes
4	Bradshaw Rd	Old Placerville Rd	Goethe Rd	6	Arterial M	81,000	1.50	F	6	Arterial M	1.50	F	Yes		Maximum General Plan lanes
5.1	Bradshaw Rd	Goethe Rd	Collector WJ-8	6	Arterial M	70,200	1.30	F	6	Arterial M	1.30	F	Yes		Maximum General Plan lanes
5.2	Bradshaw Rd	Collector WJ-8	Kiefer Blvd	6	Arterial M	66,370	1.23	F	6	Arterial M	1.23	F	Yes		Maximum General Plan lanes
6.1	Bradshaw Rd	Kiefer Blvd	Collector WJ-9	6	Arterial M	68,950	1.28	F	6	Arterial M	1.28	F	Yes		Maximum General Plan lanes
6.2	Bradshaw Rd	Collector WJ-9	Mayhew Rd	6	Arterial M	68,690	1.27	F	6	Arterial M	1.27	F	Yes		Maximum General Plan lanes
23	Elder Creek Rd	Power Inn Rd	Florin-Perkins Rd	2	Arterial M	28,710	1.60	F	4	Arterial M	0.80	C	No		
25	Elder Creek Rd	South Watt Ave	Hedge Ave	4	Arterial M	54,480	1.51	F	6	Arterial M	1.01	F	No		
26	Elder Creek Rd	Hedge Ave	Mayhew Rd	4	Arterial M	43,210	1.20	F	6	Arterial M	0.80	D	No		
28.1	Elder Creek Rd	Bradshaw Rd	Vineyard Rd	3	Arterial M	31,620	1.76	F	4	Arterial M	0.88	D	No		
31.1	Excelsior Rd	Jackson Rd	Collector WJ-6	3	Arterial M	41,580	2.31	F	6	Arterial M	0.77	C	No		
31.2	Excelsior Rd	Collector WJ-6	Elder Creek Rd	3	Arterial M	41,380	2.30	F	6	Arterial M	0.77	C	No		
37	Florin Rd	Power Inn Rd	Florin-Perkins Rd	4	Arterial M	44,830	1.25	F	4	Arterial M	1.25	F	Yes		Maximum General Plan lanes
41	Florin Rd	Mayhew Rd	Bradshaw Rd	4	Arterial M	43,130	1.20	F	6	Arterial M	0.80	C	No		
42.2	Florin Rd	Vineyard Rd	Excelsior Rd	3	Arterial M	28,090	1.56	F	4	Arterial M	0.78	C	No		

Table TC-88 continued															
ID	Roadway	Segment		CEQA Cumulative + Jackson Corridor Projects					Mitigated CEQA Cumulative Jackson Corridor Projects						
		From	To	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/ Capacity Ratio	Level of Service	Travel Lanes	Facility Type ¹	Volume / Capacity Ratio	Level of Service	LOS Impact with Mitigation?	Alternative Mitigation ²	Constraint if Full Mitigation Not Possible
43	Florin Rd	Excelsior Rd	Sunrise Blvd	2	Arterial M	18,580	1.03	F	4	Arterial M	0.52	A	No		
44	Folsom Blvd	Howe Ave	Jackson Rd	4	Arterial M	56,760	1.58	F	4	Arterial M	1.58	F	Yes		Maximum General Plan lanes
46	Fruitridge Rd	Power Inn Rd	Florin Perkins Rd	4	Arterial M	32,850	0.91	E	4	Arterial M	0.91	E	Yes		Maximum General Plan lanes
47	Fruitridge Rd	Florin Perkins Rd	South Watt Ave	2	Arterial M	29,480	1.64	F	4	Arterial M	0.82	D	No		
48	Fruitridge Rd	South Watt Ave	Hedge Ave	3	Arterial M	24,970	1.39	F	4	Arterial M	0.69	B	No		
51.2	Grant Line Rd	Chrysanthy Blvd	Kiefer Blvd	4	Arterial M	47,600	1.32	F	6	Arterial M	0.88	D	No		
52.1	Grant Line Rd	Kiefer Blvd	Rancho Cordova Pkwy	4	Arterial M	37,390	1.04	F	6	Arterial M	0.69	B	No		
56	Grant Line Rd	Sheldon Rd	Wilton Rd	4	Arterial M	46,230	1.28	F	6	Arterial M	0.86	D	No		
57	Grant Line Rd	Wilton Rd	Bond Rd	4	Arterial M	40,920	1.14	F	6	Arterial M	0.76	C	No		
58	Happy Ln	Old Placerville Rd	Kiefer Blvd	4	Arterial M	51,220	1.42	F	4	Arterial M	1.42	F	Yes	Happy Lane realigned to Rooter Road, widened to 6 lanes	County will not exceed 6 lanes
62	Howe Ave	US 50	Folsom Blvd	6	Arterial M	72,510	1.34	F	6	Arterial M	1.34	F	Yes		Maximum General Plan lanes
65	Jackson Rd	Folsom Blvd	Florin Perkins Rd	4	Arterial M	36,540	1.02	F	4	Arterial M	1.02	F	Yes		Maximum General Plan lanes
66.1	Jackson Rd	Florin Perkins Rd	14th Ave	4	Arterial M	45,880	1.27	F	4	Arterial M	1.27	F	Yes		Maximum General Plan lanes
66.2	Jackson Rd	14th Ave	Rock Creek Pkwy	4	Arterial M	64,740	1.80	F	4	Arterial M	1.80	F	Yes		Maximum General Plan lanes

Table TC-88 continued															
ID	Roadway	Segment		CEQA Cumulative + Jackson Corridor Projects					Mitigated CEQA Cumulative + Jackson Corridor Projects						
		From	To	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/Capacity Ratio	Level of Service	Travel Lanes	Facility Type ¹	Volume / Capacity Ratio	Level of Service	LOS Impact with Mitigation?	Alternative Mitigation ²	Constraint if Full Mitigation Not Possible
66.3	Jackson Rd	Rock Creek Pkwy	Aspen 1 Dwy	4	Arterial M	61,240	1.70	F	4	Arterial M	1.70	F	Yes		Maximum General Plan lanes
66.4	Jackson Rd	Aspen 1 Dwy	South Watt Ave	4	Arterial M	58,860	1.64	F	4	Arterial M	1.64	F	Yes		Maximum General Plan lanes
67	Jackson Rd	South Watt Ave	Hedge Ave	4	Arterial M	69,380	1.93	F	6	Arterial M	1.28	F	Yes		Maximum General Plan lanes
68.1	Jackson Rd	Hedge Ave	Collector WJ-3	4	Arterial M	62,190	1.73	F	6	Arterial M	1.15	F	Yes		Maximum General Plan lanes
68.2	Jackson Rd	Collector WJ-3	Mayhew Rd	4	Arterial M	62,890	1.75	F	6	Arterial M	1.16	F	Yes		Maximum General Plan lanes
69	Jackson Rd	Mayhew Rd	Bradshaw Rd	6	Arterial M	63,070	1.17	F	6	Arterial M	1.17	F	Yes		Maximum General Plan lanes
70.1	Jackson Rd	Bradshaw Rd	Collector WJ-4	6	Arterial M	60,480	1.12	F	6	Arterial M	1.12	F	Yes		Maximum General Plan lanes
70.2	Jackson Rd	Collector WJ-4	Happy Ln	6	Arterial M	57,380	1.06	F	6	Arterial M	1.06	F	Yes		Maximum General Plan lanes
71.1	Jackson Rd	Excelsior Rd	Collector JT-3	4	Arterial M	62,780	1.74	F	6	Arterial M	1.16	F	Yes		Maximum General Plan lanes
71.2	Jackson Rd	Collector JT-3	Tree View Ln	4	Arterial M	48,960	1.36	F	6	Arterial M	0.91	E	No		
71.3	Jackson Rd	Tree View Ln	Collector JT-4	4	Arterial M	42,560	1.18	F	6	Arterial M	0.79	C	No		
71.4	Jackson Rd	Collector JT-4	Eagles Nest Rd	4	Arterial M	39,060	1.09	F	6	Arterial M	0.72	C	No		
72.1	Jackson Rd	Eagles Nest Rd	Rockbridge Dr	4	Arterial M	39,660	1.10	F	6	Arterial M	0.73	C	No		

Table TC-88 continued															
ID	Roadway	Segment		CEQA Cumulative + Jackson Corridor Projects					Mitigated CEQA Cumulative + Jackson Corridor Projects						
		From	To	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/Capacity Ratio	Level of Service	Travel Lanes	Facility Type ¹	Volume / Capacity Ratio	Level of Service	LOS Impact with Mitigation?	Alternative Mitigation ²	Constraint if Full Mitigation Not Possible
72.2	Jackson Rd	Rockbridge Dr	Sunrise Blvd	4	Arterial M	39,710	1.10	F	6	Arterial M	0.74	C	No		
73	Jackson Rd	Sunrise Blvd	Grant Line Rd	4	Arterial M	46,130	1.28	F	6	Arterial M	0.85	D	No		
76	Kiefer Blvd	Mayhew Rd	Bradshaw Rd	4	Arterial M	47,090	1.31	F	4	Arterial M	1.31	F	Yes		Maximum General Plan lanes
77.1	Kiefer Blvd	Bradshaw Rd	Collector WJ-14	6	Arterial M	56,300	1.04	F	6	Arterial M	1.04	F	Yes		Maximum General Plan lanes
78.4	Kiefer Blvd	E Collector MS-1	Sunrise Blvd	3	Arterial M	37,390	2.08	F	4	Arterial M	1.04	F	Yes		Maximum General Plan lanes
79	Kiefer Blvd	Sunrise Blvd	Rancho Cordova Pkwy	4	Arterial M	33,880	0.94	E	4	Arterial M	0.94	E	Yes		Maximum General Plan lanes
83	Mather Blvd-Excelsior Rd	Douglas Rd	Kiefer Blvd	2	Res Collector F	15,750	1.97	F	2	Res Collector F	1.97	F	Yes	Construct Douglas Road extension to 4 lanes	Maximum General Plan lanes
89.1	Mayhew Rd	Jackson Rd	Rock Creek Pkwy	4	Arterial M	52,530	1.46	F	6	Arterial M	0.97	E	No		
89.2	Mayhew Rd	Rock Creek Pkwy	Fruitridge Rd	4	Arterial M	51,240	1.42	F	6	Arterial M	0.95	E	No		
92	Old Placerville Rd	Happy Ln	Routier Rd	2	Arterial M	53,710	2.98	F					No	Happy Lane realigned to Routier Road, widened to 6 lanes	
93	Old Placerville Rd	Routier Rd	Rockingham Dr	4	Arterial M	34,690	0.96	E	4	Arterial M	0.96	E	Yes		Maximum General Plan lanes
95	Rockingham Dr	Old Placerville Rd	Mather Field Rd	4	Arterial M	38,480	1.07	F	4	Arterial M	1.07	F	Yes		Maximum General Plan lanes

Table TC-88 continued															
ID	Roadway	Segment		CEQA Cumulative + Jackson Corridor Projects					Mitigated CEQA Cumulative + Jackson Corridor Projects						
		From	To	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/Capacity Ratio	Level of Service	Travel Lanes	Facility Type ¹	Volume / Capacity Ratio	Level of Service	LOS Impact with Mitigation?	Alternative Mitigation ²	Constraint if Full Mitigation Not Possible
96	South Watt Ave	Folsom Blvd	Kiefer Blvd	6	Arterial M	84,250	1.56	F	6	Arterial M	1.56	F	Yes		Maximum General Plan lanes
97	South Watt Ave	Kiefer Blvd	Jackson Rd	6	Arterial M	71,600	1.33	F	6	Arterial M	1.33	F	Yes		Maximum General Plan lanes
100	South Watt Ave	Elder Creek Rd	Florin Rd	6	Arterial M	59,790	1.11	F	6	Arterial M	1.11	F	Yes		Maximum General Plan lanes
104.3	Sunrise Blvd	Rio Del Oro Pkwy	Douglas Rd	6	Arterial M	65,850	1.22	F	6	Arterial M	1.22	F	Yes		Maximum General Plan lanes
105	Sunrise Blvd	Douglas Rd	Kiefer Blvd	5	Arterial M	37,890	1.05	F	6	Arterial M	0.70	C	No		
106	Sunrise Blvd	Kiefer Blvd	Jackson Rd	4	Arterial M	33,310	0.93	E	6	Arterial M	0.62	B	No		
110	Watt Ave	US 50	Folsom Blvd	6	Arterial H	108,540	1.81	F	6	Arterial H	1.81	F	Yes		Maximum General Plan lanes
117	White Rock Rd	Grant Line Rd	Prairie City Rd	4	Arterial M	55,730	1.55	F	6	Arterial M	1.03	F	No		
122	Zinfandel Dr	City Limit	Douglas Rd	2	Arterial M	33,990	1.89	F	4	Arterial M	0.94	E	No		
132	Kiefer Blvd	Americanos Blvd	Grant Line Rd	2	Arterial M	18,810	1.05	F	4	Arterial M	0.52	A	No		
135	Rancho Cordova Pkwy	White Rock Rd	International Dr	6	Arterial M	49,470	0.92	E	6	Arterial M	0.92	E	Yes		Maximum General Plan lanes
136	Rancho Cordova Pkwy	International Dr	Rio Del Oro Pkwy	6	Arterial M	60,440	1.12	F	6	Arterial M	1.12	F	Yes		Maximum General Plan lanes
200	Kiefer Blvd	Tree View Ln	Eagles Nest Rd	4	Arterial M	41,540	1.15	F	4	Arterial M	1.15	F	Yes		Maximum General Plan lanes

Table TC-88 continued															
ID	Roadway	Segment		CEQA Cumulative + Jackson Corridor Projects					Mitigated CEQA Cumulative + Jackson Corridor Projects						
		From	To	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/Capacity Ratio	Level of Service	Travel Lanes	Facility Type ¹	Volume / Capacity Ratio	Level of Service	LOS Impact with Mitigation?	Alternative Mitigation ²	Constraint if Full Mitigation Not Possible
302	Happy Ln	Kiefer Blvd	Mayhew Rd	4	Arterial M	43,730	1.21	F	4	Arterial M	1.21	F	Yes		Maximum General Plan lanes
305	Kiefer Blvd	Happy Ln	Collector WJ-15	6	Arterial M	66,970	1.24	F	6	Arterial M	1.24	F	Yes		Maximum General Plan lanes
306	Kiefer Blvd	Collector WJ-15	Douglas Rd	6	Arterial M	63,570	1.18	F	6	Arterial M	1.18	F	Yes		Maximum General Plan lanes
308	Mayhew Rd	Happy Ln	Bradshaw Rd	4	Arterial M	40,390	1.12	F	6	Arterial M	0.75	C	No		
309	Mayhew Rd	Bradshaw Rd	Jackson Rd	4	Arterial M	46,460	1.29	F	6	Arterial M	0.86	D	No		
311	Mayhew Rd	Collector WJ-13	Elder Creek Rd	3	Arterial M	28,570	1.59	F	4	Arterial M	0.79	C	No		
319	Vineyard Rd	Rock Creek Pkwy	Elder Creek Rd	4	Arterial M	39,590	1.10	F	4	Arterial M	1.10	F	Yes		Maximum General Plan lanes
405	Collector JT-3	Collector JT-5	Jackson Rd	2	Res Collector F	18,370	2.30	F	4	Arterial M	0.51	A	No		
410	Kiefer Blvd	Excelsior Rd	Tree View Ln	4	Arterial M	38,470	1.07	F	4	Arterial M	1.07	F	Yes		Maximum General Plan lanes
602	Collector MS-2	Eagles Nest Rd	Collector MS-5	2	Res Collector F	9,980	1.25	F	2	Res Collector NF	1.00	E	No		

Note: Gray shading represents changes in travel lanes or facility type that the project is responsible to provide. Bold values do not meet LOS policy. Red values with light gray shading indicate project impacts.

¹ The following classifications are used to determine daily roadway capacity:

- Arterial L - Arterial, Low Access Control
- Arterial M - Arterial, Moderate Access Control
- Arterial H - Arterial, High Access Control
- Rural Hwy - Rural 2-lane Highway
- Rural S - Rural 2-lane Road, 24'-36' of pavement, Paved Shoulders
- Rural NS - Rural 2-lane Road, 24'-36' of pavement, No Shoulders
- Res Collector F - Residential Collector with Frontage
- Res Collector NF - Residential Collector with No Frontage

² Alternative mitigations represent proposed mitigations beyond the General Plan, as proposed by the County of Sacramento.

Table TC-46: CEQA Cumulative plus Jackson Corridor Projects Impacted Intersections and Mitigations

Intersection		AM Peak Hour							PM Peak Hour						
		CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact	Mitigated CEQA Cumulative Plus Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact	Mitigated CEQA Cumulative Plus Jackson Corridor Projects		
		Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)
3	Power Inn Road/Howe Avenue & Folsom Blvd	Signal	F	103.3	Yes				Signal	F	91.6	Yes			
4	Power Inn Road & 14th Avenue	Signal	F	227.8	Yes	Signal	F	174.1	Signal	F	149.2	Yes	Signal	F	117.7
5	Power Inn Road & Fruitridge Road	Signal	F	118.6	No				Signal	E	60.8	Yes			
12	Watt Avenue & Folsom Blvd.	Signal	F	196.0	Yes	Signal	D	53.3	Signal	F	217.7	Yes	Signal	D	54.2
14	S. Watt Avenue & Kiefer Blvd.	Signal	F	118.0	Yes	Signal	SB Ramps B NB Ramps B	15.8 19.6	Signal	F	90.7	Yes	Signal	SB Ramps B NB Ramps C	18.0 32.0
16	S. Watt Avenue & Jackson Road	Signal	F	246.9	Yes	Signal	E	79.6	Signal	F	207.8	Yes	Signal	E	78.7
17	S. Watt Avenue & Fruitridge Road	Signal	F	159.8	Yes	Signal	F	116.1	Signal	F	174.2	Yes	Signal	F	108.8
20	Elk Grove Florin Road/S. Watt Ave. & Florin Road	Signal	F	302.3	Yes	Signal	F	104.0	Signal	F	204.3	Yes	Signal	F	84.3
23	Hedge Avenue & Jackson Road	Signal	F	214.4	Yes	Signal	D	38.5	Signal	F	121.0	Yes	Signal	C	23.6
28	Mayhew Road & Kiefer Boulevard	Signal	F	133.5	Yes	Signal	E	74.4	Signal	F	84.1	No			
29	Mayhew Road & Jackson Road	Signal	F	145.8	Yes	Signal	E	78.9	Signal	F	129.4	Yes	Signal	E	72.0
31	Mayhew Road & Elder Creek Road	Signal	F	297.4	Yes	Signal	E	79.0	Signal	F	211.5	Yes	Signal	E	77.1
32	Woodring Drive & Zinfandel Drive	Two-way stop	E	40.8	Yes	Signal	B	15.0	Two-way stop	C	20.8	Yes	Signal	C	27.2
	<i>Eastbound</i>		F	>300						F	>300				
	<i>Northbound Left Turn</i>		B	12.6						B	14.8				

Table TC-89 continued															
Intersection		AM Peak Hour						PM Peak Hour							
		CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact	Mitigated CEQA Cumulative Plus Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact	Mitigated CEQA Cumulative Plus Jackson Corridor Projects		
		Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)
35	Bradshaw Road & US 50 EB Ramps	Signal	E	68.7	Yes				Signal	D	40.2	No			
36	Bradshaw Road & Old Placerville Road	Signal	F	89.9	Yes				Signal	F	88.7	Yes			
37	Bradshaw Road & Kiefer Boulevard	Signal	F	180.8	Yes	Signal	F	159.4	Signal	F	197.9	Yes	Signal	F	170.7
39	Bradshaw Road & Elder Creek Road	Signal	F	172.5	Yes	Signal	F	94.9	Signal	F	155.7	Yes	Signal	D	54.9
40	Bradshaw Road & Florin Road	Signal	F	128.0	No				Signal	F	95.5	Yes	Signal	E	60.1
42	Happy Lane & Old Placerville Road	Two-way stop	F	181.0	Yes	Signal	E	67.7	Two-way stop	F	192.1	Yes	Signal	D	47.4
	Northbound Left Turn		F	>300						F	>300				
	Northbound Right Turn		F	>300						F	>300				
	Westbound Left Turn		F	>300						F	>300				
43	Happy Lane & Kiefer Boulevard	Signal	F	125.0	Yes	Signal	F	83.3	Signal	F	98.2	Yes	Signal	E	76.9
44	Excelsior Road & Kiefer Boulevard	Signal	F	148.2	Yes				Signal	F	83.6	Yes			
45	Excelsior Road & Jackson Road	Signal	F	357.8	Yes	Signal	E	58.4	Signal	F	274.1	Yes	Signal	E	76.1
46	Excelsior Road & Elder Creek Road	Signal	F	126.6	Yes	Signal	B	14.9	Signal	F	120.1	Yes	Signal	C	24.0
47	Excelsior Road & Florin Road	Signal	F	212.0	Yes	Signal	E	71.3	Signal	F	169.6	Yes	Signal	E	55.3
51	Mather Field Road & Rockingham Drive	Signal	F	271.4	Yes				Signal	F	144.7	Yes			
58	Zinfandel Drive & Douglas Road	Signal	F	273.9	Yes	Signal	E	65.8	Signal	F	273.2	Yes	Signal	E	77.1

Table TC-89 continued															
Intersection		AM Peak Hour						PM Peak Hour							
		CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact	Mitigated CEQA Cumulative Plus Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact	Mitigated CEQA Cumulative Plus Jackson Corridor Projects		
		Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)
59	Eagles Nest Road/Zinfandel Drive & Kiefer Boulevard	Signal	F	86.3	Yes	Signal	E	63.9	Signal	E	61.2	No			
61	Eagles Nest Road & Florin Road	Two-way stop	F	>300	Yes	Signal	E	76.1	Two-way stop	F	>300	Yes	Signal	E	62.4
	<i>Northbound</i>		F	>300						F	>300				
	<i>Southbound</i>		F	>300						F	>300				
	<i>Eastbound Left Turn</i>		B	11.6						A	0.0				
	<i>Westbound Left Turn</i>		A	0.0						A	0.0				
67	Sunrise Boulevard & Douglas Road	Signal	F	230.7	Yes	Signal	F	230.5	Signal	F	115.4	Yes	Signal	F	114.7
69	Sunrise Boulevard & Kiefer Boulevard	Signal	F	443.8	Yes	Signal	F	88.7	Signal	F	167.2	Yes	Signal	E	59.3
70	Sunrise Boulevard & Jackson Road	Signal	F	109.7	Yes	Signal	D	50.2	Signal	F	89.0	Yes	Signal	D	54.8
72	Sheldon Lake Drive/Sunrise Boulevard & Grant Line Road	Signal	F	188.1	Yes	Signal	E	77.4	Signal	E	79.3	No			
76	Prairie City Road & White Rock Road	Signal	F	96.4	Yes	Signal	D	51.5	Signal	F	137.2	No			
80	Grant Line Road & Jackson Road	Signal	F	140.0	Yes	Signal	D	44.8	Signal	F	83.0	Yes	Signal	D	46.5
86	Power Inn Road & Florin Rd	Signal	F	118.5	Yes	Signal	F	99.0	Signal	E	79.0	No			
91	Grant Line Rd & Eagles Nest Rd/Sloughhouse Rd	Signal	F	358.4	No				Signal	F	343.5	Yes	Signal	F	280.3
93	Grant Line Rd & Dwy/Wilton Rd	Signal	F	89.1	No				Signal	F	103.6	Yes	Signal	E	55.8
95	Florin Perkins Road & 14th Avenue	Signal	E	67.6	Yes				Signal	D	54.3	No			
96	Jackson Road & 14th Avenue	Signal	F	166.5	Yes				Signal	F	115.4	Yes			

Table TC-89 continued															
Intersection		AM Peak Hour							PM Peak Hour						
		CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact	Mitigated CEQA Cumulative Plus Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact	Mitigated CEQA Cumulative Plus Jackson Corridor Projects		
		Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)
97	Rock Creek Pkwy & Jackson Road	Signal	F	201.5	Yes				Signal	F	188.2	Yes			
105	Rancho Cordova Pkwy & Kiefer Blvd	Signal	E	71.1	Yes	Signal	D	39.3	Signal	D	52.4	No			
306	Excelsior Road & Collector WJ-6	Signal	F	109.6	Yes	Signal	C	25.1	Signal	D	44.9	No			
308	Hedge Avenue & Rock Creek Pkwy WB	Roundabout	F	77.3	Yes	Roundabout	B	10.0	Roundabout	C	17.0	No			
310	Mayhew Road & Rock Creek Pkwy WB	Roundabout	F	341.2	Yes	Signal	E	66.4	Roundabout	F	348.9	Yes	Signal	E 67.9	
311	Mayhew Road & Rock Creek Pkwy EB	Roundabout	F	254.9	Yes	Signal	E	66.4	Roundabout	F	204.0	Yes	Signal	E 67.9	
314	Vineyard Road/Happy Lane & Rock Creek Pkwy	Signal	E	56.0	No				Signal	F	88.7	Yes	Signal	E 78.2	
318	Bradshaw Road & Mayhew Road	Signal	F	185.3	Yes	Signal	F	100.8	Signal	F	132.9	Yes	Signal	E 58.5	
325	Douglas Road & Kiefer Boulevard	Signal	F	223.6	Yes	Signal	F	133.8	Signal	F	141.7	Yes	Signal	E 59.3	
326	Happy Lane & Mayhew Road	Roundabout	F	277.4	Yes	Signal	D	46.8	Roundabout	F	204.6	Yes	Signal	D 44.3	
328	Vineyard Road & Florin Road	Signal	F	104.2	Yes	Signal	E	59.6	Signal	E	55.9	No			
400	Collector JT-3 & Jackson Road	Signal	F	88.1	Yes	Signal	D	49.9	Signal	D	49.8	No			
605	Collector MS-5 & Collector MS-4	All-way stop	F	55.5	Yes	Signal	E	63.8	All-way stop	E	43.1	No			

Note: Gray shading represents changes in traffic control for which the project is responsible to pay a fair share. **Bold** values do not meet LOS policy. **Red** values with light gray shading indicate project impacts.

Table TC-47: CEQA Cumulative plus Jackson Corridor Projects Intersection Impacts and Mitigations

Intersection	Traffic Control		CEQA Cumulative Plus FOUR PROJECTS Lane Geometrics				Mitigated CEQA Cumulative Plus FOUR PROJECTS Lane Geometrics				Impact Caused by NewBridge Alone?	LOS Impact with Mitigation?	High Capacity Intersection? ¹	Alternative Mitigation ²	Constraint if Full Mitigation Not Possible
	CEQA Cumulative Plus FOUR PROJECTS	Mitigated CEQA Cumulative Plus FOUR PROJECTS	NB Approach	SB Approach	EB Approach	WB Approach	NB Approach	SB Approach	EB Approach	WB Approach					
3 Power Inn Road/Howe Avenue & Folsom Blvd	Signal	Signal	↖↑↑↑↗	↘↓↓↓↙	↖↑↗	↖↑↑↗	↖↑↑↑↗	↘↓↓↓↙	↖↑↗	↖↑↑↗	No	Yes	No		Existing development
4 Power Inn Road & 14th Avenue	Signal	Signal	↖↑↑↗	↘↓↓↓↙	↖↑↗	↖↑↗	↖↑↑↗	↘↓↓↓↙	↖↑↗	↖↑↑↗	No	Yes	No		Existing development
5 Power Inn Road & Fruitridge Road	Signal	Signal	↖↑↑↗	↘↓↓↓↙	↖↑↗	↖↑↑↗	↖↑↑↗	↘↓↓↓↙	↖↑↗	↖↑↑↗	No	Yes	No		Existing development
12 Watt Avenue & Folsom Blvd.	Signal	Signal	↖↑↑↑↗	↘↓↓↓↙	↖↑↑↗	↖↑↑↗	↖↗	↘↙	↖↑↑↗	↖↑↑↗	No	No	Yes	Grade separated NBT and SBT	
14 S. Watt Avenue & Kiefer Blvd.	Signal	Signal	↖↑↑↑↗	↘↓↓↓↙	↖↑↑↗	↖↑↑↗		↘↙	↑↑↗	↖↑↑	No	No	Yes	Tight Diamond Interchange (SB Watt Ramps/Kiefer intersection shown)	
	Signal	Signal	↖↑↑↑↗	↘↓↓↓↙	↖↑↑↗	↖↑↑↗	↖↗		↑↑↗	↑↑↗				Tight Diamond Interchange (NB Watt Ramps/Kiefer intersection shown)	
16 S. Watt Avenue & Jackson Road	Signal	Signal	↖↑↑↑↗	↘↓↓↓↙	↖↑↑↗	↖↑↑↗	↖↑↑↑↗	↘↓↓↓↙ *Free left	↖↑↑↑↗	↖↑↑↑↗ *Free right	No	No	Yes	Triple NBL, Free WBR and SBL via tunnel	
17 S. Watt Avenue & Fruitridge Road	Signal	Signal	↖↑↑↑↗	↘↓↓↓↙	↖↑↗	↖↑↗	↖↑↑↑↗	↘↓↓↓↙	↖↑↑↑↗	↖↑↗	No	Yes	No	Dual SBR	Existing development
20 Elk Grove Florin Road/S. Watt Ave. & Florin Road	Signal	Signal	↖↑↑↑↗	↘↓↓↓↙	↖↑↑↗	↖↑↑↗	↖↑↑↑↗	↘↓↓↓↙	↖↑↑↑↗	↖↑↑↗	No	No	No	Triple EBL and dual SBR	
23 Hedge Avenue & Jackson Road	Signal	Signal	↖↗	↘↙	↖↑↗	↖↑↗	↖↗	↘↙	↖↑↑↑↗	↖↑↑↗	No	No	No	Dual NBL and exclusive EBR	
28 Mayhew Road & Kiefer Boulevard	Signal	Signal	↖↑↗	↘↙	↖↑↗	↖↑↗	↖↑↗	↘↙	↖↑↗	↖↑↑↗	No	No	No	Dual SBL	
29 Mayhew Road & Jackson Road	Signal	Signal	↖↑↑↑↗	↘↓↓↓↙	↖↑↑↑↗	↖↑↑↑↗	↖↑↑↑↗	↘↓↓↓↙	↖↑↑↑↗	↖↑↑↑↗	No	No	No		
31 Mayhew Road & Elder Creek Road	Signal	Signal	↖↗	↘↙	↖↑↗	↖↑↗	↖↗	↘↙	↖↑↑↑↗	↖↑↑↑↗	No	No	No	Dual SBR	
32 Zinfandel Drive & Woodring Drive	Two-way stop	Signal	↖↑↑	↘↓	↖↗		↖↑↑	↘↓	↖↗		No	No	No		
35 Bradshaw Road & US 50 EB Ramps	Signal	Signal	↑↑↑↗	↘↓↓↓	↖↗↗		↑↑↑↗	↘↓↓↓	↖↗↗		No	Yes	No		Maximum General Plan lanes
36 Bradshaw Road & Old Placerville Road	Signal	Signal	↖↑↑↑↗	↘↓↓↓↙	↖↗	↖↑↑↗	↖↑↑↑↗	↘↓↓↓↙	↖↗	↖↑↑↗	No	Yes	No		Existing development

Intersection	Traffic Control		CEQA Cumulative Plus FOUR PROJECTS Lane Geometrics				Mitigated CEQA Cumulative Plus FOUR PROJECTS Lane Geometrics				Impact Caused by New Bridge Alone?	LOS Impact with Mitigation?	High Capacity Intersection? ¹	Alternative Mitigation ²	Constraint if Full Mitigation Not Possible
	CEQA Cumulative Plus FOUR PROJECTS	Mitigated CEQA Cumulative Plus FOUR PROJECTS	NB Approach	SB Approach	EB Approach	WB Approach	NB Approach	SB Approach	EB Approach	WB Approach					
37 Bradshaw Road & Kiefer Boulevard	Signal	Signal	↖↗↑↑↑↘	↘↓↓↓↓↖	↖↗↑↑↘	↖↗↑↑↘	↖↗↑↑↑↘	↘↓↓↓↓↖	↖↗↑↑↑↘	↖↗↑↑↑↘	No	Yes	No	Carry 3 EBT and 3 WBT lanes through intersection	Maximum General Plan lanes
39 Bradshaw Road & Elder Creek Road	Signal	Signal	↖↑↑↘	↘↓↓↓↓↖	↖↗↘	↖↗↑↑↘	↖↗↑↑↑↘	↘↓↓↓↓↖	↖↗↑↑↘	↖↗↑↑↘	No	No	No		
40 Bradshaw Road & Florin Road	Signal	Signal	↖↗↑↑↑↘	↘↓↓↓↓↖	↖↗↑↘	↖↗↑↘	↖↗↑↑↑↘	↘↓↓↓↓↖	↖↗↑↑↘	↖↗↑↑↑↘	No	No	No		
42 Happy Lane & Old Placerville Road	Two-way stop	Signal	↖↘		↑↘	↖↑	↖↗↑↑↘↘	↘↓↓↖	↖↗↑↑↑↘	↖↗↗↑↑↑↘	No	Yes	No	Realign Happy Lane to Rooter Road (6 lanes), triple WBL and dual NBR (trap)	Maximum General Plan lanes
43 Happy Lane & Kiefer Boulevard	Signal	Signal	↖↗↑↑↘	↘↓↓↖	↖↗↑↑↑↘	↖↗↑↑↑↘	↖↗↑↑↑↘	↘↓↓↓↓↖	↖↗↑↑↑↘	↖↗↑↑↑↘	No	Yes	No	3 NBT and 3 SBT	Maximum General Plan lanes
44 Excelsior Road & Kiefer Boulevard	Signal	Signal	↖↑↘	↘↓↓↖	↖↑↘	↖↑↘	↖↑↘	↘↓↓↖	↖↑↘	↖↑↘	No	Yes	No		Maximum General Plan lanes
45 Excelsior Road & Jackson Road	Signal	Signal	↖↘	↘↓↓↓↓↖	↖↗↑↑↑↘	↖↗↑↑↑↘	↖↗↑↑↑↘	↘↓↓↓↓↖	↖↗↑↑↑↘	↖↗↑↑↑↘	No	No	No	NBR overlap	
46 Excelsior Road & Elder Creek Road	Signal	Signal	↖↑	↘↓↓	↖↘		↖↑↑	↘↓↓	↖↗↘		No	No	No	Dual SBR	
47 Excelsior Road & Florin Road	Signal	Signal	↖↘	↘↖	↖↘	↖↘	↖↑↘	↘↖	↖↑↘	↖↑↘	No	No	No		
51 Mather Field Road & Rockingham Drive	Signal	Signal	↖↑↑↘	↘↓↓↓↓↖	↖↗↘	↖↘	↖↑↑↘	↘↓↓↓↓↖	↖↗↘	↖↘	No	Yes	No		Existing development
58 Zinfandel Drive & Douglas Road	Signal	Signal	↖↘	↘↓↓↖	↖↑↘	↖↗↑↑↘	↖↗↑↑↘	↘↓↓↖	↖↗↑↑↑↘	↖↗↑↑↑↘	No	No	No		
59 Eagles Nest Road/Zinfandel Drive & Kiefer Boulevard	Signal	Signal	↖↗↑↑↘	↘↓↓↓↓↖	↖↗↑↑↘	↖↗↑↑↘	↖↗↑↑↘	↘↓↓↓↓↖	↖↗↑↑↘	↖↗↑↑↑↘	No	No	No	3 WBT	
61 Eagles Nest Road & Florin Road	Two-way stop	Signal	↘	↖	↘	↘	↖↘	↘↖	↖↘	↖↘	Yes	No	No		
67 Sunrise Boulevard & Douglas Road	Signal	Signal	↖↗↑↑↑↘	↘↓↓↓↓↖	↖↗↑↑↘	↖↗↑↑↑↘	↖↗↑↑↑↘	↘↓↓↓↓↖	↖↗↑↑↑↘	↖↗↑↑↑↘	Yes	Yes	No		Maximum General Plan lanes
69 Sunrise Boulevard & Kiefer Boulevard	Signal	Signal	↖↑↑↘	↘↓↓↖	↖↗↑↑↘	↖↘	↖↗↑↑↑↘	↘↓↓↓↓↖	↖↗↑↑↘	↖↗↑↑↘	Yes	No	No		
70 Sunrise Boulevard & Jackson Road	Signal	Signal	↖↗↑↑↘	↘↓↓↓↓↖	↖↗↑↑↘	↖↗↑↑↘	↖↗↑↑↑↘	↘↓↓↓↓↖	↖↗↑↑↑↘	↖↗↑↑↑↘	No	No	No		

Intersection	Traffic Control		CEQA Cumulative Plus FOUR PROJECTS Lane Geometrics				Mitigated CEQA Cumulative Plus FOUR PROJECTS Lane Geometrics				Impact Caused by New Bridge Alone?	LOS Impact with Mitigation?	High Capacity Intersection? ¹	Alternative Mitigation ²	Constraint if Full Mitigation Not Possible
	CEQA Cumulative Plus FOUR PROJECTS	Mitigated CEQA Cumulative Plus FOUR PROJECTS	NB Approach	SB Approach	EB Approach	WB Approach	NB Approach	SB Approach	EB Approach	WB Approach					
72 Sheldon Lake Drive/Sunrise Boulevard & Grant Line Road	Signal	Signal	↘	↗	↘↗↘↗	↘↗	↘	↗	↘↗↘↗	↘↗	No	No	No		
76 Prairie City Road & White Rock Road	Signal	Signal		↗	↘↗↘↗	↗↘		↗↘	↘↗↘↗	↗↘↘↗	No	No	No		
80 Grant Line Road & Jackson Road	Signal	Signal	↘↗↘↗	↗↘↗↘	↘↗↘↗	↘↗↘↗	↘↗↘↗↘↗	↗↘↗↘↗↘↗	↘↗↘↗↘↗	↘↗↘↗↘↗	No	No	No	Triple EBL and dual SBR	
86 Power Inn Road & Florin Rd	Signal	Signal	↘↗	↗↘↗↘	↘↗↘↗	↘↗↘↗	↘↗↘↗	↗↘↗↘	↘↗↘↗	↘↗↘↗	No	No	No		
91 Grant Line Rd & Eagles Nest Rd/Sloughhouse Rd	Signal	Signal	↘↗↘↗	↗↘↗↘	↘	↘↗	↘↗↘↗	↗↘↗↘	↘↗↘↗	↘↗↘↗	Yes	No	No		
93 Grant Line Rd & Dwy/Wilton Rd	Signal	Signal	↘↗↘↗	↗↘↗↘	↘↗	↘↗	↘↗↘↗	↗↘↗↘	↘↗↘↗	↘↗↘↗	Yes	No	No		
95 Florin Perkins Road & 14th Avenue	Signal	Signal	↘↗↘↗	↗↘↗↘	↘↗↘↗	↘↗↘↗	↘↗↘↗	↗↘↗↘	↘↗↘↗	↘↗↘↗	No	Yes	No		Maximum General Plan lanes
96 Jackson Road & 14th Avenue	Signal	Signal		↗↘	↘↗↘↗	↗↘↘↗		↗↘↘↗	↘↗↘↗	↗↘↘↗	No	Yes	No		Maximum General Plan lanes
97 Rock Creek Pkwy & Jackson Road	Signal	Signal	↘↗↘↗	↗↘↗↘	↘↗↘↗	↘↗↘↗	↘↗↘↗	↗↘↗↘	↘↗↘↗	↘↗↘↗	Yes	Yes	No		Maximum General Plan lanes
105 Rancho Cordova Pkwy & Kiefer Blvd	Signal	Signal	↘↗↘↗	↗↘↗↘	↘↗↘↗	↘↗↘↗	↘↗↘↗	↗↘↗↘	↘↗↘↗	↘↗↘↗	No	No	No		
306 Excelsior Road & Collector WJ-6	Signal	Signal	↘↗	↗↘	↘↗↘↗		↘↗↘↗	↗↘↗↘	↘↗↘↗		No	No	No		
308 Hedge Avenue & Rock Creek Pkwy WB	Roundabout	Roundabout	↘	↗		↘	↘	↗		↘↗	No	No	No		
310 Mayhew Road & Rock Creek Pkwy WB	Roundabout	Signal	↘↗	↗↘		↘	↘↗↘↗	↗↘↗↘	↘↗↘↗	↘↗↘↗	No	No	No		
311 Mayhew Road & Rock Creek Pkwy EB	Roundabout	Signal	↗↘	↘↗	↘↗		↘↗↘↗	↗↘↗↘	↘↗↘↗	↘↗↘↗	No	No	No		
314 Vineyard Road/Happy Lane & Rock Creek Pkwy	Signal	Signal	↘↗↘↗	↗↘↗↘	↘↗↘↗	↘↗↘↗	↘↗↘↗	↗↘↗↘	↘↗↘↗	↘↗↘↗	No	No	No		
318 Bradshaw Road & Mayhew Road	Signal	Signal	↘↗↘↗↘↗	↗↘↗↘↗↘	↘↗↘↗↘↗	↘↗↘↗↘↗	↘↗↘↗↘↗	↗↘↗↘↗↘	↘↗↘↗↘↗	↘↗↘↗↘↗	No	Yes	No	HCI, Triple EBL and dual SBR	Maximum General Plan lanes

Intersection	Traffic Control		CEQA Cumulative Plus FOUR PROJECTS Lane Geometrics				Mitigated CEQA Cumulative Plus FOUR PROJECTS Lane Geometrics				Impact Caused by NewBridge Alone?	LOS Impact with Mitigation?	High Capacity Intersection? ¹	Alternative Mitigation ²	Constraint if Full Mitigation Not Possible
	CEQA Cumulative Plus FOUR PROJECTS	Mitigated CEQA Cumulative Plus FOUR PROJECTS	NB Approach	SB Approach	EB Approach	WB Approach	NB Approach	SB Approach	EB Approach	WB Approach					
325 Douglas Road/Shopping Center Dwy & Kiefer Boulevard	Signal	Signal	↖ ↗ ↘	↘ ↙ ↗	↖ ↗ ↘ ↙	↖ ↗ ↘ ↙	↖ ↗ ↘ ↙	↘ ↙ ↗ ↘	↖ ↗ ↘ ↙ ↘	↖ ↗ ↘ ↙ ↘	No	Yes	No	3 WBT	Maximum General Plan lanes
326 Happy Lane & Mayhew Road	Roundabout	Signal	↖ ↗	↘ ↙	↖ ↗		↖ ↗ ↘	↘ ↙ ↗	↖ ↗ ↘		No	No	No		
328 Vineyard Road & Florin Road	Signal	Signal	↖ ↗ ↘ ↙	↘ ↙ ↗ ↘	↖ ↗ ↘ ↙	↖ ↗ ↘ ↙	↖ ↗ ↘ ↙	↘ ↙ ↗ ↘	↖ ↗ ↘ ↙	↖ ↗ ↘ ↙	No	No	No		
400 Collector JT-3 & Jackson Road	Signal	Signal		↘ ↙	↖ ↗ ↘	↖ ↗ ↘		↘ ↙ ↗	↖ ↗ ↘ ↙	↖ ↗ ↘ ↙	No	No	No		
605 Collector MS-5 & Collector MS-4	All-way stop	Signal	↖ ↗	↘ ↙	↖ ↗	↖ ↗	↖ ↗	↘ ↙	↖ ↗	↖ ↗	No	No	No		

¹ High capacity intersections are defined in the Sacramento County General Plan and may include grade separations, additional turn lanes, and/or other features as deemed appropriate by the County.

² Alternative mitigations represent proposed mitigations beyond the General Plan, excluding high capacity intersections, as proposed by the County of Sacramento.

PEDESTRIAN AND BICYCLE FACILITY MITIGATION

The Jackson Corridor Projects applicants shall coordinate with Sacramento County to identify the necessary on- and off-site pedestrian and bicycle facilities to serve the proposed development. These facilities shall be incorporated into the Jackson Corridor Projects and could include sidewalks, stop signs, standard pedestrian and school crossing warning signs, lane striping to provide a bicycle lane, bicycle parking, signs to identify pedestrian and bicycle paths, raised crosswalks, pedestrian signal heads, and all appropriate traffic calming measures as defined in the County's Neighborhood Traffic Management Program (NTMP). Sidewalks would be required as part of the frontage improvements along all new roadway construction in the Jackson Corridor Projects vicinity in conformance with County design standards. Circulation and access to all proposed public spaces shall include sidewalks that meet Americans with Disabilities Act standards.

TRANSIT SYSTEM MITIGATION

The applicants of the Jackson Corridor Projects shall coordinate with Regional Transit (or other transit operators) to provide the additional transit facilities and services assumed in transportation analysis, or a cost-effective equivalent level of transit facilities and services.

The assumed transit routes and service frequency would be required at full development of the Jackson Corridor Projects. The full level of transit service would not achieve adequate transit ridership during the early stages of development. Thus the ultimate transit service, like the roadway system serving the Jackson Corridor Projects, must be phased with development of the Jackson Corridor Projects.

FUNCTIONALITY MITIGATION

Table TC-91 summarizes the results of the functionality analysis for the study area rural roadway segments with mitigation.

MITIGATION SUMMARY

Table TC-91 through Table TC-97 summarize the roadway segments, intersections, and freeway facilities that would exhibit significant LOS impacts, along with the mitigation success for these impacts.

Table TC-48: CEQA Cumulative plus Jackson Corridor Projects Functionality Mitigations

ID	Roadway	Segment		CEQA Cumulative + Jackson Corridor Projects				Mitigation	Impact after Mitigation?
		From	To	Travel Lanes	Facility Type ¹	Forecasted Volume	Functionality Impact? ²		
15	Douglas Rd	Mather Blvd	Zinfandel Dr	4	Arterial M	35,330	Yes ³	Widen to County standards ⁵	No
16	Douglas Rd	Zinfandel Dr	Sunrise Blvd	6	Arterial M	48,540	Yes ³	Widen to County standards ⁵	No
19	Eagles Nest Rd	Kiefer Blvd	Jackson Rd	4	Arterial M	15,420	Yes ³	Widen to County standards ⁵	No
20	Eagles Nest Rd	Jackson Rd	Florin Rd	2	Arterial M	9,790	Yes	Widen to County standards ⁵	No
25	Elder Creek Rd	South Watt Ave	Hedge Ave	4	Arterial M	54,480	Yes ³	Widen to County standards ⁵	No
26	Elder Creek Rd	Hedge Ave	Mayhew Rd	4	Arterial M	43,210	Yes ³	Widen to County standards ⁵	No
27	Elder Creek Rd	Mayhew Rd	Bradshaw Rd	4	Arterial M	25,620	Yes ³	Widen to County standards ⁵	No
28	Elder Creek Rd	Bradshaw Rd	Excelsior Rd	3	Arterial M	31,620	Yes ³	Widen to County standards ⁵	No
30	Excelsior Rd	Kiefer Blvd	Jackson Rd	2	Arterial M	30,400	Yes	Widen to County standards ⁵	No
31	Excelsior Rd	Jackson Rd	Elder Creek Rd	3	Arterial M	41,380	Yes ³	Widen to County standards ⁵	No
32	Excelsior Rd	Elder Creek Rd	Florin Rd	3	Arterial M	12,900	Yes ³	Widen to County standards ⁵	No
33	Excelsior Rd	Florin Rd	Gerber Rd	2	Arterial M	14,300	Yes	Widen to County standards ⁵	No
34	Excelsior Rd	Gerber Rd	Calvine Rd	2	Arterial M	9,110	Yes	Widen to County standards ⁵	No
39	Florin Rd	South Watt Ave	Hedge Ave	4	Arterial M	13,280	Yes ³	Widen to County standards ⁵	No
40	Florin Rd	Hedge Ave	Mayhew Rd	4	Arterial M	14,700	Yes ³	Widen to County standards ⁵	No
41	Florin Rd	Mayhew Rd	Bradshaw Rd	4	Arterial M	43,130	Yes ³	Widen to County standards ⁵	No
42	Florin Rd	Bradshaw Rd	Excelsior Rd	4	Arterial M	29,540	Yes ³	Widen to County standards ⁵	No
43	Florin Rd	Excelsior Rd	Sunrise Blvd	2	Arterial M	18,580	Yes	Widen to County standards ⁵	No
48	Fruitridge Rd	South Watt Ave	Hedge Ave	3	Arterial M	24,970	Yes ³	Widen to County standards ⁵	No
49	Fruitridge Rd	Hedge Ave	Mayhew Rd	4	Arterial M	27,150	Yes ³	Widen to County standards ⁵	No
50	Grant Line Rd	White Rock Rd	Douglas Rd	4	Arterial M	40,500	Yes ³	Widen to County standards ⁵	No
58	Happy Ln	Old Placerville Rd	Kiefer Blvd	4	Arterial M	51,220	Yes ³	Widen to County standards ⁵	No
59	Hedge Ave	Jackson Rd	Fruitridge Rd	2	Arterial M	11,810	Yes	Widen to County standards ⁵	No
60	Hedge Ave	Fruitridge Rd	Elder Creek Rd	2	Arterial M	9,680	Yes	Widen to County standards ⁵	No
61	Hedge Ave	Elder Creek Rd	Florin Rd	2	Arterial M	22,180	Yes	Widen to County standards ⁵	No
70	Jackson Rd	Bradshaw Rd	Excelsior Rd	6	Arterial M	60,480	Yes ³	Widen to County standards ⁵	No

Table TC-91 continued									
ID	Roadway	Segment		CEQA Cumulative + Jackson Corridor Projects				Mitigation	Impact after Mitigation?
		From	To	Travel Lanes	Facility Type ¹	Forecasted Volume	Functionality Impact? ²		
71	Jackson Rd	Excelsior Rd	Eagles Nest Rd	4	Arterial M	62,780	Yes ³	Widen to County standards ⁵	No
77	Kiefer Blvd	Bradshaw Rd	Happy Ln	6	Arterial M	56,300	Yes ³	Widen to County standards ⁵	No
78	Kiefer Blvd	Zinfandel Dr	Sunrise Blvd	3	Arterial M	37,390	Yes ³	Widen to County standards ⁵	No
83	Mather Blvd-Excelsior Rd ⁴	Douglas Rd	Kiefer Blvd	2	Res Collector F	15,750	Yes	Widen to County standards ⁵	No
89	Mayhew Rd	Jackson Rd	Fruitridge Rd	4	Arterial M	52,530	Yes ³	Widen to County standards ⁵	No
116	White Rock Rd	Fitzgerald Rd	Grant Line Rd	4	Arterial M	54,910	Yes ³	Widen to County standards ⁵	No
123	Zinfandel Dr	Douglas Rd	Kiefer Blvd	4	Arterial M	31,690	Yes ³	Widen to County standards ⁵	No

Note: Gray shading indicates changes in travel lanes or facility type that the project is responsible to provide. For all roadway segments to be widened, the project is responsible to build the entire roadway to County standards.

Red text with light gray shading indicate project impacts.

¹ Substandard rural roads are defined as rural, 2-lane roadway segments with travel lanes narrower than 12 feet and/or roadside shoulders narrower than 6 feet.

² Functionality impacts are triggered when a substandard rural road increases over a threshold of 6,000 ADT, or for a roadway already above 6,000 ADT, increases by more than 600 ADT.

³ The potential for an impact exists should the project generate traffic volumes on the roadway exceeding 6,000 ADT, or increasing more than 600 ADT on a roadway already above 6,000 ADT, prior to the construction of roadway improvements.

⁴ Excluding the roadway segment that is within the developed community of Independence at Mather.

⁵ The functionality impact is mitigated by improving the roadway to County standards, including widening travel lanes to 12 feet and/or widening or providing paved shoulders to 6 feet.

Table TC-49: CEQA Cumulative plus Jackson Corridor Projects Summary of Impacted Roadway Segments

ID	Roadway	Segment	
		From	To
Level of Service Impact Fully Mitigated by General Plan Lanes			
23	Elder Creek Rd	Power Inn Rd	Florin-Perkins Rd
25	Elder Creek Rd	South Watt Ave	Hedge Ave
26	Elder Creek Rd	Hedge Ave	Mayhew Rd
28.1	Elder Creek Rd	Bradshaw Rd	Vineyard Rd
31.1	Excelsior Rd	Jackson Rd	Collector WJ-6
31.2	Excelsior Rd	Collector WJ-6	Elder Creek Rd
41	Florin Rd	Mayhew Rd	Bradshaw Rd
42.2	Florin Rd	Vineyard Rd	Excelsior Rd
43	Florin Rd	Excelsior Rd	Sunrise Blvd
47	Fruitridge Rd	Florin Perkins Rd	South Watt Ave
48	Fruitridge Rd	South Watt Ave	Hedge Ave
51.1	Grant Line Rd	Douglas Rd	Chrysanthy Blvd
51.2	Grant Line Rd	Chrysanthy Blvd	Kiefer Blvd
56	Grant Line Rd	Sheldon Rd	Wilton Rd
57	Grant Line Rd	Wilton Rd	Bond Rd
71.2	Jackson Rd	Collector JT-3	Tree View Ln
71.3	Jackson Rd	Tree View Ln	Collector JT-4
71.4	Jackson Rd	Collector JT-4	Eagles Nest Rd
72.1	Jackson Rd	Eagles Nest Rd	Rockbridge Dr
72.2	Jackson Rd	Rockbridge Dr	Sunrise Blvd
73	Jackson Rd	Sunrise Blvd	Grant Line Rd
89.1	Mayhew Rd	Jackson Rd	Rock Creek Pkwy
89.2	Mayhew Rd	Rock Creek Pkwy	Fruitridge Rd
92	Old Placerville Rd	Happy Ln	Routier Rd
105	Sunrise Blvd	Douglas Rd	Kiefer Blvd
106	Sunrise Blvd	Kiefer Blvd	Jackson Rd
117	White Rock Rd	Grant Line Rd	Prairie City Rd
122	Zinfandel Dr	City Limit	Douglas Rd
132	Kiefer Blvd	Americanos Blvd	Grant Line Rd
308	Mayhew Rd	Happy Ln	Bradshaw Rd
309	Mayhew Rd	Bradshaw Rd	Jackson Rd
311	Mayhew Rd	Collector WJ-13	Elder Creek Rd
405	Collector JT-3	Collector JT-5	Jackson Rd
602	Collector MS-2	Eagles Nest Rd	Collector MS-5
Level of Service Impact Not Fully Mitigated by General Plan Lanes			
2	Bradshaw Rd	US 50	Lincoln Village Dr

Table TC-92 continued			
ID	Roadway	Segment	
		From	To
3	Bradshaw Rd	Lincoln Village Dr	Old Placerville Rd
4	Bradshaw Rd	Old Placerville Rd	Goethe Rd
5.1	Bradshaw Rd	Goethe Rd	Collector WJ-8
5.2	Bradshaw Rd	Collector WJ-8	Kiefer Blvd
6.1	Bradshaw Rd	Kiefer Blvd	Collector WJ-9
6.2	Bradshaw Rd	Collector WJ-9	Mayhew Rd
37	Florin Rd	Power Inn Rd	Florin-Perkins Rd
44	Folsom Blvd	Howe Ave	Jackson Rd
46	Fruitridge Rd	Power Inn Rd	Florin Perkins Rd
58	Happy Ln	Old Placerville Rd	Kiefer Blvd
62	Howe Ave	US 50	Folsom Blvd
65	Jackson Rd	Folsom Blvd	Florin Perkins Rd
66.1	Jackson Rd	Florin Perkins Rd	14th Ave
66.2	Jackson Rd	14th Ave	Rock Creek Pkwy
66.3	Jackson Rd	Rock Creek Pkwy	Aspen 1 Dwy
66.4	Jackson Rd	Aspen 1 Dwy	South Watt Ave
67	Jackson Rd	South Watt Ave	Hedge Ave
68.1	Jackson Rd	Hedge Ave	Collector WJ-3
68.2	Jackson Rd	Collector WJ-3	Mayhew Rd
69	Jackson Rd	Mayhew Rd	Bradshaw Rd
70.1	Jackson Rd	Bradshaw Rd	Collector WJ-4
70.2	Jackson Rd	Collector WJ-4	Happy Ln
71.1	Jackson Rd	Excelsior Rd	Collector JT-3
76	Kiefer Blvd	Mayhew Rd	Bradshaw Rd
77.1	Kiefer Blvd	Bradshaw Rd	Collector WJ-14
78.4	Kiefer Blvd	E Collector MS-1	Sunrise Blvd
79	Kiefer Blvd	Sunrise Blvd	Rancho Cordova Pkwy
83	Mather Blvd-Excelsior Rd	Douglas Rd	Kiefer Blvd
93	Old Placerville Rd	Routier Rd	Rockingham Dr
95	Rockingham Dr	Old Placerville Rd	Mather Field Rd
96	South Watt Ave	Folsom Blvd	Kiefer Blvd
97	South Watt Ave	Kiefer Blvd	Jackson Rd
100	South Watt Ave	Elder Creek Rd	Florin Rd
104.3	Sunrise Blvd	Rio Del Oro Pkwy	Douglas Rd
110	Watt Ave	US 50	Folsom Blvd
135	Rancho Cordova Pkwy	White Rock Rd	International Dr
136	Rancho Cordova Pkwy	International Dr	Rio Del Oro Pkwy

Table TC-91 continued			
ID	Roadway	Segment	
		From	To
200	Kiefer Blvd	Tree View Ln	Eagles Nest Rd
302	Happy Ln	Kiefer Blvd	Mayhew Rd
305	Kiefer Blvd	Happy Ln	Collector WJ-15
306	Kiefer Blvd	Collector WJ-15	Douglas Rd
319	Vineyard Rd	Rock Creek Pkwy	Elder Creek Rd
410	Kiefer Blvd	Excelsior Rd	Tree View Ln

Table TC-50: CEQA Cumulative plus Jackson Corridor Projects Summary of Impacted Intersections

Intersection		Alternative Mitigation
Level of Service Impact Fully Mitigated by General Plan Lanes		
20	Elk Grove Florin Road/S. Watt Ave. & Florin Road	**
23	Hedge Avenue & Jackson Road	**
29	Mayhew Road & Jackson Road	
31	Mayhew Road & Elder Creek Road	**
32	Woodring Drive & Zinfandel Drive	
39	Bradshaw Road & Elder Creek Road	
40	Bradshaw Road & Florin Road	
46	Excelsior Road & Elder Creek Road	**
47	Excelsior Road & Florin Road	
58	Zinfandel Drive & Douglas Road	
61	Eagles Nest Road & Florin Road	
69	Sunrise Boulevard & Kiefer Boulevard	
70	Sunrise Boulevard & Jackson Road	
72	Sheldon Lake Drive/Sunrise Boulevard & Grant Line Road	
76	Prairie City Road & White Rock Road	
86	Power Inn Road & Florin Rd	
91	Grant Line Rd & Eagles Nest Rd/Sloughhouse Rd	
93	Grant Line Rd & Dwy/Wilton Rd	
105	Rancho Cordova Pkwy & Kiefer Blvd	

Table TC-93 continued		
Intersection		Alternative Mitigation
306	Excelsior Road & Collector WJ-6	
308	Hedge Avenue & Rock Creek Pkwy WB	
310	Mayhew Road & Rock Creek Pkwy WB	
311	Mayhew Road & Rock Creek Pkwy EB	
314	Vineyard Road/Happy Lane & Rock Creek Pkwy	
326	Happy Lane & Mayhew Road	
328	Vineyard Road & Florin Road	
400	Collector JT-3 & Jackson Road	
605	Collector MS-5 & Collector MS-4	
Level of Service Impact Not Fully Mitigated by General Plan Lanes But Designated High Capacity Intersection		
12	Watt Avenue & Folsom Blvd.	**
14	S. Watt Avenue & Kiefer Blvd.	**
16	S. Watt Avenue & Jackson Road	**
Level of Service Impact Not Fully Mitigated by General Plan Lanes		
3	Power Inn Road/Howe Avenue & Folsom Blvd	
4	Power Inn Road & 14th Avenue	
5	Power Inn Road & Fruitridge Road	
17	S. Watt Avenue & Fruitridge Road	*
28	Mayhew Road & Kiefer Boulevard	**
35	Bradshaw Road & US 50 EB Ramps	

Table TC-93 continued		Alternative Mitigation
Intersection		
36	Bradshaw Road & Old Placerville Road	
37	Bradshaw Road & Kiefer Boulevard	*
42	Happy Lane & Old Placerville Road	*
43	Happy Lane & Kiefer Boulevard	*
44	Excelsior Road & Kiefer Boulevard	
45	Excelsior Road & Jackson Road	**
51	Mather Field Road & Rockingham Drive	
59	Eagles Nest Road/Zinfandel Drive & Kiefer Boulevard	**
67	Sunrise Boulevard & Douglas Road	
80	Grant Line Road & Jackson Road	**
95	Florin Perkins Road & 14th Avenue	
96	Jackson Road & 14th Avenue	
97	Rock Creek Pkwy & Jackson Road	
318	Bradshaw Road & Mayhew Road	*
325	Douglas Road & Kiefer Boulevard	*
<p>¹ Alternative mitigations represent proposed mitigations beyond the General Plan, excluding designated high capacity intersections, as proposed by the County of Sacramento.</p> <p>* denotes alternative mitigations that improve operations but do not fully mitigate the impact.</p> <p>** denotes alternative mitigations that fully mitigate the impact.</p>		

Table TC-51: CEQA Cumulative plus Jackson Corridor Projects Summary of Impacted Freeway Segments

Direction	Location
Level of Service Impact Not Mitigated	
Eastbound US-50	Stockton Boulevard to 59th Street
	Watt Avenue to Bradshaw Road
	Bradshaw Road to Mather Field Road
	Zinfandel Drive to Sunrise Boulevard
	Sunrise Boulevard to Rancho Cordova Parkway
	Rancho Cordova Parkway to Hazel Avenue
Westbound US-50	Watt Avenue to Howe Avenue
	Howe Avenue to 65th Street
	65th Street to 59th Street
	59th Street to Stockton Boulevard
	Stockton Boulevard to SR 99 / SR 51
<i>Source: DKS Associates, 2014.</i>	

Table TC-52: CEQA Cumulative plus Jackson Corridor Projects Summary of Impacted Freeway Ramp Junction/Weaves

Direction	Location	Junction Type
Level of Service Impact Not Mitigated		
Eastbound US-50	Northbound 65th Street Slip Entrance	Weave
	Howe Avenue / Hornet Drive Exit	
	Bradshaw Road Exit	Two-Lane Diverge
	Northbound Mather Field Road Slip Entrance	Weave
	Zinfandel Drive Exit	
	Rancho Cordova Parkway Entrance	Weave
	Hazel Avenue Exit	
Westbound US-50	Southbound Hazel Avenue Slip Entrance	Weave
	Rancho Cordova Parkway Exit	
	Southbound Sunrise Boulevard Slip Entrance	Lane Addition
	Northbound Bradshaw Road Loop Entrance	One-Lane Merge
	Southbound Bradshaw Road Slip Entrance	One-Lane Merge
	Southbound Howe Avenue Slip Entrance	One-Lane Merge
<p><i>Source: DKS Associates, 2014.</i></p>		

Table TC-53: CEQA Cumulative plus Jackson Corridor Projects Summary of Impacted Freeway Ramp Termini

Direction	US 50 Exit Ramp
Queuing Impact Not Mitigated	
Eastbound US-50	Howe Avenue
Westbound US-50	Rancho Cordova Parkway
<i>Source: DKS Associates, 2014.</i>	

Table TC-54: CEQA Cumulative plus Jackson Corridor Projects Functionality Impact Summary

ID	Roadway	Segment	
		From	To
Functionality Impact Fully Mitigated			
15	Douglas Rd	Mather Blvd	Zinfandel Dr
16	Douglas Rd	Zinfandel Dr	Sunrise Blvd
19	Eagles Nest Rd	Kiefer Blvd	Jackson Rd
20	Eagles Nest Rd	Jackson Rd	Florin Rd
25	Elder Creek Rd	South Watt Ave	Hedge Ave
26	Elder Creek Rd	Hedge Ave	Mayhew Rd
27	Elder Creek Rd	Mayhew Rd	Bradshaw Rd
28	Elder Creek Rd	Bradshaw Rd	Excelsior Rd
30	Excelsior Rd	Kiefer Blvd	Jackson Rd
31	Excelsior Rd	Jackson Rd	Elder Creek Rd
32	Excelsior Rd	Elder Creek Rd	Florin Rd
33	Excelsior Rd	Florin Rd	Gerber Rd
34	Excelsior Rd	Gerber Rd	Calvine Rd
39	Florin Rd	South Watt Ave	Hedge Ave
40	Florin Rd	Hedge Ave	Mayhew Rd
41	Florin Rd	Mayhew Rd	Bradshaw Rd
42	Florin Rd	Bradshaw Rd	Excelsior Rd
43	Florin Rd	Excelsior Rd	Sunrise Blvd
48	Fruitridge Rd	South Watt Ave	Hedge Ave
49	Fruitridge Rd	Hedge Ave	Mayhew Rd
50	Grant Line Rd	White Rock Rd	Douglas Rd
58	Happy Ln	Old Placerville Rd	Kiefer Blvd
59	Hedge Ave	Jackson Rd	Fruitridge Rd
60	Hedge Ave	Fruitridge Rd	Elder Creek Rd
61	Hedge Ave	Elder Creek Rd	Florin Rd

Table TC-97 continued			
ID	Roadway	Segment	
		From	To
70	Jackson Rd	Bradshaw Rd	Excelsior Rd
71	Jackson Rd	Excelsior Rd	Eagles Nest Rd
77	Kiefer Blvd	Bradshaw Rd	Happy Ln
78	Kiefer Blvd	Zinfandel Dr	Sunrise Blvd
83	Mather Blvd-Excelsior Rd ⁴	Douglas Rd	Kiefer Blvd
89	Mayhew Rd	Jackson Rd	Fruitridge Rd
116	White Rock Rd	Fitzgerald Rd	Grant Line Rd
123	Zinfandel Dr	Douglas Rd	Kiefer Blvd

CEQA CUMULATIVE PLUS NEWBRIDGE PROJECT SCENARIO

METHODOLOGY

The analysis of the CEQA Cumulative Plus NewBridge Project scenario is based upon the analysis of the CEQA Cumulative Plus Jackson Corridor Projects scenario in the Traffic Study. The travel model was utilized to estimate the portion of the Jackson Corridor Projects traffic that is associated with the NewBridge project. With this information, it was possible to identify whether the NewBridge project, on its own, would trigger significant impacts in the cumulative scenario. It should be noted that, even at locations where the NewBridge project on its own would not trigger a significant impact, the NewBridge project contributes to the cumulative impacts associated with the CEQA Cumulative Plus Jackson Corridor Projects scenario.

CEQA CUMULATIVE LAND USE

Outside the Jackson Corridor Projects area, SACOG's 2035 development forecasts (the amount and location of housing and employment) for the adopted 2012 Metropolitan Transportation Plan (MTP) were used to prepare travel demand forecasts for this scenario. In addition, full build out of all reasonably foreseeable development projects was assumed within the study area, including the following major developments:

- Unincorporated Sacramento County
 - Vineyard Springs Comprehensive Plan
 - North Vineyard Station Specific Plan
 - Florin Vineyard Gap Community Plan
 - Mather Airport Specific Plan
 - Cordova Hills
 - Easton
 - Glenborough
 - East County Quarries
- City of Ranch Cordova
 - Arboretum
 - Suncreek
 - Sunridge Ranch
 - Rio del Oro
 - Westborough
- City of Folsom
 - Folsom South of 50 Specific Plan
- City of Sacramento
 - Aspen 1

TRANSPORTATION NETWORK

Plate TC-27 illustrates the transportation network associated with the CEQA Cumulative without Jackson Corridor Projects scenario. Outside the Jackson Corridor Projects area, it consists of the improvements through 2035 in the adopted 2012 Metropolitan Transportation Plan (MTP). Within the Jackson Corridor Projects area, it includes

roadway improvements beyond those in the MTP, which would be fully funded by the developments assumed in this scenario or by other committed funding sources. Sacramento County staff helped define such improvements and the number of roadway lanes for this scenario.

Plate TC-28 illustrates the transportation network associated with the CEQA Cumulative with Jackson Corridor Projects scenario. The Jackson Corridor Projects would construct new roadways within their sites, and widen many existing roadways within or on the borders of their sites. Details of this expansion of the roadway system is included in Section 6.2.1 of the Traffic Study.

NEWBRIDGE PROJECT TRIP GENERATION

The trip generation of the NewBridge project was estimated by the SACSIM model, which has been utilized to prepare transportation forecasts for this analysis. Table TC-98 summarizes the person trip generation. The NewBridge project would generate about 6,800 daily work person trip ends, and over 52,000 daily person trip ends for all trip purposes.

The total trip generation of the NewBridge project is somewhat higher under the CEQA Cumulative scenario than with existing conditions. The SACSIM model will vary the trips generated by retail and service uses depending on the amount of development that is near those uses. This result is expected as commercial development with much housing and/or employment nearby will be more successful (and generate more trips) than the same commercial development located in an area with less nearby population.

Table TC-55: Estimated Daily Person Trip Generation (CEQA Cumulative plus Jackson Corridor Projects Scenario)

NewBridge Specific Plan		
Project	Trip Purpose	Daily Person Trip Ends
NewBridge	Work Trips	6,795
	Non-Work Trips	45,477
	All Trip Purposes	52,272
Source: DKS Associates, 2014.		

Table TC-99 summarizes the estimated mode choice for the NewBridge Project. Over 90 percent of all person trips are expected to be accommodated by automobile. Transit will serve about 1.7 percent of all trips, while walk and bike modes will accommodate about 6.7 percent of all trips.

Table TC-100 summarizes the vehicular (auto) trip generation of the NewBridge project. The NewBridge project is estimated to generate over 33,000 daily vehicle trip ends. About 1,500 of the daily vehicle trip ends will be associated with trips with both an origin

and destination within the NewBridge project, about 4 percent of the trip ends. Those internal trip ends represent about 750 daily vehicle trips (one-half the number of internal trip ends). The NewBridge project will generate about 32,000 external vehicle trips that have an origin or destination inside the NewBridge project but the other end of the trip is outside the NewBridge project. Table TC-100 also shows the vehicle trips generated during the a.m. and p.m. peak hours.

NEWBRIDGE PROJECT TRIP DISTRIBUTION

The distribution of trips associated with development on the NewBridge project site was derived utilizing SACSIM, incorporating the proposed land use and access locations associated with the NewBridge project site. Trip distribution varies by land use and time period. Plate TC-34 illustrates the overall trip distribution of daily NewBridge project trips with the CEQA Cumulative scenario.

Table TC-56: Mode Split (CEQA Cumulative plus Jackson Corridor Projects Scenario)

NewBridge Specific Plan				
Project	Mode	Percentage of Person Trips by Trip Purpose		
		Work Trips	Non-Work	All Trip Purpos
NewBridge	Auto - SOV	84.4%	43.8%	49.1%
	Auto - HOV	10.2%	47.4%	42.6%
	Transit	3.8%	1.4%	1.7%
	Walk	0.8%	6.7%	6.0%
	Bike	0.7%	0.7%	0.7%

Source: DKS Associates, 2014.

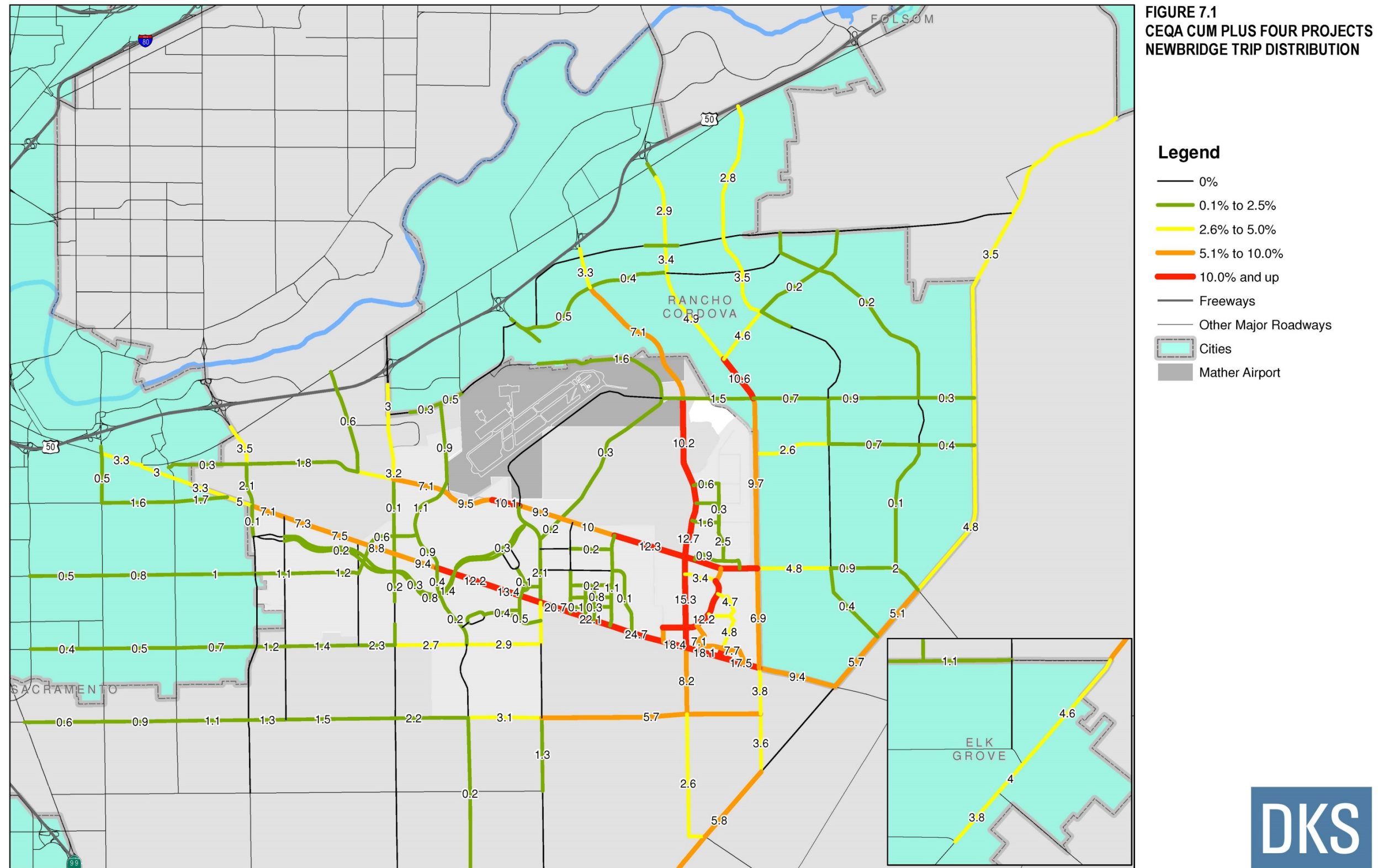
Table TC-57: Estimated Daily Vehicle Trip Generation (CEQA Cumulative plus Jackson Corridor Projects Scenario)

NewBridge Specific Plan				
Trip Type		AM Peak Hour	PM Peak Hour	Daily
Total Vehicle Trip Ends		2,833	4,147	34,835
Percent Internal Trip Ends ¹		6.9%	9.8%	8.5%
Vehicle trips	Internal to Project	99	203	1,481
	External to Project	2,636	3,742	31,873
	Total	2,735	3,945	33,354

¹. Both trip ends within the project.

Source: DKS Associates, 2014.

Plate TC-22: CEQA Cumulative plus Jackson Corridor Projects NewBridge Trip Distribution



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*OPERATIONS ANALYSIS AND IMPACTS***PROJECT ROADWAY SEGMENT IMPACTS**

Table TC-101 summarizes the results of the operations analysis for the study area roadway segments. Only those segments where an impact would be triggered by the NewBridge project are shown. The table includes the number of lanes assumed with the implementation of the Jackson Corridor Projects. The shaded table cells under the “Travel Lanes” and “Facility Type” headings illustrate new roadways or widened roadways. The last column of the table shows the project(s) responsible for the increase in the number of roadway lanes. The shaded table cells under the “Level of Service” heading indicate those locations with an LOS impact.

INTERSECTION IMPACTS

Table TC-102 and Table TC-103 summarize the results of the operations analysis for the study area intersections. Only those intersections where an impact would be triggered by the NewBridge project are shown. The tables include the implementation of intersection changes associated with the Jackson Corridor Projects. Table TC-103 illustrates the type of traffic control and number of lanes by type on each study area intersection approach. Shaded table cells indicate those locations where changes in traffic control and / or number of approach lanes by type would be fully funded by the project(s) shown in the last column. Shaded table cells in Table TC-102 illustrate those locations with an LOS impact. Detailed analysis information is included in the technical appendix.

Signal warrant analysis was conducted for all unsignalized intersections along Jackson Road, and other unsignalized intersections in close proximity to the project. The project is considered to have a significant impact at an unsignalized location if both the impact criteria in Table TC-7 are met, and one or more of the signal warrants specified in the California Manual on Uniform Traffic Control Devices (CAMUTCD) are met. Detailed signal warrant calculation sheets are included in the technical appendix. The following unsignalized intersections exhibit significant impacts and meet one or more traffic signal warrants:

- Eagles Nest Road and Florin Road

Table TC-58: CEQA Cumulative Roadway Segment Levels of Service – Impacts Triggered by NewBridge Project

ID	Roadway	Segment		CEQA Cumulative No Project					CEQA Cumulative + Jackson Corridor Projects					Project(s) Responsible for Change in Lanes
		From	To	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/ Capacity Ratio	Level of Service	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/ Capacity Ratio	Level of Service	
66.2	Jackson Rd	14th Ave	Rock Creek Pkwy	4	Arterial M	40,490	1.12	F	4	Arterial M	64,740	1.80	F	
66.3	Jackson Rd	Rock Creek Pkwy	Aspen 1 Dwy	4	Arterial M	34,850	0.97	E	4	Arterial M	61,240	1.70	F	
71.1	Jackson Rd	Excelsior Rd	Collector JT-3	2	Rural Hwy	23,230	1.01	F	4	Arterial M	62,780	1.74	F	Jackson Township
71.2	Jackson Rd	Collector JT-3	Tree View Ln	2	Rural Hwy	23,250	1.02	F	4	Arterial M	48,960	1.36	F	Jackson Township
71.3	Jackson Rd	Tree View Ln	Collector JT-4	2	Rural Hwy	23,210	1.01	F	4	Arterial M	42,560	1.18	F	Jackson Township
71.4	Jackson Rd	Collector JT-4	Eagles Nest Rd	2	Rural Hwy	23,230	1.01	F	4	Arterial M	39,060	1.09	F	Jackson Township
73	Jackson Rd	Sunrise Blvd	Grant Line Rd	4	Arterial M	31,990	0.89	D	4	Arterial M	46,130	1.28	F	
79	Kiefer Blvd	Sunrise Blvd	Rancho Cordova Pkwy	4	Arterial M	20,550	0.57	A	4	Arterial M	33,880	0.94	E	

Note: Gray shading indicates changes in travel lanes or facility type that the project is responsible to provide.

Bold values do not meet LOS policy. Red values with light gray shading indicate project impacts.

¹ The following classifications are used to determine daily roadway capacity:

Arterial L - Arterial, Low Access Control

Arterial M - Arterial, Moderate Access Control

Arterial H - Arterial, High Access Control

Rural Hwy - Rural 2-lane Highway

Rural S - Rural 2-lane Road, 24'-36' of pavement, Paved Shoulders

Rural NS - Rural 2-lane Road, 24'-36' of pavement, No Shoulders

Res Collector F - Residential Collector with Frontage

Res Collector NF - Residential Collector with No Frontage

Table TC-59: CEQA Cumulative plus Jackson Corridor Projects Intersection Levels of Service – Impacts Triggered by NewBridge Project

Intersection		AM Peak Hour							PM Peak Hour						
		CEQA Cumulative No Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact	CEQA Cumulative No Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact
		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)	
61	Eagles Nest Road & Florin Road	Two-way stop	F	194.9	Two-way stop	F	>300	Yes	Two-way stop	F	83.9	Two-way stop	F	>300	Yes
	<i>Northbound</i>		<i>F</i>	<i>>300</i>		<i>F</i>	<i>>300</i>			<i>F</i>	<i>>300</i>		<i>F</i>	<i>>300</i>	
	<i>Southbound</i>		<i>F</i>	<i>>300</i>		<i>F</i>	<i>>300</i>			<i>F</i>	<i>>300</i>		<i>F</i>	<i>>300</i>	
	<i>Eastbound Left Turn</i>		<i>B</i>	<i>10.3</i>		<i>B</i>	<i>11.6</i>			<i>A</i>	<i>8.4</i>		<i>A</i>	<i>0.0</i>	
	<i>Westbound Left Turn</i>		<i>A</i>	<i>0.0</i>		<i>A</i>	<i>0.0</i>			<i>A</i>	<i>9.4</i>		<i>A</i>	<i>0.0</i>	
67	Sunrise Boulevard & Douglas Road	Signal	F	142.9	Signal	F	230.7	Yes	Signal	E	75.5	Signal	F	115.4	Yes
69	Sunrise Boulevard & Kiefer Boulevard	Signal	F	157.5	Signal	F	443.8	Yes	Signal	F	133.4	Signal	F	167.2	Yes
91	Grant Line Rd & Eagles Nest Rd/Sloughhouse Rd	Signal	F	369.2	Signal	F	358.4	No	Signal	F	314.5	Signal	F	343.5	Yes
93	Grant Line Rd & Wilton Rd	Signal	F	85.4	Signal	F	89.1	No	Signal	E	79.3	Signal	F	103.6	Yes
97	Rock Creek Pkwy & Jackson Road	Signal	F	89.0	Signal	F	201.5	Yes	Signal	D	49.9	Signal	F	188.2	Yes

Note: Gray shading represents changes in traffic control that the project is responsible to provide.

Bold values do not meet LOS policy. **Red** values with light gray shading indicate project impacts.

Table TC-60: CEQA Cumulative and CEQA Cumulative plus Jackson Corridor Projects Intersection Geometrics – Impacts Triggered by NewBridge Project

Intersection	Traffic Control		CEQA Cumulative Lane Geometrics				CEQA Cumulative Plus FOUR PROJECTS Lane Geometrics				Project(s) Responsible for Change
	CEQA Cumulative	CEQA Cumulative Plus FOUR PROJECTS	NB Approach	SB Approach	EB Approach	WB Approach	NB Approach	SB Approach	EB Approach	WB Approach	
61 Eagles Nest Road & Florin Road	Two-way stop	Two-way stop	Ψ	⤴	Ψ	Ψ	Ψ	⤴	Ψ	Ψ	
67 Sunrise Boulevard & Douglas Road	Signal	Signal	↖↗↑↑↑↘	↙↓↓↓↘↘	↖↗↑↑↘	↖↗↑↑↑↘	↖↗↑↑↑↘	↙↓↓↓↘↘	↖↗↑↑↘	↖↗↑↑↑↘	
69 Sunrise Boulevard & Kiefer Boulevard	Signal	Signal	↖↑↑↘	⤴↓↘↘	Ψ	↘↘	↖↑↑↘	⤴↓↘↘	↖↗↑↑↘	↘↘	NewBridge; Mather South
91 Grant Line Rd & Eagles Nest Rd/Sloughhouse Rd	Signal	Signal	↖↑↑↘	⤴↓↘	Ψ	↘↘	↖↑↑↘	⤴↓↘	Ψ	↘↘	
93 Grant Line Rd & Dwy/Wilton Rd	Signal	Signal	↖↑↘	⤴↓↘	↘↘	↘↘	↖↑↘	⤴↓↘	↘↘	↘↘	
97 Rock Creek Pkwy & Jackson Road	Signal	Signal	↖↑↘	↙↓↘	↖↑↘	↖↑↘	↖↑↘	↙↓↘	↖↑↘	↖↑↘	

U.S. 50 FREEWAY IMPACTS

Based upon the Caltrans' thresholds of significance, any volume contribution to a significant impact of the CEQA Cumulative Plus Jackson Corridor Projects scenario is considered significant. Therefore, the impacts of the CEQA Cumulative Plus NewBridge Project scenario are identical to those of the CEQA Cumulative Plus Jackson Corridor Projects scenario.

FREEWAY MAINLINE

Table 6.4 of the Traffic Study summarizes a.m. and p.m. peak hour US 50 freeway mainline operations. Details of the analysis are included in the technical appendix. The following locations exhibit significant impacts:

- Eastbound
 - Stockton Boulevard to 59th Street - a.m. and p.m. peak hours
 - Watt Avenue to Mather Field Road - a.m. peak hour
 - Zinfandel Drive to Hazel Avenue - p.m. peak hour
- Westbound
 - Watt Avenue to Howe Avenue - p.m. peak hour
 - Howe Avenue to 59th Street - a.m. and p.m. peak hours
 - 59th Street to SR 99 / SR 51 - p.m. peak hour

FREEWAY RAMP JUNCTIONS / WEAVING

Table 6.5 of the Traffic Study summarizes a.m. and p.m. peak hour freeway operations at ramp junctions and weaving areas. Details of the analysis are included in the technical appendix. The following locations exhibit significant impacts:

- Eastbound
 - 65th Street to Howe Avenue weave - a.m. and p.m. peak hours
 - Bradshaw Road exit - a.m. peak hour
 - Mather Field Road to Zinfandel Drive weave - a.m. and p.m. peak hours
 - Rancho Cordova Parkway to Hazel Avenue weave - a.m. and p.m. peak hours
- Westbound
 - Hazel Avenue to Rancho Cordova Parkway weave - a.m. and p.m. peak hours
 - Sunrise Boulevard Entrance Ramp - a.m. peak hour
 - Northbound Bradshaw Road Loop Entrance Ramp - a.m. peak hour
 - Southbound Bradshaw Road Slip Entrance Ramp - a.m. peak hour
 - Southbound Howe Avenue Slip Entrance Ramp - a.m. peak hour

FREEWAY RAMP INTERSECTION QUEUING

Tables 6.6 and 6.7 of the Traffic Study summarize a.m. and p.m. peak hour freeway ramp intersection queuing. The following locations exhibit a significant impact:

- Eastbound
 - Exit ramp to Howe Avenue - right turn queue length exceeds available storage
- Westbound
 - Exit ramp to Rancho Cordova Parkway - left turn queue length exceeds available storage

PEDESTRIAN AND BICYCLE FACILITY IMPACTS

The NewBridge project would not remove any existing or planned pedestrian facility, nor would the Project remove any existing or planned bicycle facility in the Bicycle Master Plan. The NewBridge project would add pedestrian and bicycle demands within the NewBridge project site and to and from nearby land uses. Very few bicycle and pedestrian facilities exist in the Project area, with the exception of the existing Class I bike trail along the western side of the Folsom South Canal. Therefore, the impact of the NewBridge project on pedestrian and bicycle circulation in the site vicinity is *potentially significant*.

As illustrated in Figure 3.2 of the Traffic Study, the NewBridge project has proposed changes to the Bicycle Master Plan, consisting of approximately 14 miles of regional Class I and 6.5 miles of Class II bikeways to be constructed as part of the project. The complete bicycle and pedestrian network within the NewBridge project consists of Class I multi-use paths/trails, Class II bikeways, pedestrian routes, and parkways. This comprehensive system provides attractive transportation choices for residents, employees, and visitors, and is an important component to providing connectivity for non-vehicular travel within the Project. The bicycle and pedestrian network has been designed to provide linkages to existing and planned pedestrian and bicycle facilities and land uses in the Project vicinity, including adjacent proposed master plans. Implementation of Mitigation Measure TC-3 will reduce this impact to *less than significant* levels.

TRANSIT SYSTEM IMPACTS

Public transit would not be provided to the site of the NewBridge project under CEQA Cumulative scenario without development of the NewBridge project. In the preparation of this analysis, a transit system to serve the Jackson Corridor Projects was developed. However, the timing and implementation of the transit system was not defined at the time of Traffic Study completion. The NewBridge project would increase demands for public transit facilities. Therefore, the impact of the NewBridge project on the transit system is potentially significant.

FUNCTIONALITY IMPACTS

Table TC-104 summarizes the results of the functionality analysis. Only those segments where an impact would be triggered by the NewBridge project are shown. The table includes the number of lanes assumed with the implementation of the Jackson Corridor Projects, which in many cases is greater than the number of lanes in the existing condition. The shaded table cells under the “Travel Lanes” heading illustrates new roadways and widened roadways that are assumed part of the Jackson Corridor

Projects. The “Substandard?” heading indicates whether or not a roadway meets the County standards of 12-foot lanes and 6-foot shoulders. If the Jackson Corridor Projects make improvements to a roadway segment such as widening, they would be required to reconstruct the entire substandard roadway segment to County standards. The shaded table cells under the “Functionality Impact?” heading indicate those locations with a functionality impact.

As stated above, the traffic analysis assumed that the Jackson Corridor Projects would construct a number of travel lanes on roadway segments that are internal to or on the boundary of the Jackson Corridor Projects, and the entire roadway segment would be reconstructed to County standards at that time. The timing of implementation of such additional traffic lanes on these internal or boundary roadway segments will affect whether or not impacts would exist at some time prior to full build out of the Jackson Corridor Projects.

Table TC-61: CEQA Cumulative plus Jackson Corridor Projects Functionality Impacts Triggered by NewBridge Project

ID	Roadway	Segment		Jurisdiction	Existing Substandard Roadways				CEQA Cumulative + Jackson Corridor Projects			
		From	To		Travel Lanes	Pavement (ft)	Substandard? ¹	Existing Volume	Travel Lanes	Facility Type ¹	Forecasted Volume	Functionality Impact? ²
16	Douglas Rd	Zinfandel Dr	Sunrise Blvd	Rancho Cordova/County	2	23	Yes	8,369	6	Arterial M	48,540	Yes ³
19	Eagles Nest Rd	Kiefer Blvd	Jackson Rd	County	2	20	Yes	740	4	Arterial M	15,420	Yes ³
25	Elder Creek Rd	South Watt Ave	Hedge Ave	County	2	23	Yes	5,576	4	Arterial M	54,480	Yes ³
26	Elder Creek Rd	Hedge Ave	Mayhew Rd	County	2	23	Yes	5,797	4	Arterial M	43,210	Yes ³
27	Elder Creek Rd	Mayhew Rd	Bradshaw Rd	County	2	23	Yes	5,355	4	Arterial M	25,620	Yes ³
33	Excelsior Rd	Florin Rd	Gerber Rd	County	2	<21	Yes	5,423	2	Arterial M	14,300	Yes
39	Florin Rd	South Watt Ave	Hedge Ave	County	2	22	Yes	7,718	4	Arterial M	13,280	Yes ³
40	Florin Rd	Hedge Ave	Mayhew Rd	County	2	22	Yes	6,312	4	Arterial M	14,700	Yes ³
41	Florin Rd	Mayhew Rd	Bradshaw Rd	County	2	22	Yes	6,317	4	Arterial M	43,130	Yes ³
42	Florin Rd	Bradshaw Rd	Excelsior Rd	County	2	22	Yes	3,478	4	Arterial M	29,540	Yes ³
43	Florin Rd	Excelsior Rd	Sunrise Blvd	County	2	22	Yes	3,835	2	Arterial M	18,580	Yes
48	Fruitridge Rd	South Watt Ave	Hedge Ave	City of Sacramento/County	2	22	Yes	2,890	3	Arterial M	24,970	Yes ³
50	Grant Line Rd	White Rock Rd	Douglas Rd	Rancho Cordova/County	2	22	Yes	7,189	4	Arterial M	40,500	Yes ³
70	Jackson Rd	Bradshaw Rd	Excelsior Rd	County	2	26	Yes	13,030	6	Arterial M	60,480	Yes ³
71	Jackson Rd	Excelsior Rd	Eagles Nest Rd	County	2	26	Yes	10,478	4	Arterial M	62,780	Yes ³
77	Kiefer Blvd	Bradshaw Rd	Happy Ln	County	2	22	Yes	4,618	6	Arterial M	56,300	Yes ³
78	Kiefer Blvd	Zinfandel Dr	Sunrise Blvd	County	2	22	Yes	656	3	Arterial M	37,390	Yes ³
123	Zinfandel Dr	Douglas Rd	Kiefer Blvd	County	2	<21	Yes	2,848	4	Arterial M	31,690	Yes ³

Note: Gray shading indicates changes in travel lanes or facility type that the project is responsible to provide. For all roadway segments to be widened, the project is responsible to build the entire roadway to County standards.

Red text with light gray shading indicate project impacts.

¹ Substandard rural roads are defined as rural, 2-lane roadway segments with travel lanes narrower than 12 feet and/or roadside shoulders narrower than 6 feet.

² Functionality impacts are triggered when a substandard rural road increases over a threshold of 6,000 ADT, or for a roadway already above 6,000 ADT, increases by more than 600 ADT.

³ The potential for an impact exists should the project generate traffic volumes on the roadway exceeding 6,000 ADT, or increasing more than 600 ADT on a roadway already above 6,000 ADT, prior to the construction of roadway improvements.

⁴ Excluding the roadway segment that is within the developed community of Independence at Mather.

⁵ The functionality impact is mitigated by improving the roadway to County standards, including widening travel lanes to 12 feet and/or widening or providing paved shoulders to 6 feet.

CEQA CUMULATIVE PLUS NEWBRIDGE PROJECT MITIGATION

ROADWAY SEGMENT MITIGATION

Table TC-105 summarizes the results of the operations analysis for the study area roadway segments with mitigation. Where feasible, the number of roadway lanes was increased to mitigate the impact. However, the increased number of lanes could not exceed the maximum designated in the General Plans of the applicable jurisdictions. The shaded table cells under the “Travel Lanes” and “Facility Type” headings illustrate widened roadways for mitigation purposes, which would be the responsibility of the Jackson Corridor Projects to fund. The NewBridge project would contribute a fair share. The shaded table cells under the “Level of Service” heading indicate those locations that would continue to have LOS impacts after mitigation. The table also includes the constraint that precluded full mitigation of the LOS impact.

The “LOS Impact with Mitigation?” column shows whether there is still an LOS impact after the mitigation measure is applied. In other words, this column shows whether a mitigation measure successfully mitigates the impact or not. In several locations where the improvements allowed under the General Plan would not mitigate an LOS impact, the County has proposed alternative mitigation measures, which are shown in the “Alternative Mitigation” column. These alternative mitigation measures will either fully mitigate the impact or substantially reduce the level of impact.

PROJECT INTERSECTION MITIGATION

Table TC-106 and Table TC-107 summarize the results of the operations analysis for the study area intersections with mitigation. However, the increased number of lanes on each approach does not exceed the County’s standard number of approach lanes. Shaded table cells in Table TC-107 indicate those locations where changes in traffic control and / or number of approach lanes by type have been made to mitigate impacts, which would be the responsibility of the Jackson Corridor Projects to fund. The NewBridge project would contribute a fair share. The shaded table cells in Table TC-106 under the “Level of Service” heading indicate those locations with an LOS impact after mitigation. Table TC-107 also identifies those intersections that would continue to have LOS impacts after mitigation, along with the constraint that precluded full mitigation. Detailed analysis information is included in the technical appendix.

The “LOS Impact with Mitigation?” column shows whether there is still an LOS impact after the mitigation measure is applied. In other words, this column shows whether a mitigation measure successfully mitigates the impact or not. In several locations where the LOS impact could not be mitigated by implementing the County’s standard number of approach lanes, the County has proposed alternative mitigation measures, which are shown in the “Alternative Mitigation” column. These generally include providing additional turn lanes, carrying an additional through lane past the intersection, or designating the intersection as a High Capacity Intersection. These alternative mitigation measures will either fully mitigate the impact or substantially reduce the level of impact.

HIGH CAPACITY INTERSECTIONS

Three intersections are currently designated as “High Capacity Intersections” on the County’s General Plan: Watt Avenue & Folsom Boulevard, Watt Avenue & Kiefer Boulevard, and Watt Avenue & Jackson Road. At two intersections on Bradshaw Road where an LOS impact could not be mitigated by implementing the County’s standard number of approach lanes, the County has proposed alternative mitigation measures by designating those two intersections as High Capacity Intersections: Bradshaw Road & Mayhew Road and Bradshaw Road & Jackson Road.

A high capacity intersection would utilize special treatments to increase the capacity of the intersection so as to reduce congestion and travel delay. Since each intersection could have unique travel movements, volumes and existing context sensitive conditions, the special treatments utilized at each high capacity intersection will be selected to meet the specific needs of each intersection. The range of special treatments is quite wide, ranging from the restriction of certain turning movements to various combinations that could include grade separating certain movements. While the field of traffic engineering is ever expanding and evolving resulting in the use of new technologies and treatments, special treatments such as the following could be utilized at a high capacity intersection:

- Restricting turning movements
- Median U-turns
- Roundabouts
- Split intersections
- Quadrant roadway intersections
- Bowtie intersections
- Directional flyovers
- Center turn overpass
- Grade separated Roundabout
- Diverging diamond grade separation
- Compact diamond grade separation
- Single point urban grade separation
- Traditional urban grade separation

The County has conducted conceptual engineering to define potential improvements at the three study area intersections on Watt Avenue that are currently designated as “High Capacity Intersections” on the County’s General Plan. These are:

- At the **Watt Avenue & Folsom Boulevard** intersection, the County proposes an ultimate configuration involving grade separation of the northbound and southbound through movements of Watt Avenue. Access to and from Folsom Boulevard would be accomplished via on and off-ramps from the left lanes of Watt Avenue to a single signalized intersection. A bus rapid transit (BRT) lane along Watt Avenue would also intersect Folsom Boulevard at the traffic signal. This design is consistent with the recommendations of the South Watt Area Transportation Study (SWATS) dated November 1, 2002 and approved by the Board of Supervisors on November 26, 2002, and with the planning study for the

State Route 16 (Jackson Road) Corridor Study (Fehr & Peers, 2012). It should be noted that the State Route 16 study has only had a staff-level review done by Caltrans, Sacramento County Department of Transportation, City of Rancho Cordova, and City of Sacramento. Other equivalent mitigation measures may be selected to the satisfaction of the Department of Transportation to mitigate the project's impact.

- At the **Watt Avenue & Kiefer Boulevard** intersection, the County proposes a tight diamond interchange as the ultimate improvement. The through movements (and BRT lane) on Watt Avenue would be grade separated from Kiefer Boulevard. Access to and from Kiefer Boulevard would be accomplished via on and off-ramps at two signalized intersections along Kiefer Boulevard. This design is proposed in the planning study prepared for *State Route 16 (Jackson Road) Corridor Study* (Fehr & Peers, 2012). It should be noted that the State Route 16 study has only had a staff-level review done by Caltrans, Sacramento County Department of Transportation, City of Rancho Cordova, and City of Sacramento. Other equivalent mitigation measures may be selected to the satisfaction of the Department of Transportation to mitigate the project's impact.
- At the **Watt Avenue & Jackson Road** intersection, the County proposes a standard six-by-six signalized intersection (two left-turn lanes, three through lanes, and one right-turn lane, on each approach) with three modifications. 1) The southbound left-turn movement would be grade separated; 2) The westbound right-turn movement would be grade separated; and 3) Three northbound left-turn lanes are proposed. This configuration represents an enhanced version of Alternative 6 in the planning study prepared for *State Route 16 (Jackson Road) Corridor Study* (Fehr and Peers, 2012). It should be noted that the State Route 16 study has only had a staff-level review done by Caltrans, Sacramento County Department of Transportation, City of Rancho Cordova, and City of Sacramento. Other equivalent mitigation measures may be selected to the satisfaction of the Department of Transportation to mitigate the project's impact.

At the two new proposed “High Capacity Intersections” along Bradshaw Road, the ultimate configurations have not been defined. A number of improvement options involving one or more of the special treatments identified above could be defined that would mitigate the LOS impact at these locations. Since each of these intersections have unique travel movements, volumes and existing context sensitive conditions (potential environmental issues, right-of-way, physical constraints, etc.), the special treatments utilized at each location will need to be studied to select the treatments that mitigate the LOS impact, while avoiding or minimizing other impacts. At Bradshaw Road & Mayhew Road, heavy southbound right turns and westbound left turns suggest that a combination of triple left-turn lanes, dual right-turn lanes and/or overlap phasing may be effective. A high conflicting northbound and southbound volume suggests that grade separating one or more movements may also be necessary to fully mitigate the LOS impact. At Bradshaw Road & Jackson Road, the critical movements are the conflicting through volumes on all approaches. Grade separating either the Bradshaw Road or

Jackson Road through movements is likely the only option that would mitigate the LOS impact at this location.

U.S. 50 FREEWAY MITIGATION

According to Caltrans' US-50 Transportation Concept Report (TCR) and Corridor System Management Plan (CSMP), all mainline freeway lanes of the 8-lane ultimate facility (4 lanes in each direction) have already been built, with the exception of the segment between Zinfandel Drive and Sunrise Boulevard (where 6 of the 8 ultimate lanes exist today). With the exception of this segment, capacity improvements to widen the freeway mainline are precluded by the ultimate configuration in the TCR/CSMP. The TCR/CSMP does conceptualize other projects that will benefit the US-50 corridor without adding additional mainline travel lanes. These improvements generally fall into one of three categories:

- Intelligent transportation systems (ITS) and integrated corridor management (ICM) projects. Some examples may include ramp metering and multimodal improvements.
- Improvements to parallel local facilities. Such projects are expected to reduce travel demand on US-50.
- Future HOV lanes and auxiliary lanes. These projects would extend, or bridge gaps in, the existing HOV and auxiliary lane network. Constructing these lanes is permissible even when further widening of the mainline is not allowable, and is consistent with the ultimate configuration in the TCR/CSMP.

The NewBridge project shall participate in one or more of these alternative improvements that could directly reduce the severity of the project's impact and/or provide operational benefits to the US-50 corridor in general.

US-50 EASTBOUND ALTERNATIVE IMPROVEMENTS

To lessen the impact to the eastbound US-50 mainline between Stockton Boulevard and 59th Street, the project may pay a fair share toward the construction of:

- Ramp meter improvements (Caltrans ITS/OPS Project List)

To lessen the impact to the eastbound US-50 weave between 65th Street and Howe Avenue, the project may pay a fair share toward the construction of:

- Ramp meter improvements (Caltrans ITS/OPS Project List)
- Widen 65th Street to 5 lanes from US-50 to Broadway (2035 SACOG MTP)

To lessen the impact to the eastbound US-50 mainline between Watt Avenue and Mather Field Road, and to the Bradshaw Road exit, and to the weave between Mather Field Road and Zinfandel Drive, the project may pay a fair share toward the construction of:

- Auxiliary lanes between Bradshaw Road and Mather Field Road (2035 SACOG MTP)

- An interchange modification of US-50 at Mather Field Road (2035 SACOG MTP)

To lessen the impact to the eastbound US-50 mainline between Zinfandel Drive and Hazel Avenue, and to the weave between Rancho Cordova Parkway and Hazel Avenue, the project may pay a fair share toward the construction of:

- Auxiliary lanes between Zinfandel Drive and Sunrise Boulevard (2035 SACOG MTP)
- Auxiliary lanes between Sunrise Boulevard and Hazel Avenue (2035 SACOG MTP)
- Widen Sunrise Boulevard to 6 lanes with special treatments, including intersection improvements at White Rock Road, Folsom Boulevard, Coloma Road, Gold Express Drive, and Gold Country Boulevard (2035 SACOG MTP)
- A new interchange at Rancho Cordova Parkway, including a 4-lane arterial from US-50 to White Rock Road (2035 SACOG MTP)
- Multi-modal corridor improvements and interchange improvements at Hazel Avenue (2035 SACOG MTP)

US-50 WESTBOUND ALTERNATIVE IMPROVEMENTS

To lessen the impact to the westbound US-50 weave between Hazel Avenue and Rancho Cordova Parkway, the project may pay a fair share toward the construction of:

- Multi-modal corridor improvements and interchange improvements at Hazel Avenue (2035 SACOG MTP)
- Auxiliary lanes between Hazel Avenue and Rancho Cordova Parkway (2035 SACOG MTP)

To lessen the impact to the westbound US-50 on-ramp at Sunrise Boulevard, the project may pay a fair share toward the construction of:

- Auxiliary lanes between Sunrise Boulevard and Zinfandel Drive (2035 SACOG MTP)
- A transition lane from the Sunrise Boulevard slip off-ramp to the Sunrise Boulevard slip on-ramp (2035 SACOG MTP)

To lessen the impact to the westbound US-50 mainline between Mather Field Road and Bradshaw Road, and to the SB Bradshaw Road slip on-ramp, the project may pay a fair share toward the construction of:

- Auxiliary lanes between Mather Field Road and Bradshaw Road (2035 SACOG MTP)
- An interchange modification of US-50 at Mather Field Road (2035 SACOG MTP)

To lessen the impact to the westbound US-50 mainline between Watt Avenue and SR-51/SR-99, and to the SB Howe Avenue slip on-ramp, the project may pay a fair share toward the construction of:

- Bus/HOV lanes from Watt Avenue to Downtown Sacramento (2035 SACOG MTP)
- Replacement of existing communication lines with fiber optics to improve performance between SR-51/SR-99 and Watt Avenue (2013 10-Year SHOPP Plan)
- Auxiliary lane between the NB Howe Avenue on-ramp and the SB Howe Avenue on-ramp (2035 SACOG MTP)
- Ramp meter improvements (Caltrans ITS/OPS Project List)

PEDESTRIAN AND BICYCLE FACILITY MITIGATION

Mitigation Measure TC-3 has been included to reduce impacts associated with pedestrian and bicycle facilities to a *less-than-significant* level.

TRANSIT SYSTEM MITIGATION

~~The applicant of the NewBridge project shall coordinate with Regional Transit (or other transit operators) to provide the additional transit facilities and services assumed in transportation analysis, or a cost-effective equivalent level of transit facilities and services.~~

The assumed transit routes and service frequency would be required at full development of the NewBridge project. The full level of transit service would not achieve adequate transit ridership during the early stages of development. Thus the ultimate transit service, like the roadway system serving the NewBridge project, must be phased with development of the NewBridge project. Mitigation Measure TC-4 has been included to **ensure** reduce this impact **remains at a** *less-than-significant* level.

FUNCTIONALITY MITIGATION

Table TC-108 summarizes the results of the functionality analysis for the rural roadway segments with mitigation.

Table TC-62: CEQA Cumulative plus Jackson Corridor Projects Roadway Segment Mitigations – Impacts Triggered by NewBridge Project

ID	Roadway	Segment		CEQA Cumulative + Jackson Corridor Projects					Mitigated CEQA Cumulative + Jackson Corridor Projects						
		From	To	Travel Lanes	Facility Type ¹	Forecasted Volume	Volume/ Capacity Ratio	Level of Service	Travel Lanes	Facility Type ¹	Volume / Capacity Ratio	Level of Service	LOS Impact with Mitigation?	Alternative Mitigation ²	Constraint if Full Mitigation Not Possible
66.2	Jackson Rd	14th Ave	Rock Creek Pkwy	4	Arterial M	64,740	1.80	F	4	Arterial M	1.80	F	Yes		Maximum General Plan lanes
66.3	Jackson Rd	Rock Creek Pkwy	Aspen 1 Dwy	4	Arterial M	61,240	1.70	F	4	Arterial M	1.70	F	Yes		Maximum General Plan lanes
71.1	Jackson Rd	Excelsior Rd	Collector JT-3	4	Arterial M	62,780	1.74	F	6	Arterial M	1.16	F	Yes		Maximum General Plan lanes
71.2	Jackson Rd	Collector JT-3	Tree View Ln	4	Arterial M	48,960	1.36	F	6	Arterial M	0.91	E	No		
71.3	Jackson Rd	Tree View Ln	Collector JT-4	4	Arterial M	42,560	1.18	F	6	Arterial M	0.79	C	No		
71.4	Jackson Rd	Collector JT-4	Eagles Nest Rd	4	Arterial M	39,060	1.09	F	6	Arterial M	0.72	C	No		
73	Jackson Rd	Sunrise Blvd	Grant Line Rd	4	Arterial M	46,130	1.28	F	6	Arterial M	0.85	D	No		
79	Kiefer Blvd	Sunrise Blvd	Rancho Cordova Pkwy	4	Arterial M	33,880	0.94	E	4	Arterial M	0.94	E	Yes		Maximum General Plan lanes

Note: Gray shading represents changes in travel lanes or facility type that the project is responsible to provide. Bold values do not meet LOS policy. Red values with light gray shading indicate project impacts.

¹ The following classifications are used to determine daily roadway capacity:

- Arterial L - Arterial, Low Access Control
- Arterial M - Arterial, Moderate Access Control
- Arterial H - Arterial, High Access Control
- Rural Hwy - Rural 2-lane Highway
- Rural S - Rural 2-lane Road, 24'-36' of pavement, Paved Shoulders
- Rural NS - Rural 2-lane Road, 24'-36' of pavement, No Shoulders
- Res Collector F - Residential Collector with Frontage
- Res Collector NF - Residential Collector with No Frontage

² Alternative mitigations represent proposed mitigations beyond the General Plan, as proposed by the County of Sacramento.

Table TC-63: CEQA Cumulative plus Jackson Corridor Projects Impacted Intersections and Mitigations – Triggered by NewBridge Project

Intersection		AM Peak Hour							PM Peak Hour						
		CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact	Mitigated CEQA Cumulative Plus Jackson Corridor Projects			CEQA Cumulative Plus Jackson Corridor Projects			LOS Impact	Mitigated CEQA Cumulative Plus Jackson Corridor Projects		
		Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)	Control	Int LOS	Delay (sec)		Control	Int LOS	Delay (sec)
61	Eagles Nest Road & Florin Road	Two-way stop	F	>300	Yes	Signal	E	76.1	Two-way stop	F	>300	Yes	Signal	E	62.4
	<i>Northbound</i>		F	>300						F	>300				
	<i>Southbound</i>		F	>300						F	>300				
	<i>Eastbound Left Turn</i>		<i>B</i>	<i>11.6</i>						<i>A</i>	<i>0.0</i>				
	<i>Westbound Left Turn</i>		<i>A</i>	<i>0.0</i>						<i>A</i>	<i>0.0</i>				
67	Sunrise Boulevard & Douglas Road	Signal	F	230.7	Yes	Signal	F	230.5	Signal	F	115.4	Yes	Signal	F	114.7
69	Sunrise Boulevard & Kiefer Boulevard	Signal	F	443.8	Yes	Signal	F	88.7	Signal	F	167.2	Yes	Signal	E	59.3
91	Grant Line Rd & Eagles Nest Rd/Sloughhouse Rd	Signal	F	358.4	No				Signal	F	343.5	Yes	Signal	F	280.3
93	Grant Line Rd & Wilton Rd	Signal	F	89.1	No				Signal	F	103.6	Yes	Signal	E	55.8
97	Rock Creek Pkwy & Jackson Road	Signal	F	201.5	Yes				Signal	F	188.2	Yes			

Note: Gray shading represents changes in traffic control that the project is responsible to provide. **Bold** values do not meet LOS policy. **Red** values with light gray shading indicate project impacts.

Table TC-64: CEQA Cumulative plus Jackson Corridor Projects Intersection Impacts and Mitigations – Impacts Triggered by NewBridge Project

Intersection	Traffic Control		CEQA Cumulative Plus FOUR PROJECTS Lane Geometrics				Mitigated CEQA Cumulative Plus FOUR PROJECTS Lane Geometrics				Impact Caused by NewBridge Alone?	LOS Impact with Mitigation?	High Capacity Intersection? ¹	Alternative Mitigation ²	Constraint if Full Mitigation Not Possible
	CEQA Cumulative Plus FOUR PROJECTS	Mitigated CEQA Cumulative Plus FOUR PROJECTS	NB Approach	SB Approach	EB Approach	WB Approach	NB Approach	SB Approach	EB Approach	WB Approach					
61 Eagles Nest Road & Florin Road	Two-way stop	Signal	Ψ	↖	Ψ	Ψ	↖	↘	↖	↖	Yes	No	No		
67 Sunrise Boulevard & Douglas Road	Signal	Signal	↖↖↑↑↑↗	↘↓↓↓↓↖	↖↖↑↑↗	↖↖↑↑↑↗	↖↖↑↑↑↗	↘↓↓↓↓↖	↖↖↑↑↑↗	↖↖↑↑↑↗	Yes	Yes	No		Maximum General Plan lanes
69 Sunrise Boulevard & Kiefer Boulevard	Signal	Signal	↖↑↑↗	↘↓↓↖	↖↖↑↑↗	↖↗	↖↖↑↑↑↗	↘↓↓↓↓↖	↖↖↑↑↗	↖↖↑↑↗	Yes	No	No		
91 Grant Line Rd & Eagles Nest Rd/Sloughhouse Rd	Signal	Signal	↖↑↑↗	↘↓↓↖	Ψ	↖↗	↖↑↑↗	↘↓↓↖	↖↗	↖↗	Yes	No	No		
93 Grant Line Rd & Dwy/Wilton Rd	Signal	Signal	↖↑↗	↘↓↓↖	↖↗	↖↗	↖↑↗	↘↓↓↖	↖↗	↖↗	Yes	No	No		
97 Rock Creek Pkwy & Jackson Road	Signal	Signal	↖↑↗	↘↓↓↖	↖↑↗	↖↑↗	↖↑↗	↘↓↓↖	↖↑↗	↖↑↗	Yes	Yes	No		Maximum General Plan lanes

¹ High capacity intersections are defined in the Sacramento County General Plan and may include grade separations, additional turn lanes, and/or other features as deemed appropriate by the County.

² Alternative mitigations represent proposed mitigations beyond the General Plan, excluding high capacity intersections, as proposed by the County of Sacramento.

Table TC-65: CEQA Cumulative plus Jackson Corridor Projects Functionality Mitigations – Impacts Triggered by NewBridge Project

ID	Roadway	Segment		CEQA Cumulative + Jackson Corridor Projects				Mitigation	Impact after Mitigation?
		From	To	Travel Lanes	Facility Type ¹	Forecasted Volume	Functionality Impact? ²		
16	Douglas Rd	Zinfandel Dr	Sunrise Blvd	6	Arterial M	48,540	Yes ³	Widen to County standards ⁵	No
19	Eagles Nest Rd	Kiefer Blvd	Jackson Rd	4	Arterial M	15,420	Yes ³	Widen to County standards ⁵	No
25	Elder Creek Rd	South Watt Ave	Hedge Ave	4	Arterial M	54,480	Yes ³	Widen to County standards ⁵	No
26	Elder Creek Rd	Hedge Ave	Mayhew Rd	4	Arterial M	43,210	Yes ³	Widen to County standards ⁵	No
27	Elder Creek Rd	Mayhew Rd	Bradshaw Rd	4	Arterial M	25,620	Yes ³	Widen to County standards ⁵	No
33	Excelsior Rd	Florin Rd	Gerber Rd	2	Arterial M	14,300	Yes	Widen to County standards ⁵	No
39	Florin Rd	South Watt Ave	Hedge Ave	4	Arterial M	13,280	Yes ³	Widen to County standards ⁵	No
40	Florin Rd	Hedge Ave	Mayhew Rd	4	Arterial M	14,700	Yes ³	Widen to County standards ⁵	No
41	Florin Rd	Mayhew Rd	Bradshaw Rd	4	Arterial M	43,130	Yes ³	Widen to County standards ⁵	No
42	Florin Rd	Bradshaw Rd	Excelsior Rd	4	Arterial M	29,540	Yes ³	Widen to County standards ⁵	No
43	Florin Rd	Excelsior Rd	Sunrise Blvd	2	Arterial M	18,580	Yes	Widen to County standards ⁵	No
48	Fruitridge Rd	South Watt Ave	Hedge Ave	3	Arterial M	24,970	Yes ³	Widen to County standards ⁵	No
50	Grant Line Rd	White Rock Rd	Douglas Rd	4	Arterial M	40,500	Yes ³	Widen to County standards ⁵	No
70	Jackson Rd	Bradshaw Rd	Excelsior Rd	6	Arterial M	60,480	Yes ³	Widen to County standards ⁵	No
71	Jackson Rd	Excelsior Rd	Eagles Nest Rd	4	Arterial M	62,780	Yes ³	Widen to County standards ⁵	No
77	Kiefer Blvd	Bradshaw Rd	Happy Ln	6	Arterial M	56,300	Yes ³	Widen to County standards ⁵	No
78	Kiefer Blvd	Zinfandel Dr	Sunrise Blvd	3	Arterial M	37,390	Yes ³	Widen to County standards ⁵	No
123	Zinfandel Dr	Douglas Rd	Kiefer Blvd	4	Arterial M	31,690	Yes ³	Widen to County standards ⁵	No

Note: Gray shading indicates changes in travel lanes or facility type that the project is responsible to provide. For all roadway segments to be widened, the project is responsible to build the entire roadway to County standards.

Red text with light gray shading indicate project impacts.

¹ Substandard rural roads are defined as rural, 2-lane roadway segments with travel lanes narrower than 12 feet and/or roadside shoulders narrower than 6 feet.

² Functionality impacts are triggered when a substandard rural road increases over a threshold of 6,000 ADT, or for a roadway already above 6,000 ADT, increases by more than 600 ADT.

³ The potential for an impact exists should the project generate traffic volumes on the roadway exceeding 6,000 ADT, or increasing more than 600 ADT on a roadway already above 6,000 ADT, prior to the construction of roadway improvements.

⁴ Excluding the roadway segment that is within the developed community of Independence at Mather.

⁵ The functionality impact is mitigated by improving the roadway to County standards, including widening travel lanes to 12 feet and/or widening or providing paved shoulders to 6 feet.

DEVELOPMENT OF MITIGATION MEASURES

This transportation analysis includes the development of mitigation measures for those impacts that have been determined to exceed the level of service policies. Important considerations in the development of such mitigation measures are feasibility, consistency with the General Plan and secondary impacts. While most impacts could theoretically be mitigated by adding more traffic lanes, grade separations, new roadways, and other similar measures, such mitigation may not be consistent with public policy, and could result in secondary impacts to the environment and other users.

The Sacramento County General Plan Circulation Element provides guidance regarding the development of mitigation measures. In particular, the Circulation Element specifies the maximum number of through lanes for major County roadways. The General Plans of the other jurisdictions in the study area provide similar guidance. In general, for those impacts that exceed the level of service policies, mitigation measures have been developed for the widening of roadway segments to accommodate additional travel lanes up to the maximum number of lanes designated in the general plans.

Similarly, the County and other jurisdictions have typical intersection cross-sections. In general, on each approach to an intersection on a four-lane or six-lane roadway, the typical cross-section includes two left turn lanes, the appropriate number of through lanes (two or three), and a single right turn lane. Exceptions to the typical intersection geometry will be considered on a case-by-case basis and in special circumstances. Mitigation measures that exceed the typical intersection geometry will be noted as so.

In the development of mitigation measures, the number of roadway segment lanes and intersection lanes has been expanded, where appropriate, to reduce impacts. In most cases, the mitigation measure does not exceed the maximum number of roadway lanes identified in the General Plans nor exceeds the typical intersection geometry. In some cases, mitigation measures consistent with the General Plan and the typical intersection geometry may not reduce the impact consistent with the level of service policies. In these cases, an alternative mitigation measure may be considered that may necessitate an amendment to the County's General Plan or deviate from the typical intersection geometry. In other cases where the roadway is already constructed to the full General Plan designation or an intersection is already constructed to the standard intersection geometry and no alternative mitigation measure is feasible, no mitigation measure may be available to reduce the impacts.

HIGH CAPACITY INTERSECTIONS

The Sacramento County General Plan recognizes that at-grade intersections may not be able to accommodate all traffic demands along the County's busiest roadways. In selected locations, the General Plan designates High Capacity Intersections. A high capacity intersection would utilize special treatments to increase the capacity of the intersection to reduce congestion and travel delay. Since each intersection has unique travel movements, volumes and existing context sensitive conditions, the special treatments utilized at each high capacity intersection will vary to meet the specific needs

of each intersection. The range of special treatments is quite wide, ranging from the restriction of certain turning movements to various combinations that could include grade separating certain movements. Special treatments such as the following could be utilized at a high capacity intersection:

- Restricting turning movements
- Median U-turns
- Roundabouts
- Split intersections
- Quadrant roadway intersections
- Bowtie intersections
- Directional flyovers
- Center turn overpass
- Grade separated roundabout
- Diverging diamond grade separation
- Compact diamond grade separation
- Single point urban grade separation
- Traditional urban grade separation

Implementation of a high capacity intersection treatment could result in secondary impacts, including right-of-way, pedestrian and bicycle impacts, restrictions to local access, fiscal, and many others. As there are many possible solutions that would provide an acceptable LOS at any location, each with related impacts, this transportation analysis cannot identify specific high capacity intersection solutions. While high capacity intersections could theoretically mitigate any of the identified LOS impacts, the feasibility of such measures has not been established at this time.

JACKSON HIGHWAY CORRIDOR TRANSPORTATION MITIGATION STRATEGY

The Sacramento County General Plan Policy CI-9 establishes a Level of Service (LOS) to define an acceptable threshold for capacity and operational impacts for urban roadways and intersections, LOS E. The County would typically recommend that a development project be fully responsible for mitigating those roadway and intersection impacts identified in the project's environmental document. The resulting implication is that the General Plan policy establishes a specific LOS threshold and should a development project's vehicle trips exceed that threshold, the project would be responsible for fully funding the improvements to construct additional roadway capacity to accommodate the project's travel demand. This "you break it, you fix it" policy can lead to a disproportionate obligation on development projects to fund and implement transportation improvements. As an extreme example, a development project that results in a travel demand that is under the LOS threshold by a single vehicle trip would not be responsible for an impact and no improvements required, whereas, a development project that exceeds the LOS threshold by a single vehicle trip would be

responsible for an impact and required to fund and construct roadway capacity improvements that would result in an acceptable LOS. The past practice has been to require projects to fully fund or construct 100 percent of the mitigation identified in the Existing Plus Project scenario. In a scenario where multiple large master plans are geographically adjacent, substantial overlap exists for the responsibility of roadway improvements. As an example, each individual master plan may have the same responsibility to construct a single roadway improvement. Each individual master plan's Public Facilities Financing Plan would need to collect the necessary funding for 100 percent of the cost of that roadway. This results in higher transportation impact fees than may be necessary, and is economically infeasible.

The Department of Transportation is recommending an alternative approach in how the Jackson Corridor master plan projects would be responsible for mitigating transportation impacts. As mentioned previously, the joint traffic study considered the transportation impacts of all four individual projects combined with the cumulative impacts of previously approved and reasonably foreseeable projects and identified each project's fair share component of the travel demand on each study roadway segment and intersection. Instead of assigning full responsibility for improvements to only those projects that happen to exceed the LOS threshold, and no responsibility to projects that would utilize the existing capacity of a roadway, but not exceed the LOS threshold, each project would be financially responsible for their fair share component of the improvements to the transportation infrastructure necessary to support the proposed Jackson Corridor development projects. This alternative approach introduces a sense of equality among the Jackson Corridor Projects in funding needed transportation improvements and neither penalizes nor rewards the first project nor the last project that may receive approval.

DYNAMIC IMPLEMENTATION TOOL

The County has strived to ensure that the investments in transportation infrastructure keep up with the growth in land use development. In past years, the County has instituted improvement triggers associated with a specific amount of dwelling units. While this has been effective on smaller scale developments, it does not always dictate the appropriate timing and location of improvements to be constructed on large Specific Plans. Staff has been working on a new approach in identifying and requiring the construction of the necessary improvements that will be much more attuned to the actual location of the development to assure an efficient use of transportation funds that are focused on the improvements to support the development potential in an area as large area as the Jackson Corridor.

This new approach has led to development of the Dynamic Implementation Tool (Tool). For any interim amount of development that might be implemented in the Jackson Corridor, the Tool is capable of estimating the vehicle trips that would be generated, where those new vehicle trips would go, and if the addition of those new vehicle trips causes any roadway segments or intersections to operate at an unacceptable LOS. In this way, the Department of Transportation will be capable of monitoring and managing the transportation network proactively and will be able to assign improvements to

roadways and intersections in support of where the growth occurs in the Jackson Corridor. The Tool will assist the County in determining the most appropriate improvements as development proceeds over multiple decades.

The Tool is based on and is consistent with the traffic modelling conducted for the joint traffic study. While the traffic study determines the transportation impacts of full build out of the proposed land uses, a process that would likely occur over many decades, staff desired to have an understanding of the impacts incremental development would have on the transportation network. To provide this level of understanding, the proposed land uses for the Jackson Corridor master plan projects were subdivided into a network of smaller districts. Each district's size and location is such that the trip generating land uses within each district have the same trip distribution. In all, there are 64 districts in the Jackson Corridor development master plan projects, each with varying mixes of residential, employment and commercial land uses. The traffic modelling for the joint traffic study tracked the trip generation and trip distribution associated with each district. With this information, the specific transportation impacts of any amount of interim land use development can be determined.

The complete master list of transportation improvements has been identified in the Joint TIS' cumulative impact analysis. Cost estimates for the engineering and construction of the improvements have been completed, and each master plan's fair share has been calculated. These project-specific fair shares define a total funding responsibility for each master plan.

Each project's financial obligation for transportation improvements is identified based on the project-specific fair shares of its traffic impacts in the CEQA Cumulative Plus Project scenario. The transportation construction priorities in this part of the County are determined based on the Tool and the best available information at the time the Draft EIR is being prepared. This project-specific list of improvements will be constructed by each project proponent and/or the County with traffic impact fees paid by the project(s) and other available funding sources. The list of improvements represents a snapshot in time and may change over time as the location and amount of development in the Jackson Highway Corridor and adjacent master plan areas progresses. For example, if an improvement on an individual project's list has already been constructed by the time that project is moving forward with development, another improvement or improvements of equal value will be identified and assigned to the project. At each phase of development, County staff will define the transportation improvements and timing of their construction for the current phase of development based on the methodology described above.

FINANCING MECHANISMS TO IMPLEMENT MITIGATION REQUIREMENTS

Each of the Jackson Corridor Projects has a financial obligation to fund the cost of each of the improvements based on each project's fair share utilization of the improvement. The summation of each project's fair share costs for all the improvements establishes the total funding obligation for each of the four Jackson Corridor Projects in mitigating the project's impact to the transportation network. Each project's cost summation is

composed of hundreds of partial fair share funding components, but lacks the full funding of any particular improvement. In order to fully fund and implement Improvements to support the incremental development of each project and to address capacity and operational issues on the network, 80 percent of each project's funding obligation is intended to fully fund and construct a subset of the most needed improvements identified with each phase of development as outlined above. The remaining 20 percent of the funds are to be collected by the County and set aside to address unforeseen capacity and operational issues on other improvements on the master list of the transportation improvements at the Department's discretion.

Each project's specific transportation improvements are developed based on the currently proposed land use plans and phasing information at the time of Draft EIR preparation. Each project's Public Facilities Financing Plan must include financing mechanisms to ensure that the identified transportation infrastructure financial obligation is funded consistent with the mitigation strategy over the projected long-term buildout of the four master plans.

In addition, the Sacramento County Transportation Development Fee Program and other transportation infrastructure funding programs such as Measure A sales tax revenues and State and federal funding programs may also help offset the costs for improvements. In 1988, the County enacted the SCTDF program for new residential, commercial and industrial development. The SCTDF funds improvements to major roadway, transit, bicycle and pedestrian facilities needed to accommodate travel demand generated by new development. It includes six districts encompassing the entire unincorporated area, each with its own fee schedule. An update to the SCTDF is currently in process at the time of this writing.

In 2004, Sacramento County voters approved a 30-year extension to the Measure A transportation sales tax. In addition to the sales tax extension, voters adopted the SCTMF which establishes a uniform development fee to be collected by all Sacramento County jurisdictions on new building permits. SCTMF fees are updated annually.

If approved, the Jackson Corridor master plan projects will not likely begin development at the same time or develop to full buildout at the same pace. Initiation of individual developments and full buildout are subject to each project's financial constraints and market conditions. Therefore, it cannot be determined with certainty when specific roadway improvements will be made, and therefore impacts of the project to area roadways are ***significant and unavoidable***.

MITIGATION MEASURES FOR TRANSPORTATION IMPROVEMENTS

MITIGATION MEASURE TC-1: JACKSON CORRIDOR TRANSPORTATION MITIGATION STRATEGY PARTICIPATION

The Project shall participate in the implementation of the Jackson Corridor Transportation Mitigation Strategy **as adopted by the Board of Supervisors on July 23, 2019** by constructing or providing funding for its fair share of transportation improvements identified in the master list of cumulative improvements **(see Appendix TR-1)**. ~~The Dynamic Implementation Tool will be~~

used to identify improvements for each phase of the Project. Improvements shall be constructed concurrent with the each phase of the Project. **The applicants shall enter into an agreement at the time of project approval to use the Dynamic Implementation Tool (Tool) to identify improvements for each phase of the project. The applicant shall also agree that required improvements will be constructed concurrent with each development increment.** For projects or phases of development with less than 50 dwelling unit equivalents (DUEs), at the discretion of the Director of the Department of Transportation, specific improvements may not be required to be constructed, but rather, allow the mitigation revenue from the payment of the impact fees to accrue in the mitigation budget that the County will be managing to address unforeseen capacity and operations issues on the impacted improvements identified within the Transportation Mitigation Strategy. For projects or phases of development with more than or equal to 50 DUEs, the Project proponent has the option to advance fund the mitigation improvements for each phase of development or portions thereof, as identified by the Tool being the required improvements for that proponent's development, through the creation of a CFD or similar financial mechanism, provide a cash contribution upfront, and/or construct the required improvements.

At this time, the set of improvements assigned to the NewBridge Specific Plan is the following:

NewBridge Specific Plan Transportation Improvements			
Phase A Improvements			
Roadway Segments		From/To	Improvement Description
78	Kiefer Boulevard	Zinfandel Drive to Sunrise Boulevard	Construct 2-lane roadway based on Sacramento County Improvement Standards.
19.a	Eagles Nest Road	Kiefer Boulevard to Phase A Boundary/Northern intersection of Bridgewater Drive	Construct 2-lane roadway based on Sacramento County Improvement Standards.
Intersections			Improvement Description
69	Sunrise Boulevard	Kiefer Boulevard	Construct a 4x4 intersection improvement based on Sacramento County Improvement Standards.
Phase B Improvements			
Roadway Segments		From/To	Improvement Description
19.b	Eagles Nest Road	Kiefer Boulevard to Jackson Road	Construct 2-lane roadway based on Sacramento County Improvement Standards.
67	Jackson Road	South Watt Avenue to	Widen to a 4-lane roadway based on Sacramento County Improvement

NewBridge Specific Plan Transportation Improvements			
		Hedge Avenue	Standards.
70	Jackson Road	Bradshaw Road to Excelsior Road	Construct functional improvements for a full 2-lane width including shoulders based on Sacramento County Improvement Standards.
Intersections			Improvement Description
60	Jackson Road	Eagles Nest Road	Construct a 2x4 intersection improvement based on Sacramento County Improvement Standards.
23	Jackson Road	Hedge Avenue	Construct a 2x4 intersection improvement based on Sacramento County Improvement Standards.
16 (alt 2)	Jackson Road	South Watt Avenue	Construct a 4x4 intersection improvement based on Sacramento County Improvement Standards.
38	Jackson Road	Bradshaw Road	Construct a 2x4 intersection improvement based on Sacramento County Improvement Standards.
Project Development: Contribute \$1 million toward the Preliminary Engineering, Environmental Documentation, and Plans, Specifications and Estimate phases of the Douglas Road Extension from Mather Field Road to Excelsior Road.			
Phase C Improvements			
Roadway Segments		From/To	Improvement Description
72	Jackson Road	Eagles Nest Road to Sunrise Boulevard	Widen to a 5-lane thoroughfare based on Sacramento County improvement standards.
74	Jackson Road	Excelsior Road to Eagles Nest Road	Construct functional improvements for a full 2-lane width including shoulders based on Sacramento County Improvement Standards.
Intersections			Improvement Description
70	Jackson Road	Sunrise Boulevard	Construct a 2x4 intersection improvement based on Sacramento County Improvement Standards.

MITIGATION MEASURE TC-2: USE OF DYNAMIC IMPLEMENTATION TOOL

The applicant at the time of project approval shall acknowledge that Tthe project-specific list of improvements specified in Mitigation Measure TC-1 may be modified over time through the use of the Dynamic Implementation Tool at each phase of project development, subject to the approval of the Department of Transportation. As development proceeds, the Dynamic Implementation Tool will be used to select which improvements the project would be required to **fair-share fund and/or** construct if its previously assigned improvement or improvements have already been constructed, thus maintaining a degree of desired flexibility **as described in the Jackson Corridor Transportation Mitigation Strategy adopted by the Board of Supervisors on July 23, 2019.**

MITIGATION MEASURE TC-3: BICYCLE AND PEDESTRIAN SYSTEM IMPLEMENTATION

Future development within the NewBridge Specific Plan shall implement the proposed bicycle and pedestrian path/trail system as described in the NewBridge Specific Plan and Design Guidelines. **Before approval of any tentative map,** future projects with NSP shall be coordinated with Sacramento County to identify the design-level details of necessary on- and off-site pedestrian and bicycle facilities to serve the proposed development **and which would ensure bicycle and pedestrian safety.** These facilities shall be incorporated into subsequent projects and could include sidewalks, stop signs, standard pedestrian and school crossing warning signs, lane striping to provide a bicycle lane, bicycle parking, signs to identify pedestrian and bicycle paths, raised crosswalks, pedestrian signal heads, and all appropriate traffic calming measures as defined in the County's Neighborhood Traffic Management Program (NTMP). Sidewalks would be required as part of the frontage improvements along all new roadway construction in the Project vicinity in conformance with County design standards. Circulation and access to all proposed public spaces shall include sidewalks that meet Americans with Disabilities Act standards.

MITIGATION MEASURE TC-4: TRANSIT SYSTEM

The Project applicant shall coordinate with Sacramento County and Sacramento Regional Transit District (or other transit operators) to provide the additional transit facilities and services assumed in the transportation analysis, or a cost-effective equivalent level of transit facilities and services. Ultimate transit service consists of 15-minute headways during peak hours and 30-minute headways during non-peak hours on weekdays. The implementation of the transit routes and service frequency must be phased with development of the Project and the ultimate service will be required at full development **buildout** of the Project. **This shall be accomplished through the annexation to County Service Area 10 or formation of a transportation services district. Such annexation or formation shall occur prior to recordation of any final small lot subdivision map for the project.**

MITIGATION MEASURE TC-5: US 50 CORRIDOR

The Project will participate in one or more of these alternative improvements that could directly reduce the severity of the project's impact and/or provide operational benefits to the US-50 corridor in general. These improvements would be subject to Caltrans approval; therefore, the timing and implementation of the improvements are not guaranteed.

US-50 EASTBOUND ALTERNATIVE IMPROVEMENTS

~~To lessen the impact to the eastbound US-50 mainline between Stockton Boulevard and 59th Street, the project may pay a fair share toward the construction of:~~

- ~~• Ramp meter improvements (Caltrans ITS/OPS Project List)~~

~~To lessen the impact to the eastbound US-50 mainline between Bradshaw Road and Mather Field Road, and to the weave between Mather Field Road to Zinfandel Drive, the project may pay a fair share toward the construction of:~~

- ~~• Auxiliary lanes between Bradshaw Road and Mather Field Road (2035 SACOG MTP)~~
- ~~• An interchange modification of US-50 at Mather Field Road (2035 SACOG MTP)~~

~~To lessen the impact to the eastbound US-50 mainline between Zinfandel Drive and Hazel Avenue, the project may pay a fair share toward the construction of:~~

- ~~• Auxiliary lanes between Zinfandel Drive and Sunrise Boulevard (2035 SACOG MTP)~~
- ~~• Auxiliary lanes between Sunrise Boulevard and Hazel Avenue (2035 SACOG MTP)~~
- ~~• Widen Sunrise Boulevard to 6 lanes with special treatments, including intersection improvements at White Rock Road, Folsom Boulevard, Coloma Road, Gold Express Drive, and Gold Country Boulevard (2035 SACOG MTP)~~
- ~~• A new interchange at Rancho Cordova Parkway, including a 4-lane arterial from US-50 to White Rock Road (2035 SACOG MTP)~~
- ~~• Multi-modal corridor improvements and interchange improvements at Hazel Avenue (2035 SACOG MTP)~~

US-50 WESTBOUND ALTERNATIVE IMPROVEMENTS

~~To lessen the impact to the westbound US-50 on-ramp at Sunrise Boulevard, the project may pay a fair share toward the construction of:~~

- ~~• Auxiliary lanes between Sunrise Boulevard and Zinfandel Drive (2035 SACOG MTP)~~
- ~~• A transition lane from the Sunrise Boulevard slip-off-ramp to the Sunrise Boulevard slip-on-ramp (2035 SACOG MTP)~~

~~To lessen the impact to the westbound US-50 mainline between Mather Field Road and Watt Avenue, the project may pay a fair share toward the construction of:~~

- ~~Auxiliary lanes between Mather Field Road and Bradshaw Road (2035 SACOG MTP)~~
- ~~An interchange modification of US-50 at Mather Field Road (2035 SACOG MTP)~~

~~To lessen the impact to the westbound US-50 mainline between Watt Avenue and SR-51/SR-99, the project may pay a fair share toward the construction of:~~

- ~~Bus/HOV lanes from Watt Avenue to Downtown Sacramento (2035 SACOG MTP)~~
- ~~Replacement of existing communication lines with fiber optics to improve performance between SR-51/SR-99 and Watt Avenue (2013 10-Year SHOPP Plan)~~
- ~~Auxiliary lane between the NB Howe Avenue on-ramp and the SB Howe Avenue on-ramp (2035 SACOG MTP)~~
- ~~Ramp meter improvements (Caltrans ITS/OPS Project List)~~

To alleviate the impacts of the Jackson Corridor Developments, the Sacramento County Department of Transportation has consulted with Caltrans and they have identified the following improvements. The applicant shall provide a fair share contribution toward Caltrans' freeway facilities to the satisfaction of the Sacramento County Department of Transportation and Caltrans:

- **Pay fair share toward the future conversion of HOV lanes to Toll Lanes or a Reversible Lane along U.S. Highway 50 from I-5 to Watt Avenue.**
- **Pay fair share toward the U.S. Highway 50 Integrated Corridor Management for the deployment of various Intelligent Transportation System improvements along U.S. Highway 50 and the City of Rancho Cordova, and regionally significant corridors in Sacramento County and the City of Folsom for incident management (non-capacity increasing) [Caltrans ID SAC25113].**

17 SUMMARY OF IMPACTS AND THEIR DISPOSITION

SIGNIFICANT EFFECTS WHICH CANNOT BE AVOIDED

AESTHETICS

DEGRADATION OF EXISTING VIEWS AND VISUAL QUALITY

The Project will substantially change the existing viewshed due to the introduction of urban levels of development, and because of the substantial changes in the color and texture of the viewshed. The Project will introduce a wider array of color into an area that was previously quite uniform. Though this will increase the diversity of the view, the loss of continuity and the partial obstruction of Sierra views, significantly and negatively impacts the quality of the views. No mitigation is available.

NEW SOURCES OF LIGHT OR GLARE

Project lighting will introduce a substantial new source of light. These impacts are due to the placement of a large urban development in an area currently dominated by open space; the impact is not due to any particular feature or features that could be changed.

AGRICULTURAL RESOURCES

CONVERSION OF FARMLAND

~~The Project on a singular level the Project does not cause substantial farmland impacts,~~

The Project does not contain lands designated as Prime Farmland, and the land does not support intensive agricultural investment. The Project will result in the loss of 8.6 acres of Farmland of Statewide Importance and 75.2 acres mapped by the DOC as Farmland of Local Importance, which exceeds the 50-acre significance threshold established by the County. Mitigation is required but the impact remains significant and unavoidable. The loss of grazing land due to the project in conjunction with other cumulative growth in the vicinity is cumulatively significant.

AIR QUALITY

IMPLEMENTATION OF THE PROJECT COULD CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF AIR QUALITY PLANS

The Project will result in significant emissions of ozone precursors, which SMAQMD has indicated can obstruct successful implementation of the State Implementation Plan (SIP). The current SIP assumed the Project area would remain industrial and agricultural, and thus even if the Project's emissions of ozone precursors were not significant, the Project would still conflict with implementation of the SIP.

CONSTRUCTION AND OPERATIONAL EMISSIONS

The Project will generate long-term emissions of ozone precursors (ROG and NO_x). The Project will substantially exceed the operational emissions threshold of 65 pounds per day. Per General Plan Policy AQ-4, the Project is required to prepare an Air Quality Management Plan (AQMP) to reduce these emissions by 15 percent. However, the SMAQMD required the Project to reduce emissions 35 percent. Even with the reduction afforded by implementation of the AQMP, the Project would still exceed the daily operation emissions thresholds. Further, construction and operational particulate matter contribute significantly to the cumulative production of these air pollutants.

BIOLOGICAL RESOURCES

WETLANDS AND WATERS OF THE U.S. AND ASSOCIATED DEPENDENT SPECIES

The Project site contains over 20 acres of wetlands and waters of the U.S. Further, the Project site is fully within the Mather Corps Recovery Area for vernal pool species and partially within the critical habitat area for Sacramento Orcutt grass. The Project has been designed to preserve larger groupings of wetland features accounting for approximately 80 percent of the wetlands on-site. However, approximately 4.86 acres will be directly impacted by development. Singular and cumulative losses of wetlands and waters of the U.S. and all species dependent on this habitat type is significant within the Mather Corps Recovery Area.

CLIMATE CHANGE

The proposed Project would generate greenhouse gas emissions that would contribute to climate change. While the Project's individual impact can be reduced to a less-than-significant level, climate change is itself a cumulative phenomenon. As areas around the world continue to develop and urbanize, associated mobile and stationary greenhouse gas emissions will continue to increase.

HYDROLOGY

EXPOSURE TO FLOOD HAZARDS OFF-SITE

The Project is designed so that peak flows are attenuated to pre-project conditions; however, there will be more volume leaving the site due to the increase in impervious surfaces. The Project would add to the volume of water which would contribute to an existing floodplain downstream. Additional structures may become flooded or it may increase the duration of flooding to structures already inundated. Even with payment into the County Beach Stone lakes mitigation fund the impact remains significant.

NOISE

SUBSTANTIAL INCREASE IN EXISTING AMBIENT VOLUMES

The Project would result in a substantial increase in existing ambient noise for multiple roadway segments that include receptors which would be impacted. Noise volumes

would increase by 11 dB on Eagles Nest Rd. between Kiefer Blvd. and Jackson Rd., and increase by 8 dB on Eagles Nest Rd between Jackson Rd and Grant Line Rd. The remaining significant off-site roadway impacts are along Jackson Rd. and Kiefer Blvd. along the Project boundaries. These roadway segments do not have existing sensitive receptors. Based on the existing noise environments, these are substantial increases. Noise barriers are not appropriate along these stretches of road given the proximity of existing residences to the roadway frontage. Thus, no further improvements can be made to reduce impacts.

PUBLIC UTILITIES

In the cumulative energy supply analysis, the development of the Jackson corridor would result in a substantial increase in the regional demand for energy and the subsequent need to construct supportive infrastructure. The construction of one new bulk substation is required and until specific site and design plans are developed, it is unknown whether specific impacts related to air quality, biological resources, greenhouse gas emissions, and noise can be reduced.

TRAFFIC

The Project results in significant and unavoidable impacts to the following facilities in the existing condition:

- *Intersections:* None
- *Roadway Segments:* Folsom Boulevard from Howe Avenue to Jackson Road, Howe Avenue from US 50 to Folsom Boulevard
- *Freeway Segments:*
 - Eastbound US 50: Stockton Boulevard to 59th Street, Bradshaw Road to Mather Field Road
 - Westbound US 50: Mather Field Road to Bradshaw Road, Bradshaw Road to Watt Avenue, Watt Avenue to Howe Avenue, Howe Avenue to 65th Street, 65th Street to 59th Street, 59th Street to Stockton Boulevard, Stockton Boulevard to SR 99 / SR 51
- *Freeway Ramps:*
 - Eastbound US 50: Northbound Mather Field Road Slip Entrance, Zinfandel Drive Exit
 - Westbound US 50: Sunrise Boulevard Entrance

These facilities cannot be expanded sufficiently to offset the impact, as neither Caltrans nor the City of Sacramento have identified any plans or secured any funding for such a project. In the case of the roadway facilities, a General Plan Amendment would be required to increase the allowed facility size, and significant right-of-way would need to be acquired, which would impact existing businesses. For these reasons, no feasible mitigation exists to offset the impacts.

The Project results in significant impacts to the following facilities in the cumulative condition:

- *Intersections:* Sunrise Boulevard and Douglas Road, Rock Creek Parkway and Jackson Road
- *Roadway Segments:* Jackson Road from 14th Avenue to Rock Creek Parkway, Jackson Road from Rock Creek Parkway to Aspen 1 Driveway, Jackson Road from Excelsior Road to Collector JT-3, Kiefer Boulevard from Sunrise Boulevard to Rancho Cordova Parkway
- *Freeway Segments and Ramps:* Same as described above in the existing condition.

For the same reasons discussed for existing condition impacts, feasible mitigation does not exist to improve operations to acceptable levels. In addition, the Project will result in significant impacts to intersections and roadway/freeway segments which do not lie wholly within the jurisdiction of Sacramento County. While in most cases mitigation has been identified which would reduce impacts to less than significant levels, Sacramento County does not have the land use authority to assure that non-County facilities will be constructed.

IMPACTS THAT REMAIN POTENTIALLY SIGNIFICANT

IMPACTS ASSOCIATED WITH THE CONSTRUCTION OF OFF-SITE INFRASTRUCTURE IMPROVEMENTS

The Project may need to construct off-site infrastructure associated with water supply, sewer and roadways. Since the timing and extent of improvements are not currently known, impacts were discussed programmatically and additional CEQA analysis would be required. The placement of new infrastructure will likely be in areas that are unimproved. Impacts associated with air quality, biological resources and cultural resources are likely and remain potentially significant.

SIGNIFICANT EFFECTS WHICH COULD BE AVOIDED WITH IMPLEMENTATION OF MITIGATION MEASURES

AGRICULTURAL RESOURCES

CONVERSION OF FARMLAND

~~The Project does not contain lands designated as Prime Farmland, and the land does not support intensive agricultural investment. The Project will result in the loss of 8.6 acres of Farmland of Statewide Importance, 75.2 acres of Farmland of Local Importance, which exceeds the 50-acre threshold established by the County; mitigation is required. The Project will not result in substantial conflicts with existing agricultural use of adjacent lands, though mitigation requiring deed notices is recommended.~~

AIR QUALITY

CONSTRUCTION ACTIVITIES WOULD INCREASE NO_x EMISSIONS

CalEEMod was utilized to estimate the construction emissions associated with NO_x. The Project does have the potential to result in significant impacts throughout most of the life of the Project. The Project will be required to conform to the SMAQMD mitigation and abatement requirements which are in effect at the time of construction are implemented. With application of these measures, construction related NO_x emissions will be reduced to less than significant. This will offset Project emissions.

BIOLOGICAL RESOURCES

BIRD SPECIES

The following special status bird species are identified as having potential to occur on or near the Project site: burrowing owl, Cooper's hawk, ferruginous hawk, golden eagle, grasshopper sparrow, northern harrier, Swainson's hawk, tricolored blackbird, and white-tailed kite. Excluding the West Planning Area and the open space preserve east of Eagles Nest Road, the Project will result in the conversion of 540 acres of grassland habitat to urban uses. Except for the tricolored blackbird, all of the species listed above use grasslands for foraging and/or nesting and will be impacted by Project development. The Swainson's hawk is the only Threatened species, and mitigation is included requiring 1:1 habitat mitigation for the conversion of agricultural lands. Mitigation of habitat for the benefit of the Swainson's hawk will also provide habitat compensation for other bird species.

The Project site contains trees that may provide suitable nesting habitat. Pre-construction nesting surveys have been included for tree- and ground-nesting raptors. Pre-construction nesting surveys are also included for burrowing owl (which is ground-nesting) as there is suitable habitat present. Finally, the West Planning Area has recorded observations of tricolored blackbird. While no construction is proposed in this Planning Area, pre-construction nesting surveys for those areas which are within 300 feet of suitable habitat, such as cattail or blackberry, is included as mitigation.

REPTILE AND AMPHIBIAN SPECIES

The Project site supports suitable habitat for the Western pond turtle and Western spadefoot toad. According to biological surveys conducted for a portion of the Project site, western pond turtles were observed in the existing settling ponds surrounding the Rendering Plant. Pre-construction surveys and coordination with the CDFW will ensure impacts to individual species are less than significant.

PLANT SPECIES

The Project site was surveyed for special status plant species in 2003 and 2010 by North Fork Associates, Inc, and in 2012 by Salix Consulting, Inc. The special status plant surveys revealed only one special status species present on the Project site: legener. The locations of the specimens are within the proposed open space areas.

Pre-construction surveys and coordination with appropriate agencies will ensure impacts to individual species are less than significant.

NATIVE AND NON-NATIVE TREES

The Project site was surveyed by Sierra Nevada Arborists in 2009. The tree inventory identified 697 trees on the portion of the Project site owned by East Sacramento Ranch. Most of the trees are non-native trees used to screen the Rendering Plant. There are a few trees located near the corner of Jackson Road and Eagles Nest Road (South Planning Area).

There are two native oak trees located near the corner of Eagles Nest Road and Kiefer Boulevard which may have to be removed to accommodate development. Mitigation is recommended to either provide for the protection and preservation of native oak tree resources, or to compensate for the loss of healthy oak trees consistent with General Plan policies.

The remaining trees, all non-native, will be removed to accommodate development. The County strives to maintain and grow the urban forest. To assist this effort, the Development Code requires the placement of new trees on every residential lot, commercial landscaping, and parking lots. The total tree canopy created on residential lots would amount to 7.8 acres; double what would be removed for development and this is not to include the other land uses and landscape frontages.

CLIMATE CHANGE

GENERATION OF GREENHOUSE GAS EMISSIONS

The Project's emissions will not exceed the 2020 thresholds established by the County for GHG emissions. However, recently implemented legislation requires the State to achieve further GHG reductions, 40% below 1990 levels. In response to this State mandate, the draft County standards reflect updated target emission levels per sector. Because the Project will not be fully operational by 2020, it can be expected that the Project would have to achieve the 2030 greenhouse gas emissions target in order to effectively contribute to the State goal to reduce emissions to 40% below 1990 levels. Compared to the 2030 target, the Project greenhouse gas emissions exceed the draft standard. Mitigation is included for the Project to demonstrate that appropriate actions have been taken to reduce project-wide GHG emissions. Therefore, impacts associated with GHG emissions would be less than significant with mitigation.

CULTURAL RESOURCES

The Project contains eleven recorded resources within the study area, although none have been determined to be significant resources. However, there remains a potential to encounter buried or as yet undiscovered historical resources, archaeological resources, tribal cultural resources, or human remains during land clearing and construction work. Mitigation is included to ensure that such resources are treated appropriately if discovered.

HAZARDOUS MATERIALS

PRESENCE OF ON-SITE HAZARDOUS MATERIALS OR CONDITIONS

The Sacramento Rendering Company has been operating on the Project site since 1955. Plant operations involve maintenance of equipment and discharge of wastewater effluent into settling ponds. While the Plant will be removed prior to placement of housing, mitigation has been included to conduct further soil testing in these areas and remediate if necessary prior to construction activities.

HYDROLOGY

EXPOSURE TO FLOOD HAZARDS ON-SITE

The hydrology analysis contained in the Drainage Master Plan demonstrates that the proposed land uses on-site will not be exposed to flooding; however, there remains some uncertainty regarding future precipitation frequency and intensity due to climate change. Changes in precipitation frequency and intensity may result in an increase in the floodplain on the project site and flooding of structures. This impact is potentially significant, but can be reduced to less than significant with implementation of the recommended mitigation to conduct subsequent hydrology analysis to incorporate assumptions for precipitation changes.

NOISE

ON-SITE TRAFFIC NOISE SOURCES

Traffic generated by the Project will increase ambient noise levels on Jackson Road, Eagles Nest Road and Kiefer Boulevard such that General Plan standards are exceeded on the lots that abut these roadways. The noise impact can be mitigated by increasing lots sizes, reconfiguring lots such that houses are an appropriate distance from the road, or installing a sound wall of appropriate height. Upon implementation of the mitigation measure, impacts would be less than significant.

ON-SITE COMMUNITY AND STATIONARY NOISE SOURCES

The Project includes eight parks located throughout the planning area and several non-residential uses. All of these uses could generate noise in excess of General Plan Noise Element. Parks and schools are afforded an exemption to the Sacramento County Noise Ordinance and in general the design of the park or school place the highest generating noise sources farthest from the sensitive receiver. Further, the Noise Ordinance details requires mechanical equipment, pumps, fans, air conditioning, and other similar noise generating devices to fall below the 60 dBA at the neighboring property. Though existing noise regulations and the Development Code will likely avoid significant noise exposure, there is not enough detail to confidently make that conclusion. Mitigation is recommended to ensure stationary source will not expose people to noise in excess of standards.

PUBLIC UTILITIES

CONSTRUCTION OF INFRASTRUCTURE

In order to deliver utility service to the Project site, regional and on-site infrastructure improvements will be required. All utility construction within the Project boundary is with the area contemplated for development and adherence to other topical mitigation measures associated with air quality, biological resources, and cultural resources will ensure impacts are less than significant. Many of the off-site, or regional, infrastructure improvements have been contemplated in the utility infrastructure master plans, or in other approved and proposed specific plans or master plans. For those projects where physical construction impacts have been identified, water supply and sewer, the developer will have to comply with those project specific mitigation requirements.

Construction of electrical or natural gas infrastructure will be completed by respective companies – SMUD and PG&E. These agencies would prepare CEQA documents and implement any mitigation requirements including compliance with the SSHCP. Potentially significant impacts can be reduced to less than significant.

TRAFFIC AND CIRCULATION

FACILITY IMPACTS

The Project results in significant existing condition impacts to two County intersections, four County roadway segments, one City of Elk Grove roadway segment, two City of Rancho Cordova roadway segments, two City of Sacramento roadway segments, and bicycle and pedestrian facilities. The Project results in significant cumulative condition impacts to six County roadway segments, two City of Rancho Cordova roadway segments, four County intersections, and two City of Rancho Cordova intersections. For all of the facilities within Sacramento County, mitigation has been provided which would reduce impacts to less than significant. Mitigation is also available and has been described for most of the facilities not within County jurisdiction, which would reduce impacts to less than significant if their construction could be assured (refer to the Significant Effects Which Cannot Be Avoided section).

EFFECTS FOUND NOT TO BE SIGNIFICANT

AGRICULTURAL RESOURCES

SUBSTANTIAL CONFLICT WITH EXISTING, ADJACENT AGRICULTURAL USES OR WILLIAMSON ACT CONTRACTS

There are agricultural-residential uses west of Eagles Nest Road, mining uses to the south and proposed urban development to the north and east of the Project site. None of these areas are currently subject to intensive farming practices. While there are no significant conflicts between agricultural and non-agricultural uses, mitigation is

recommended to notify buyers of properties adjacent to agricultural properties that they could be subject to inconvenience or discomfort resulting from accepted farming practices. Overall, given the lack of intensive farming and planned, future urbanization, impacts associated with conflicts with existing adjacent agricultural uses are less than significant.

There is one existing Williamson Act Contract (72-AP-026) within the Project limits. The landowner initiated the non-renewal process for this contract in January 2012. Under the nonrenewal process the contract will expire in the year 2022, and the land will no longer be subject to Williamson Act contract restrictions. Since the Project does not include a rezone, the Project is consistent with the provisions of the Williamson Act.

AIR QUALITY

PROJECT OPERATION WOULD GENERATE CO EMISSIONS

Twenty-four intersections would either be subject to degradation of LOS to a level of service E or worse, or add vehicles to an intersection already operating at an LOS of E or worse. Examining these facilities as compared to the SMAQMD screening methodology for CO impacts: none of the affected intersections would result in an hourly traffic volume of more than 31,000 vehicles; a review of area topography indicates that these intersections are located in open areas (not in locations where vertical or horizontal mixing would be limited); and the Project would not substantially change the mix of vehicle fleets typical to Sacramento County at these intersections. Project traffic would not cause threshold exceedance.

PROJECT OPERATION WOULD RESULT IN TOXIC AIR CONTAMINANT (TAC) EMISSIONS

Project-level details are unavailable at the master planning stage, but it can be assumed that TAC generating stationary sources could be constructed within the Project in area designated for non-residential uses. The Project will not expose existing sensitive receptors to stationary source TAC. Within the Project, new stationary source TAC generators could be placed in proximity to sensitive receptors; however, there are Policies in place to buffer these uses.

Another TAC source is high volume roadways. No roadways surrounding the Project meet the definition of a high volume roadway. The Project will not expose sensitive receptors to a substantial risk related to mobile-source TAC exposure.

GEOLOGY AND SOILS

Multiple topics were examined: soil erosion, expansive soils, naturally occurring asbestos, mineral resources, and geologic hazards. The Project has the potential to increase soil erosion due to disturbance of on-site soils. There are existing regulations in place to address both of these issues, including the Sacramento County Land Grading and Erosion Control Ordinance, the Uniform Building Code, and the California Building Code. The Project site is not considered likely to include asbestos-containing

soils, and soil testing found no evidence of naturally occurring asbestos. While there are mapped mineral resources on the site, it is a small area and it is not lucrative to mine. Seismic ground-shaking hazards are low in Sacramento County, and existing building codes require adherence to seismic design standards.

HAZARDOUS MATERIALS

ACCIDENTAL RELEASE DUE TO TRANSPORT, USE, OR DISPOSAL OF HAZARDOUS MATERIALS

Standard construction activities require the use of hazardous materials such as fuels, oils, and solvents; such materials would only pose a hazard if they are improperly used, stored, or transported through either upset conditions or mishandling. These hazards are common household and commercial materials used by the public and so will most likely be used during the operation of the Project as well. Because construction and operation of the Project would implement and comply with federal, state, and local hazardous materials regulations and codes monitored by the state and/or local jurisdictions, impacts related to creation of significant hazards for construction workers, employees within the Project area, and the general public through routine transport, use, and disposal of hazardous materials would be unlikely; this impact is less than significant.

PROXIMITY TO KNOWN CONTAMINATED SITES

The Project is located within one mile of nine agency-listed contaminated sites. All sites have a close status and do not result in a significant hazard to the public or environment. The former Mather Air Force Base is over one mile from the Project site. The Base is a superfund site currently undergoing groundwater remediation. The extent of the contaminated groundwater plumes are two miles to the northwest of the Project site and are migrating to the southwest, away from the Project site. The project would not be exposed to a significant hazard related to contaminated groundwater.

WATER SUPPLY WELLS/PRIVATE SEPTIC SYSTEMS

There are existing private water supply wells and septic systems within the Project site. Adherence to State and local regulations to properly remove or abandon these systems will ensure impacts are less than significant.

ASBESTOS OR LEAD EXPOSURE THROUGH DEMOLITION OF EXISTING STRUCTURES

The Project will require demolition of several structures constructed prior to 1978 and may contain asbestos and lead based paint. Procedures are already in place requiring applicants to survey for and abate any asbestos. Additionally, workers are required to be informed about the potential exposure to lead and that employers must have a Lead Compliance Plan in place that provides a protocol for worker safety, transport, and disposal of the hazardous material.

EXPOSE PEOPLE OR STRUCTURES TO WILDLAND FIRE

The Project will create new urban development with open space preserves. Additionally, there are existing and proposed open space preserves bordering the site. Prescribed burns are often used in preserves to manage weeds and invasive species. The Project is served by Sacramento Metropolitan Fire District and an additional Fire station site is dedicated within the Project. The Project will not significantly expose people or structures to wildland fire.

HYDROLOGY AND WATER QUALITY

The Project includes a Drainage Master Plan which evaluates the on- and off-site floodplains, the potential for hydromodification of stream channels, and the adequacy of existing and planned stormwater infrastructure. The existing floodplains on the site will be within the Avoided Areas where no development will occur, and detention basins have been included to ensure that the post-Project flow rates do not exceed pre-Project rates. Put in general terms, the design to prevent hydromodification is a detention basin outlet control structure which retains all stormwater runoff generated up to a 10-year event and slowly releases the runoff through a very small outlet. The Project also includes stormwater infrastructure which is sufficient to handle flows.

Compliance with adopted Ordinances and standards will ensure that future development projects implemented as a result of Project approval will not cause violation of a water quality standard or waste discharge requirement, result in substantial erosion or siltation, and will not result in substantial increases to polluted runoff associated with construction. Compliance with the County Stormwater Ordinance, implementation of Low Impact Development Standards, and implementation of the Drainage Master Plan will ensure that development of the site will not alter the course of local waterways in a manner that results in substantial erosion or siltation, will not cause violation of a water quality standard or waste discharge requirement, and will not result in substantial increases to polluted runoff.

LAND USE

CONFLICT WITH ADOPTED LAND USE PLANS

The Project is requesting entitlements to change the Project site General Plan and Vineyard Community Plan land use designation. While the Project currently conflicts with the existing designation, upon approval of the requested entitlements, the Project would be consistent with land use plans. The Project uses are compatible with surrounding existing and proposed land use plans, and would not result in substantial conflicts with land use plans designed to avoid environmental effects.

CONFLICT WITH GENERAL PLAN POLICIES RELATED TO GROWTH INDUCEMENT

The Project is surrounded on three sides by approved or draft land use plans. Extension of infrastructure to the site does have the potential to reduce some constraints to growth; however, all of these areas are being considered for growth even

in absence of the Project. The Project will not cause substantial growth inducement around the site; growth in this area is already contemplated.

CONFLICT WITH GENERAL PLAN POLICIES RELATED TO PUBLIC SERVICES AND UTILITIES

Compliance with General Plan Policies LU-13, LU-66, LU-110, and LU-123 is intended to ensure that minimum service standards for public services and utilities are met. The Project includes a facilities financing plan which was submitted to all of the applicable service entities for review and approval. Long-term funding sources have been identified for the maintenance of public services. The Project will not result in any substantial environmental impacts related to conflict with General Plan policies which pertain to public services or utilities.

CONFLICT WITH GENERAL PLAN POLICIES RELATED TO LAND USE COMPATIBILITY

Policy LU-19 states that appropriate buffers should be placed between incompatible uses, and Policy LU-94 states that new development should be compatible with existing development. The aggregate mine south of the Project site has estimated the completion of mining operations by 2033 and return to agricultural land. The agricultural land surrounding the remaining Project boundary have existing or is currently planning development to covert to urban uses.

DIVISION/DISRUPTION OF AN ESTABLISHED COMMUNITY

The division or disruption of an established community is an impact considered by CEQA. Case law has established that a project must create physical barriers within the established community in order to be considered under this impact category. The project is bounded by four established major roadways and is not proposing changes to the alignment of these roads; therefore, the project will not disrupt or divide an established community.

DISPLACEMENT OF HOUSING

There is no existing housing on the Project site that will be displaced by the project, nor would the project uses cause the displacement of nearby housing. The site is not included in the affordable housing inventory as part of implementation of the Sacramento County General Plan Housing Element.

NOISE

CONSTRUCTION WOULD TEMPORARILY INCREASE NOISE LEVELS

It is acknowledged that construction related noise could be a nuisance to sensitive receptors; however, this increase in noise is short-term and noise standards are intended to address long-term sources of noise. Construction-related noise would not result in a permanent increase in ambient noise. Though noise volumes would undergo short-term increases, the existing construction ordinance is designated to avoid

significant community effects through the restriction of nighttime and weekend disturbances.

MATHER AIRPORT

The project site is located approximately 3.6 miles southeast of Mather Airport. Although the project site is located outside the 60 dB CNEL contour of Mather Airport, the project site is located within the overflight path of approaching and departing aircraft that fly below 3,000 feet above ground level. During an average one-month time period, a very small percentage of total departure (two percent) and arrival (eight percent) flights are passing over the project site and there is less than 15 percent of the total touch-and-go flights passing over the project site. Though the Project will not expose people to excessive aircraft noise, continued and future use of Mather Airport has the potential to be a nuisance and generate objections by residents and other sensitive receptors. An Avigation Easement to inform future potential residential buyers will be required to help reduce the impact to Mather Airport from new complaints by future residents or other sensitive receptors of the proposed Project; these various conditions are included as mitigation.

PUBLIC SERVICES

The public services analysis concludes that the Project provides for adequate public services and will not result in substantial adverse physical impacts associated with the construction of facilities, or result in a service demand that cannot be met by existing or reasonably foreseeable service capacity. In summary, service needs are as follows:

- One fire station, which will require a truck company, an engine company, and a medic company. This is accommodated within the Project.
- A total of six new Sacramento County Sheriff's Department staff.
- The Project has dedicated one elementary school site (9.4 acres). In total the project will require 1.2 elementary schools but only about 27/24 percent of a middle/high school, with student generation of 1,008 in grades K – 6 (elementary school), 315 in grades 7 – 8 (middle school), and 528 in grades 9 – 12 (high school).
- Approximately 41 acres of parkland is required, which is accommodated within the Project.

PUBLIC UTILITIES

There is adequate water supply, sewage disposal capacity, and energy supply to serve the Project, nor will provision of these utilities result in substantial impacts to the sustainability of groundwater resources or to groundwater recharge. The projected annual demands and system capacities are as follows:

- Water demand is 1,380 acre feet per year (AFY), while Zone 40 supply is 185,500 AFY.
- Sewage disposal demand is 1.35 million gallons per day (mgd) average dry weather flow and the peak wet weather flow is 1.67 mgd while the Sacramento Regional Wastewater Treatment Plant has remaining capacity of approximately 40 mgd average dry weather flow.
- Electricity demand is 28,000,000 kilowatt hours annually, which is a fraction of the total 10,850.2 million kilowatt hours delivered in Sacramento County in 2016.
- Natural gas demand is 691,000 therms annually, which is a fraction of the 286.9 million therms delivered in Sacramento County in 2010.

As a signatory to the WFA and a member of the Sacramento Central Groundwater Authority (Groundwater Authority), SCWA recognizes the Water Forum-defined long-term sustainable average annual yield of the underlying groundwater basin of 273,000 AFY. The additional groundwater draw caused from implementation of the proposed Project will not result in exceedance of the agreed-upon sustainable yield of 273,000 AFY.

TRAFFIC AND CIRCULATION

FACILITY IMPACTS AND CONFLICT WITH PLANS

Existing condition Project impacts will not be substantial for 158 of the 164 studied intersections, 250 of the 261 studied roadway segments, 11 of the 20 studied freeway segments, and 37 of the 40 studied freeway ramps. Cumulative condition Project impacts will not be substantial for 156 of the 164 studied intersections, 249 of the 261 studied roadway segments, 11 of the 20 studied freeway segments, and 37 of the 40 studied freeway ramps.

IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA Guidelines Section 15126.2 requires the evaluation of significant irreversible environmental changes, stating that “uses of nonrenewable resources during the initial and continued phases of a proposed project may be irreversible since a large commitment of these resources makes removal or nonuse thereafter unlikely.” This section of the EIR evaluates whether the project would result in the irretrievable commitment of resources, or would cause irreversible changes in the environment.

Construction of various Project elements will require irretrievable commitments of a variety of finite natural resources, including aggregates, petrochemicals, and metals. These commitments will occur both as direct and indirect impacts of the Project. Direct impacts include the consumption of fuel by the construction fleet and equipment, the consumption of fuel as part of vehicle usage originating from and entering the

completed Project, the use of metals in the constructed buildings, and the use of aggregates in the constructed buildings and paved surfaces. Indirect impacts include the consumption of fuel and other resources to produce the materials used in construction. The Project will also require the commitment of potentially renewable, but limited natural resources such as lumber, other forest products, and water.

The Project includes design features whose purpose is to reduce the usage of energy, water, and construction materials (see the Project Description chapter). CEQA Guidelines Appendix F focuses particularly on the “inefficient, wasteful and unnecessary consumption of energy.” As discussed in the Climate Change chapter, the Project commits to all electric appliances, water-efficient landscapes, water efficient irrigation. As described in the Public Services chapter, it is anticipated that 50% of the construction debris and 70% of all household/commercial waste will be diverted from the landfill for recycling. For these reasons, the investment of additional resources in the project would be less than the level of investment historically required for projects of this scale and type.

18 CUMULATIVE AND GROWTH INDUCING IMPACTS

INTRODUCTION

The CEQA Guidelines section 15355 defines a cumulative impact as “two or more individual effects which, when considered together, are considerable”. An individual effect need not itself be significant to result in significant cumulative effects; the impact is the result of the incremental effects of the Project combined with the effects of “other closely related past, present, and reasonably foreseeable probable future projects.” CEQA does not define “closely related”, but the Code of Federal Regulations (40 CFR 1508.25) indicates that a “closely related” project is one which is automatically triggered by the Project; one which cannot proceed without the Project first proceeding (mutual dependency); one which requires the Project for justification or is an interdependent part of the same action; or one which is a similar action with common timing, geography, and other features.

The requirements for a cumulative analysis are described in CEQA Guidelines Section 15130. A cumulative analysis “need not provide as great detail as is provided for the effects attributable to the project alone.” The analysis should focus on analyzing the effects of the Project to which other projects contribute, to the extent practical and reasonable. These other projects may be identified either through the provision of a list of cumulative projects, or via a summary of projections contained in an adopted General Plan or an adopted EIR. This EIR uses a combination of the two methods, using projections contained in adopted General Plans and related planning documents, as well as known major reasonably foreseeable other projects.

The significance criteria used for analysis are the same as those used throughout the topical chapters of the EIR. Section 15130(a)(3) states that a Project’s contribution to an impact is “less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures”.

GROWTH INDUCING IMPACTS

GROWTH INDUCEMENT

The CEQA Guidelines identify several ways in which a project could have growth-inducing impacts (CEQA Guidelines Section 15126.2). Growth inducement is when a project fosters economic or population growth in the surrounding environment, which may be directly or indirectly caused. For instance, a project may generate significant additional employment opportunities, which in turn generates the construction of additional housing to bring additional residents near this employment center. Indirect growth inducement is also possible, if a project removes obstacles to population growth, or encourages and facilitates other activities that are beyond those proposed as part of the project. For instance, a project may upgrade and increase the capacity of a major

water pipeline, which then allows additional development in the area that had previously been constrained by lack of additional infrastructure capacity. Aside from infrastructure, other indirect examples include altering the availability of developable land and precedent-setting actions related to local government growth policies.

Growth inducement may not be considered necessarily detrimental, beneficial, or of significance under CEQA. Induced growth is considered a significant impact only if it directly or indirectly affects the ability of agencies to provide needed public services or if it can be demonstrated that the potential growth, in some other way, significantly affects the environment. The paragraphs below analyze the Project's potential to induce growth by removing a barrier to growth, by setting a land use precedent, or by fostering additional development.

REMOVING BARRIERS TO GROWTH

The Project includes the extension of public infrastructure, including water lines and sewer lines. As outlined in the Public Utilities chapter regional infrastructure to serve the surrounding area has been identified. Utility extensions are in-place or planned for expansion to serve the area developing east of Sunrise Boulevard and south of Douglas Road (the Sunridge Specific Plan, the Suncreek Specific Plan, and the Arboretum development) and the area developing north of Kiefer Boulevard (Mather Field Specific Plan and the Mather South Master Plan).

Extension of infrastructure to the site does have the potential to reduce some constraints to growth; however, all of these areas are being considered for growth even in absence of the Project. The Project will not cause substantial growth inducement around the site; growth in these areas is already contemplated.

LAND USE PRECEDENT AND FOSTERING DEVELOPMENT

The Project could set a land use precedent or otherwise foster development by expansion of the UPA to include the Project area. However, as stated previously, there are approved or draft land use plans surrounding the Project on three sides. All properties to the north and east are within the UPA, and the properties to the west are adjacent to it. Only properties to the south, mining operation and natural resources preserve are not adjacent to the UPA. After Project approval, the properties to the south would be adjacent to the UPA. However, this land is currently being mined and will be reclaimed back to agricultural land. General Plan Policy LU-120 sets the standards for UPA expansion, and the Office of Planning and Environmental Review has determined that the Project meets these standards. Implementing a policy in the manner it was intended to be applied is not precedent-setting.

CUMULATIVE ENVIRONMENTAL SETTING

The cumulative setting is based largely upon the development forecasts of the adopted Sacramento Area Council of Governments' 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) development forecast. The

MTP/SCS was approved with a certified FEIR on February 18, 2016. The MTP/SCS included development projections for Sacramento County and its incorporated cities, as well as for adjacent counties and cities, based on adopted and in-development General Plans, Specific Plans, and Community Plans in each jurisdiction. Reasonably foreseeable development areas already considered in the MTP include the proposed Sacramento County General Plan, the areas within the Vineyard community of Sacramento County, Rio Del Oro, Easton, the proposed City of Folsom SOI, and the City of Rancho Cordova Sunridge and Suncreek Specific Plans.

The above baseline cumulative setting was then augmented with current data on approved and proposed projects in Sacramento County. These include several master plan proposals: Mather South Community Master Plan (NOP dated January 5, 2017), Jackson Township Specific Plan (NOP dated August 5, 2013), and West Jackson Master Plan (NOP dated September 10, 2013).

CUMULATIVE IMPACTS AND ANALYSIS

Cumulative impacts are assessed below, organized by EIR chapter. Mitigation measures are not included at the end of each subtopic below, but are instead included in the relevant topical chapters where applicable or at the end of this document.

AESTHETICS

Singular project aesthetics analyses focus on a specific project site and its immediate environment, but for the purposes of this cumulative discussion the viewshed is defined more broadly. Most of the County includes relatively flat topography which is either urbanized or dominated by crop farming interspersed with rural communities and open space areas. The character of these lands are very similar to the visual character described for the site in the Aesthetics chapter.

The viewing groups for this larger viewshed area are mostly composed of people traveling along roadways which border the viewshed, such as Sunrise Boulevard, Eagles Nest Road, and Jackson Highway. This viewshed is within the Urban Services Boundary of the existing Sacramento County General Plan, and can ultimately be expected to develop. As discussed, the Project is likely to induce growth within this area earlier than had been anticipated. As the Project results in significant visual impacts to the views of the site, it is also reasonable to conclude that additional development west and north of the site would have similar impacts. These impacts are related to the conversion of open space to urban uses, and cannot be mitigated, and thus the Project will contribute to *significant and unavoidable* cumulative aesthetic impacts.

AGRICULTURAL RESOURCES

The Project site includes approximately 956 acres¹ of land designated as Grazing Land and approximately 8.6 acres of Farmland of Statewide Importance and 75.2 acres of Farmland of Local Importance. Grazing Land is not a farmland designation specifically protected within the CEQA Guidelines or within County Policy if within the Urban Services Boundary, but loss of this farmland type can be considered under the broader significance criteria which asks whether a project may result in substantial conversion of farmland to non-agricultural use. This analysis is restricted to the cumulative analysis because grazing impacts must be very large-scale in order to result in substantial impacts; grazing is not agriculturally intensive, and thus the loss of even one thousand acres may only represent the loss of 83 cattle². When considered cumulatively with other projects impacting grazing lands in the County, the cumulative loss of grazing land may exceed 10,000 acres. However, the acres of viable grazing land are far less due to agricultural-residential fragmentation and existing uses. While on a singular level the Project does not cause substantial farmland impacts, the loss of grazing land due to the project in conjunction with other cumulative growth in the vicinity is cumulatively significant. Mitigation has already been included for the loss of important farmlands and represents all feasible mitigation. Further, if the SSHCP is adopted, the Project proponent will be assessed a fee for the loss of grassland land cover type. This would be a greater amount than the loss of important farmlands alone and would represent all feasible mitigation. Though land will be preserved, the cumulative loss of farmland is still considered significant, and thus impacts are *significant and unavoidable*.

AIR QUALITY

Project construction and operation will result in the generation of ozone precursors and particulate matter. Ozone precursors generated by construction can be mitigated to below threshold levels regardless of the amount, because of the availability of the SMAQMD mitigation fee program. All of the cumulative projects proposed are subject to the SMAQMD rules related to ozone precursors, and will be required to offset construction emissions. Even on a cumulative level, existing mitigation will be sufficient to offset construction-related ozone precursor emissions.

Even on a singular level, construction-level particulate matter emissions, operational particulate matter and ozone precursor emissions will exceed significance thresholds despite the application of feasible mitigation, and thus the Project can also be expected to contribute to a cumulatively significant and unavoidable impact. Likewise, the Project will contribute to a cumulatively significant and unavoidable impact related to conflict with implementation of the State Implementation Plan.

¹ Grazing land designated on the Project site includes the Folsom South Canal and the agricultural-residential uses west of Eagles Nest Road, which do not provide suitable land for grazing activities.

² Conservative assumption of 1 head of cattle per 12 acres production rate.

Cumulative development would increase traffic and change traffic flows on the regional roadway network, and these changes would tend to increase local CO levels. The cumulative traffic impacts are anticipated to degrade the level of service to LOS E or F, or increase the traffic volume for intersections already operating at an LOS of E or worse for six intersections, as detailed in the Traffic Chapter of this EIR. None of the affected intersections would result in an hourly traffic volume of more than 31,000 vehicles. These intersections are not in a location where vertical or horizontal mixing would be limited, nor would the implementation of the Project substantially change the mix of vehicle fleets typical to Sacramento County at these intersections. Therefore, based on SMAQMD screening methodology as described in the methodology section of the Air Quality chapter, the cumulative impact related to increases in CO levels would be less than significant.

Though cumulative impacts related to construction emissions of ozone precursors and operational emissions of carbon monoxide are less than significant, cumulative impacts related to construction-level particulate matter, operational particulate matter and ozone precursors, and conflict with implementation of the State Implementation Plan will be *significant and unavoidable*.

BIOLOGICAL RESOURCES

Natural community habitat values on the Project site and surrounding area are generally comprised of grasslands, vernal pools/wetlands, creeks, riparian vegetation and oak savannah. On the Project site alone there are nearly 22 acres of delineated wetlands. Based on review of aerial photography, wetland densities to the west and north are similar to the Project. Further, Mather South, Jackson Township, Sunridge, Suncreek, and the Arboretum development proposals and are with the Mather Core Recovery Area. Wetlands support special status invertebrates, amphibians, and plants. Singularly, Project impacts to wetlands and some of the associated species are significant even after the application of mitigation; thus, it can be concluded that cumulative impacts will also be considerable, and that despite the application of mitigation cumulative impacts will remain *significant and unavoidable*.

The FEIR/EIS prepared for the SSHCP analyzed the cumulative impact and concluded that the conservation strategy is designed to ensure that the long-term productivity in the SSHCP planning area is maintained. Implementation of the SSHCP would provide a comprehensive and balanced approach to natural resource preservation. If the SSHCP is adopted, the Project will be required to implement certain biological resources mitigation measures consistent with the SSHCP.

CLIMATE CHANGE

The proposed Project would generate greenhouse gas emissions that would contribute to climate change. The State of California has established aggressive greenhouse gas reduction targets and to meet those targets, the County will require that the Project prepare and implement a Greenhouse Gas Reduction Plan that ensures that the Project will not exceed an emission standard of 1.57 MTCO₂e per capita, per year. While this

would reduce that Project's impact to a less-than-significant level, climate change is itself a cumulative phenomenon. As areas around the world continue to develop and urbanize, associated mobile and stationary greenhouse gas emissions will increase, and the impact will remain a *significant and unavoidable cumulative impact*.

CULTURAL RESOURCES

Cumulative development in Sacramento County, could significantly impact historic, archaeological, paleontological, geologic, or human resources. The archaeology of prehistoric resources in their original contexts is crucial in developing an understanding of the social, economic, and technological character of the resources. The boundaries of an archaeologically important site could extend beyond property boundaries. As a result, a meaningful approach to preserving and managing cultural research should focus on the likely distribution of cultural resources, rather than on Project or parcel boundaries. The cultural system is represented archaeologically by the total inventory of all sites and other cultural remains. However, proper planning and appropriate mitigation can help to capture and preserve knowledge of such resources and can provide opportunities for increasing understanding of the past environmental conditions and cultures by recording data about any sites discovered and preserving artifacts found. Based on the findings of the records and literature search and field survey, mitigation has been proposed that attempts to document and preserve cultural resources that have been identified or may be encountered during construction of this Project as well as other cumulative projects. This mitigation limits the cumulative contribution of impacts to cultural resources within the County to *less than significant* levels.

GEOLOGY AND SOILS

Most geologic impacts are not cumulative in nature. The exception is in cases where projects may obstruct access to valuable mineral resources, in which case losses can accumulate over multiple projects. The Project proposes land development over approximately 115 acres of land containing valuable mineral resources. However, the mining operator has decided not to mine the land due to the small size and separation of the parcel from the other active mining sites. Other land identified as containing valuable mineral resources, has been or is actively being mined. The Project does not contribute to a substantial loss of mineral resources; cumulative impacts are *less than significant*.

HAZARDS AND HAZARDOUS MATERIALS

Like geologic hazards, most impacts in this category are existing hazardous conditions which have the potential to impact projects, but which are not exacerbated by projects. The only impact discussed in the Hazards and Hazardous Materials chapter to which the Project could cumulatively contribute is increases in the transport, use, and disposal of hazardous materials. As concluded for the Project, all of the cumulative developments would be required to implement and comply with federal, state, and local hazardous materials regulations and codes monitored by the state and/or local

jurisdictions, and as such would not create a cumulatively significant hazard; impacts are *less than significant*.

HYDROLOGY AND WATER QUALITY

The Project analysis includes a cumulative discussion in related to hydrology and flooding. To summarize, the floodplain and hydromodification analyses for the Project assumed development north of the site, in order to ensure that facilities were adequately designed to handle cumulative conditions. On the basis of this cumulative environment, the Project drainage master plan has been designed to ensure that downstream impacts do not occur. Therefore, the Project will not contribute to a significant impact related to on-site flooding or hydromodification. However, the Project will contribute to floodwaters downstream in the cumulative condition, which results in a *significant and unavoidable* cumulative impact.

LAND USE

Though the Land Use chapter of this EIR examined many topics (policy consistency, displacement of housing, etc), the potential cumulative impacts related to land use are restricted to the topic of land use compatibility with adjacent uses because the character of adjacent land uses will be different in the cumulative condition than in the existing condition. The Land Use chapter already addressed probable future uses, which included master planning along the Jackson corridor and in the City of Rancho Cordova. Thus, the Land Use chapter has already addressed the cumulative land use impacts of the Project, and it was determined impacts would be *less than significant*.

NOISE

The Project analysis of noise included cumulative analyses of traffic noise, which is the noise source to which the Project could cumulatively contribute. To summarize, when comparing the cumulative condition with the cumulative plus project condition, the Project contributes to the exposure of people to a substantial increase in ambient noise. The most affected properties are those located west of Eagles Nest Road. Typical measures implemented to reduce noise are placement of soundwalls, improvements to building façades (windows, doors, etc.), or increased setbacks; however, these are not feasible measures to implement in off-site or non-participatory properties. The Project impacts are *significant and unavoidable*.

PUBLIC SERVICES

As described in the Public Services chapter, the Project includes adequate public services facilities and infrastructure, and also includes an infrastructure financing plan to fund the construction of those facilities. There are existing fees and other programs which fund operation of services. The Project has been reviewed by service providers. Given that the singular analysis concludes that the Project can be adequately served, the Project also does not contribute to any cumulative degradation of service; cumulative impacts are *less than significant*.

PUBLIC UTILITIES

The on-site and off-site wet and dry utility lines (natural gas) described in the facility master plans for the Project are designed to handle cumulative conditions, and that analysis concludes that capacity will be sufficient. The Zone 40 Water Supply Master Plan Amendment prepared to accompany the Project already examines the cumulative water demand projections out to the year 2052, and projects that demand will reach 102,400 acre-feet/year. In the multiple-dry year scenario, the maximum groundwater demand will be approximately 60,600 acre-feet/year, which is within the sustainable yield of the groundwater basin. These cumulative demand projections include growth in the City of Rancho Cordova, within approved but incomplete developments within Sacramento County (e.g. Florin Vineyard Gap), and other reasonably foreseeable development. On a cumulative basis, there is sufficient water to supply the Project, and impacts are *less than significant*.

The existing capacity of the Sacramento Regional Wastewater Treatment Plant (SRWTP) is 181 million gallons per day (mgd), and existing treatment flows are 141 mgd. The SRWTP Master Plan uses an average figure of 132.4 gallons per day (gpd) per capita and combines that figure with population projections to determine the needed capacity. On this basis, the treatment plant can accommodate a population increase of approximately three million people. In terms of housing units, this is equivalent to 111,482 additional units (United States Census Bureau average household size in Sacramento County in 2010 was 2.71 people, (<https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>, accessed on May 18, 2018). This capacity is within the projected population and household increases currently expected by the year 2035, according to the Sacramento Area Council of Governments most current draft growth projections. Cumulative impacts are *less than significant*.

ENERGY SUPPLY (SACRAMENTO MUNICIPAL UTILITIES DISTRICT)

CUMULATIVE SETTINGS

The geographic area considered for cumulative impacts regarding energy use is Sacramento County and the service areas for Sacramento Municipal Utility District (SMUD) and Pacific Gas and Electric (PG&E). SMUD and PG&E both employ programs and mechanisms to support provision of services for new developments to be built within their service territory. The most common mechanism includes connection fees to recoup the cost of infrastructure required to service new developments through standard billing services. Additionally, energy efficiency, power management strategies, and conservation measures, reducing energy demand in existing development can serve to reduce additional energy infrastructure and services required for new development.

Sacramento County is currently processing four specific and community master plans within the Jackson Road corridor each of which is undergoing a separate evaluation for environmental impacts. Build out of the plans, if approved, would occur across a 20-plus year horizon. The projects include the Newbridge Specific Plan, the West Jackson

Highway Master Plan, the Jackson Township Specific Plan, and the Mather South Community Master Plan. The total impact of these plans would result in the development of over 9,247 acres and would include at least 24,182 dwelling units, and over 3 million square feet of commercial, retail, and other uses. In anticipation of the increased energy demand that would result from the implementation of these plans, the following new electrical infrastructure would be required to serve all four developments combined:

- One new bulk substation: Jackson Bulk Electrical substation;
- Eight project-specific distribution substations located on-site throughout the plan areas;
- Two expanded project-specific distribution substations within the West Jackson Master Plan Project area; and
- Ancillary infrastructure including on-site and off-site distribution, sub-transmission, and transmission lines.

The above infrastructure would be needed to provide adequate service for the development of each new community while continuing to maintain adequate service levels for the existing development within the area. The bulk electrical substation and off-site transmission and sub-transmission lines are not specific to any one of the projects but are needed to meet the cumulative needs for all the projects in combination with existing development. SMUD will be responsible for the land acquisition, design, and construction of the bulk substation; therefore, the information and analysis below is presented programmatically.

Based on the size and land uses included within each project, SMUD has estimated the following future energy demand:

- Mather South Community Master Plan - 27 megawatts (MW)
- Jackson Township Specific Plan - 44 MW
- NewBridge Specific Plan - 21 MW
- West Jackson Highway Master Plan - ~~213~~ **223** MW

ELECTRICAL INFRASTRUCTURE NEEDS

DISTRIBUTION SUBSTATIONS

The following description generally summarizes the requirements for new SMUD distribution substations, such as those that will be located within each of the specific and community master plan areas. While exact design specifications are not available, this summary provides a good faith effort at evaluating the size, capacity, infrastructure, and design of each of the distribution substations in order to analyze the potential environmental impacts associated with the infrastructure. The description is largely derived from SMUD's recently prepared Draft Franklin Electric Transmission Project Initial Study and Mitigated Negative Declaration (Franklin Bulk Substation MND) (April 2016).

Each of the eight distribution substations would be approximately up to 1.5 acres in size and would be energized by connecting to 69,000 (69kV) subtransmission lines that are supplied by the proposed Jackson Bulk Substation (described in detail below) and existing SMUD Bulk Substations. Bulk substations typically step down transmission line voltage of 230,000 Volts (230 kV) to ~~distribution~~ **sub-transmission** voltage of 69 kV through power transformers. The **distribution** substations would in turn step down the electricity supply to 12,000 (12kV) for delivery to residential neighborhoods. Each distribution substation would include up to two transformers, eight capacitor banks, two battery systems, two metal clad switchgears, and ~~4 or 2~~ **two** poles with a disconnect switch **per pole**. Substations will require an access road**(s)** of at least 20-feet wide **if the access roads are straight, and 24-feet if there are turns required**. The distribution substations would receive electricity from 69kV sub-transmission lines. SMUD's standard construction for sub-transmission lines is overhead construction with poles that would be approximately 65-feet tall. The distribution substations would distribute electricity via underground and/or overhead 12kV lines to neighborhoods. Permanent utility easements would be required. Construction of the distribution substations would occur over a one-year period.

SPECIFIC AND COMMUNITY PLAN INFRASTRUCTURE

The following section describes the existing and required electrical infrastructure that would be required within each of the four specific and community master plan areas. The approximate locations of the proposed new electrical infrastructure are illustrated on Plate CU-1 and Plate CU-2. **Additional 69kV routes may be required depending upon final locations of the new distribution substations.**

MATHER SOUTH COMMUNITY PLAN AREA

The Mather South Community Plan Area would require one new distribution substation and is proposed to be located in one of two options. Location A would be located in the center of the Plan Area within COMM1 land use designation and would receive the 69kV sub-transmission line along the east side of Zinfandel Drive. Location B would be located on the eastern side of the Plan Area within R17a and receive the 69kV sub-transmission line along the east side of the Regional Bike Trail on the west side of the Folsom South Canal.

There is one existing 69kV sub-transmission line east of Sunrise Boulevard, and the cumulative projects would require three new 69kV sub-transmission routes within the project, including one along the north side of Douglas Road, one along the east side of Zinfandel Drive or the east side of the Regional Bike Trail, and one along Kiefer Boulevard.

JACKSON TOWNSHIP SPECIFIC PLAN AREA

The Jackson Township Specific Plan Area would require one new distribution substation in the vicinity of Jackson Road and Tree View Lane. There are four existing 230kV transmission lines in an easement that runs along the southeasterly portion of the Jackson Township plan area. Two of the lines are owned by SMUD and two are owned by PG&E. The cumulative projects would require three new 69kV sub-transmission

routes, including one along Kiefer Boulevard, one along Jackson Road, and one along Excelsior Road.

NEWBRIDGE SPECIFIC PLAN AREA

The NewBridge Specific Plan Area would require one new distribution substation between Jackson Road and Sunrise Boulevard in the P/QP parcel (S-60). **There is an existing SMUD distribution substation at this location that will need to be expanded or replaced by a new distribution substation located** This location may shift to the west side of the Folsom South Canal, depending on construction constraints at the time of development. **If a new distribution substation is constructed, the existing distribution substation will be removed after the new location is in service.** The four 230kV transmission lines described above also traverse the NewBridge Plan area in an easement that runs along the north central portion. There are additionally, two existing 69kV sub-transmission lines in the plan area, one located along the north side of Jackson Road and one on the east side of Sunrise Boulevard. The cumulative projects would require two new 69kV sub-transmission routes within the project area, including one on the west side of Eagles Nest Road between Jackson Road and Kiefer Boulevard, and one on the south side of Kiefer Boulevard between the western NewBridge plan boundary and Sunrise Boulevard.

WEST JACKSON HIGHWAY MASTER PLAN AREA

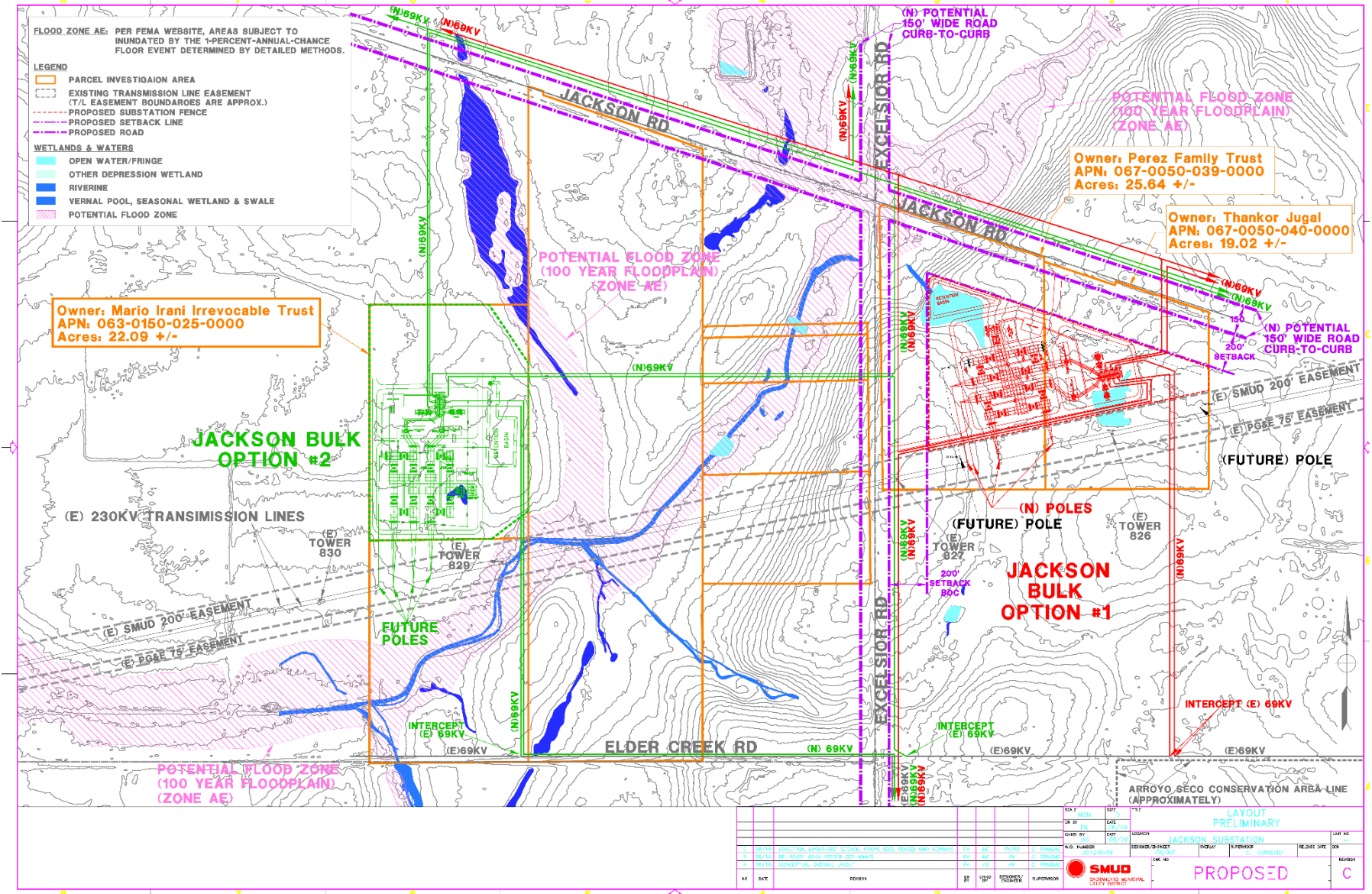
The West Jackson Highway Master Plan Area project would require the expansion of two existing distribution substations, one on the east side of Happy Lane south of Old Placerville Road and one along the west side of Mayhew and north of Jackson Road. The expansion of these distribution substations would result in impacts to the adjacent parcels, which will be evaluated in detail in the West Jackson Highway Master Plan EIR.

The project would also require four new distribution substations, in the vicinity of Fruitridge Road and Hedge Avenue; Jackson Road and Vineyard Road extension; Fruitridge Road and Bradshaw Road; Excelsior and Kiefer Boulevard; and Florin Road and Vineyard Road.

The project may also result in the removal of an existing distribution substation, **east of Bradshaw Road on the north side of Kiefer Boulevard**, at location 9 if no longer required by the existing customer, ~~in the vicinity of Kiefer Boulevard and Bradshaw Road.~~

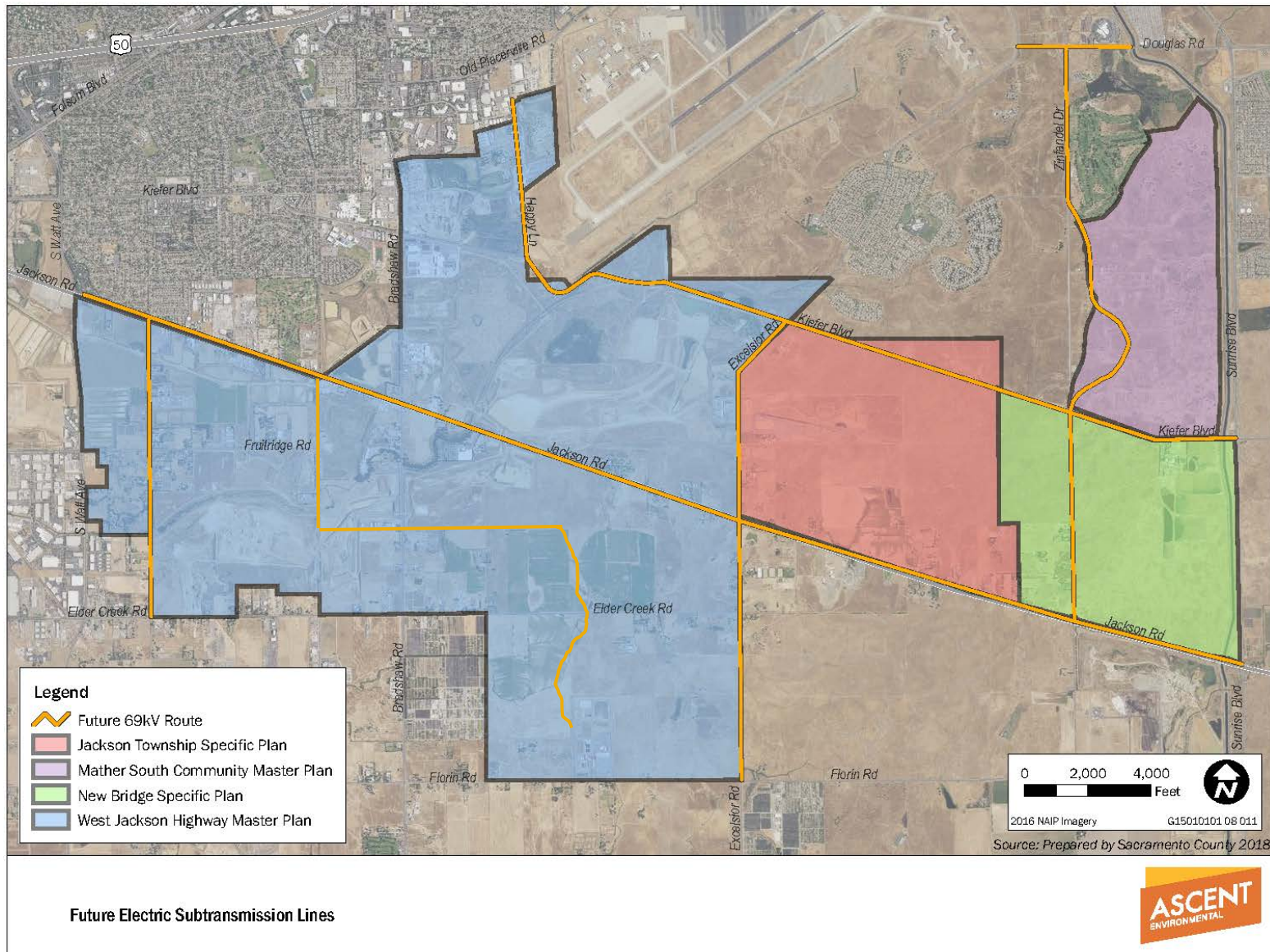
The four existing 230kV transmission lines that are located south of Jackson Road and described above, also run along the northern portion of the West Jackson Highway Master Plan area. The cumulative projects would require seven new 69kV sub-transmission routes within the project area, including one along Kiefer Boulevard, one along Happy Lane, one along Jackson Road, one along Vineyard Road, one along Bradshaw Road, one along the east/west road between Bradshaw Rd and Vineyard Road, and one along Hedge Avenue.

Plate CU-1: Proposed Bulk Substation Location Options



NO.	DATE	DESCRIPTION	BY	CHKD.	STATUS
1	06/15/11	CONCEPTUAL SHEET	JM	SM	FOR REVIEW
2	07/20/11	CONCEPTUAL SHEET	JM	SM	FOR REVIEW
3	08/11/11	CONCEPTUAL SHEET	JM	SM	FOR REVIEW
4	09/01/11	CONCEPTUAL SHEET	JM	SM	FOR REVIEW
5	09/15/11	CONCEPTUAL SHEET	JM	SM	FOR REVIEW
6	10/05/11	CONCEPTUAL SHEET	JM	SM	FOR REVIEW
7	10/20/11	CONCEPTUAL SHEET	JM	SM	FOR REVIEW
8	11/02/11	CONCEPTUAL SHEET	JM	SM	FOR REVIEW
9	11/15/11	CONCEPTUAL SHEET	JM	SM	FOR REVIEW
10	12/01/11	CONCEPTUAL SHEET	JM	SM	FOR REVIEW
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99	08/20/15	CONCEPTUAL SHEET	JM	SM	FOR REVIEW
100	09/05/15	CONCEPTUAL SHEET	JM	SM	FOR REVIEW

Plate CU-2: Future Subtransmission Lines



JACKSON BULK SUBSTATION

As noted above, because of the cumulative anticipated growth along the Jackson Road corridor, SMUD will require the construction and operation of a new bulk substation. The following description summarizes the general components and requirements for a new SMUD bulk substation, such as the Jackson Bulk Substation. While exact design specifications are not available, this summary provides a good faith effort at evaluating the size, capacity, infrastructure, and design of the project in order to analyze the potential environmental impacts associated with the project. The description of electrical infrastructure is largely derived from SMUD's recent Franklin Bulk Substation project.

The project would result in the construction and operation of a new bulk distribution substation, modify existing and construct new overhead 69kV subtransmission and 230kV transmission lines that would link the distribution substations to the electrical grid. Project features would include the development of the Jackson Bulk Substation, up to eight new distribution substations located within nearby master plan areas (as described above), and sub-transmission lines.

BULK SUBSTATION LOCATION OPTIONS

SMUD would require the dedication of approximately 22 acres of land north of the existing Cordova-Hedge and Cordova-Pocket 230kV transmission lines that are located within a utility easement south of Jackson Road. The two potential locations are shown on Plate CU-1.

Option 1 is located adjacent to the southeast corner of Jackson Road and Excelsior Road and is not located within any of the four proposed master plan projects discussed above. It is located within parcels APN 067-0050-039-0000 and 067-0050-040-0000. The parcels also include two single-family, detached homes and is designated as AG-160 (Agricultural-160 Acres). There are two retention ponds on the site which are designated wetlands and included in the U.S Fish and Wildlife National Wetland Inventory.

Option 2 is located approximately 2,000 feet south of Jackson Road and 2,000 feet west of Excelsior Road and is within the project boundary of the West Jackson Highway Master Plan. This location is within a civic/employment designated portion of the master plan. The substation location for Option 2 is located approximately 680 feet north of the nearest sensitive receptors. The site is located directly south of Jackson Road and north of four 230 kV transmission lines that run through the proposed south-easterly portion of the West Jackson Highway Master Plan development area.

BULK SUBSTATION INFRASTRUCTURE

BULK SUBSTATION

The bulk substations will step down transmission line voltage of 230 kV to **sub-transmission** distribution voltage of 69 kV, for distribution to the distribution substations located within the four **communities** community and masterplan areas. The bulk substation area would be graded and partially covered in crushed gravel, except where concrete foundations for the control building, transformers, circuit breakers and other

equipment, oil containment, metal clad switchgear, and paved access roads would be built.

The main components of a bulk substation are the power transformers, steel structures, switches, control and relay equipment, circuit breakers, capacitor banks, electrical busses, cables and control building. Each power transformer would be approximately 35-feet tall, would contain approximately 25,000 to 30,000 gallons of insulating mineral oil. The maximum average sound level for each transformer would not exceed 80 decibel A-weighting (dBA) measured at a distance of 6-feet around the periphery of the transformer.

The bulk substation will also include circuit breakers and circuit switchers to receive and distribute electricity. Circuit breakers would be approximately 25-feet tall and would contain sulfur hexafluoride (SF₆) or other insulating medium. Sound levels would not exceed 140 decibels measured at a distance of 50-feet around the perimeter of the circuit breaker. Noise generated by the circuit breaker is typically intermittent.

The bulk substation also includes pad-mounted transformers which will contain approximately 85 gallons of insulating oil, which is typically natural ester oil, which is non-toxic and biodegradable. The bulk substation would also include battery systems using lead acid, which would be located inside the control building. Other optional electrical components may be included which utilize mineral oil for insulating.

ELECTRICAL BUS

The bulk substation would include a network of steel structures that would support equipment, electrical buses, varying in height from approximately 16 to 80 feet tall. The electrical bus would support equipment such as insulators and would support overhead conductors entering the bulk substation from the interconnecting transmission and subtransmission overhead lines.

CONTROL BUILDING

The bulk substation would include a control building up to 50 feet tall. The control building would be constructed with masonry block, concrete, or steel walls. The control building would include a restroom for employees and would be connected to municipal water and sewer if available.

ACCESS ROAD

The bulk substation would require two access roads of at least 20-feet wide if the access roads are straight, and 24-feet if there are turns required.

BULK SUBSTATION FENCING, LANDSCAPING, AND LIGHTING

To maintain security and public safety, a minimum 10-foot fence would be installed around the perimeter of the bulk substation site. SMUD would work with Sacramento County in order to determine the most appropriate landscaping and screening improvements. Lighting would be included as required by the National Electrical Safety Code for substation operation. The installed lighting system would be designed for

purposes of nighttime operations and maintenance and would be oriented in order to minimize glare onto surrounding property.

ELECTRICAL TRANSMISSION LINES

Transmission **sub-transmission** lines would be required in order to receive electricity from the grid at the Jackson Bulk Substation and distribute to the distribution substations. The receipt and distribution of electricity along transmission lines would require the dedication of a utility easement. Receipt of electricity from the grid would occur by construction of new 230 kV transmission poles. These poles will transition from the existing SMUD 230kV transmission lines on 130-foot tall steel transmission poles to the new bulk substation. Distribution of electricity would occur across existing and new 69kV wood or steel sub-transmission lines approximately 65 feet tall or along underground lines. The additional cost of underground 69kV sub-transmission would be borne by the applicant requesting the facilities be installed underground and would require a feasibility study.

CONSTRUCTION, OPERATION, AND MAINTENANCE

Construction of the Jackson Bulk Substation would occur over approximately two years, in typical construction phases. During normal operations, the bulk substation would be operated remotely and continuously. Bulk substation maintenance would occur on a regular basis from two to four times per month for internal inspections and four times per year for perimeter maintenance. Major maintenance would occur about once every three years.

CUMULATIVE IMPACT ANALYSIS

Implementation of the four proposed specific and community master plans would result in a substantial increase in the regional demand for energy and the subsequent need to develop new supportive infrastructure (i.e., one bulk substation, eight distribution substations, ~~two~~^{three} expanded distribution substations, transmission lines, sub-transmission lines, and accessory infrastructure). All new project-specific distribution substations would be located within the project boundaries of their associated maps, with the exception of the expanded distribution substations required by the West Jackson Highway Master Plan Project. The Jackson Bulk Substation (bulk substation) and ancillary facilities would be located off-site for some or all facilities. Should Option 1 be selected for the bulk substation, it would be located off-site for the four master plans. For infrastructure located within project boundaries, impacts would be addressed as direct impacts within the appropriate resource areas within each project's EIR. However, because in most cases Option 1 and Option 2 would not be located within project boundaries of the four proposed master plan projects discussed above, an evaluation of cumulative impacts associated with each location is provided below. Table CU-1 includes an evaluation of the potential impacts of the new bulk substation if it were to be developed in either location. This analysis is programmatic in nature; a more detailed CEQA analysis will be performed by SMUD prior to construction of any of the proposed substations which will determine the environmental impacts and respective mitigation measures.

**Table CU-1:
Summary of Potential Environmental Impacts from Jackson Bulk Substation
Construction and Operation**

Affected Resources	Potential Impacts
<p>Aesthetics and Visual Resources</p>	<p>The aesthetic and visual characteristics of the proposed sites for Option 1 and 2 are similar and are characterized by grassland, rural residential homes, and agricultural land uses. The surrounding area is currently relatively rural, but with implementation of the Jackson Bulk Substation, eight distribution substations, and proposed community and master plan projects, would gradually transition to an urbanized community. The proposed bulk substation would be typical of other bulk substations in the region and would include a two-story control building, transformers (approximately 35²⁵-feet tall), power circuit breakers (approximately 35-feet tall), a network of steel structures to support electrical equipment (up to 100-feet tall), and overhead conductors entering the substation from the interconnecting sub-transmission and transmission overhead lines (up to 130-feet tall).</p> <p>Project construction would temporarily disrupt the existing visual environment as project materials would be staged and workers would be present on-site during the construction phase which would be approximately two years. However, these changes in the existing visual environment would be temporary, and consistent with the overall change to existing visual context in the Jackson Road corridor because of multiple large proposed master plans.</p> <p>Under both options, the bulk substation would be located adjacent to urbanizing areas and Jackson Highway, and would be typical of supportive urban infrastructure seen in the community. The overall visual transformation of the surrounding areas is addressed in the project-specific visual resources chapter of this EIR and is inclusive of supporting infrastructure needed to support the community. The project would result in less than significant impacts. No scenic resources nor scenic vistas are located on or adjacent to the sites or nearby for either Option 1 or Option 2. While development of the bulk substation would result in the visual transformation of the site from a rural character to urban infrastructure, its development would be completed in concert with the overall urbanization of the surrounding area such that construction of this facility would not result in the substantial degradation of views of the site. As described above, nighttime lighting would be included for safety and maintenance purposes but would be shielded and directionally controlled to prevent impacts to nearby sensitive land uses. Overall,</p>

	<p>the project would not result in a considerable contribution to a significant cumulative impact related to visual resources.</p>
<p>Air Quality</p>	<p>Construction of the Jackson Bulk Substation and related infrastructure components under Options 1 and 2 would involve the use of off-road heavy-duty construction equipment. Construction of the bulk substation would be typical of construction activity for the project type and size. Use of this equipment during various construction phases would result in emissions of fugitive dust, diesel particulate matter, and other criteria air pollutants. It is anticipated that certain phases in the construction of the substation may result in fugitive dust emissions and criteria air pollutants which exceed applicable standards set by the Sacramento Metropolitan Air Quality Management District (SMAQMD). Given the close proximity of both Option 1 and Option 2 to existing sensitive receptors, the use of construction equipment may also expose sensitive receptors to substantial pollutant concentrations. As a result, construction activity associated with bulk substation construction could result in significant air quality impacts. Construction of the bulk substation would be the responsibility of SMUD and would not be subject to the control of the County. Nonetheless, SMUD would be responsible for implementing appropriate mitigation developed in consultation with regulatory agencies to mitigate air quality impacts. Such mitigation could include construction practice and equipment limitations and renewable energy features. With implementation of mitigation, project-related impacts associated with the bulk substation could be reduced to a less-than-significant level. Mitigation Measure CU-2 below is recommended to reduce the project's contribution to impacts, specifically a reduction in fugitive dust emissions through the implementation of Fugitive Dust Control Plan during project construction. Mitigation Measure CU-3 below is recommended to reduce the project's contribution to impacts, specifically NO_x emissions during project construction through the implementation of NO_x reduction measures, to a less-than-significant level. However, even with implementation of this mitigation, cumulative construction-related air quality impacts could result in emissions above SMAQMD's thresholds for certain pollutants and, therefore, cumulative impacts would remain considerable and significant and unavoidable.</p> <p>Operation of the bulk substation under Option 1 or 2 would result in emissions associated with routine maintenance tasks including worker commute trips and the use of maintenance equipment, as needed. Similar to existing facilities such as the Franklin Bulk Substation, emissions during operations would be limited over the lifetime of the project and no permanent staff would be expected to be stationed at the facility. Therefore, no significant operational</p>

	<p>impacts would be expected, and this would not result in a considerable contribution to a significant cumulative impact.</p>
<p>Biological Resources</p>	<p>The site for Option 1 includes two, single-family detached homes on large lots which are surrounded by grassland habitat. There are also two retention ponds located within the parcel that are designated wetlands and could be disturbed during construction. The site for Option 2 is located within the project boundary of the West Jackson Highway Master Plan and consists of grassland habitat.</p> <p>Disturbance of special-status plant species and wildlife as well as their habitats could occur because of construction activities for the development of either Option 1 or Option 2. The total area of disturbance for development of the bulk substation would be a maximum of approximately 22 acres. This would not be a significant biological impact due to the extent of existing development on the Option 1 site, and the relatively small scale of the bulk substation in comparison to other larger development projects. Construction of the substation would be the responsibility of SMUD and would not be subject to the control of the County. Nonetheless, SMUD would be responsible for implementing appropriate mitigation developed in consultation with resource agencies to mitigate the impacts to special-status species and their habitats. Mitigation Measure CU-4 General Construction Measures, Mitigation Measure CU-5 Pre-Construction Surveys, Mitigation Measure CU-6 Avoid Disturbance or Harm to Wildlife Species below is recommended to reduce the project's contribution to construction-related impacts to less-than-significant levels. Development of the project would contribute to the loss of biological resources within the region, but due to the relatively small amount of anticipated impacts this is not a considerable contribution to a significant cumulative biological resources impact. Mitigation Measure CU-7, Clean Water Act Permitting, and Mitigation Measure CU-8, Compensate for Permanent Loss of Wetlands below is recommended to reduce the project's contribution to this impact to less-than-significant levels.</p>
<p>Cultural Resources</p>	<p>Construction activities for the development of the Jackson Bulk Substation and related infrastructure under Option 1 or Option 2 would involve ground disturbance, grading, and trenching activities that could result in the uncovering of previously undiscovered cultural resources on the site. Mitigation Measures CU-9 through CU-11 are recommended to minimize the potential for the project to result in potential impacts on cultural resources. With mitigation, the project would not result in a considerable contribution to a significant cumulative impact.</p>
<p>Geology and</p>	<p>Construction activities for the development of the Jackson Bulk</p>

<p>Soils</p>	<p>Substation and related infrastructure under Option 1 or Option 2 would involve ground disturbance, grading, and trenching activities that could result in activities which expose soils and result in accelerated erosion. Construction activity could result in the movement of soils to other locations on the project site to assist in the leveling the site. Because the project would disturb more than one acre of ground surface, the project would be required to comply with the Sacramento County Land Grading and Erosion Control Ordinance (Sacramento County Code Ch. 16.44). The ordinance establishes administrative procedures, minimum standards of review, and implementation and enforcement procedures for the control of erosion and sedimentation that are directly related to land grading activities.</p> <p>In addition to complying with the County’s ordinances because the construction site would disturb more than one acre, it would be required to comply with the State’s General Stormwater Permit for Construction Activities, which is Mitigation Measure CU-12. The Construction General Permit is issued by the State Water Resources Control Board and enforced by the Regional Board and requires preparation and implementation of a site-specific Stormwater Pollution Prevention Plan (SWPPP) that must be kept on site at all times for review by the State inspector. As such, the project would not result in substantial soil erosion or the loss of topsoil and would not contribute considerably to a significant cumulative impact.</p>
<p>Greenhouse Gas Emissions</p>	<p>Operation of the Jackson Bulk Substation under Option 1 or 2 would result in GHG emissions associated with routine maintenance tasks including worker commute trips and the use of maintenance equipment, as needed. Similar to existing facilities such as the Franklin Bulk Substation, GHG emissions during operations would be limited over the lifetime of the project and no permanent staff would be expected to be stationed at the facility. Construction of the project and related infrastructure components under Option 1 or Option 2 would involve the use of off-road heavy-duty construction equipment resulting in GHG emissions and vehicle miles associated with construction worker commute trips.</p> <p>The full design and construction details for the bulk substation are not known at this time. However, the Franklin Bulk Substation, which is similar in size to the Jackson Bulk Substation, resulted in 1,230 MTCO₂e during the initial year of construction. Based on similar size of the Jackson Bulk Substation, GHG emissions during the initial year of construction could potentially exceed SMAQMD’s significance threshold of 1,100 MTCO₂e/year for construction activity. Therefore, implementation of Mitigation Measure CU-13</p>

	<p>(described below) is suggested to reduce construction-generated GHG emissions to below 1,100 MTCO₂e/year. With implementation of the Mitigation Measure CU-13, the project would not result in a considerable contribution to a significant cumulative impact.</p>
<p>Hazards and Hazardous Materials</p>	<p>Construction of the Jackson Bulk Substation and related infrastructure components under Option 1 or Option 2 would involve the transport and use of hazardous materials. These include mineral oil used to insulate transformers which would be in sealed transformer equipment, substation battery backup systems, containing liquid sulfuric acid, which would be in sealed cases, and petroleum products for use in construction equipment. As part of the SWPPP required for the project, a Spill Prevention and Response Plan (SPRP) would be implemented and would include action measures to minimize the potential release of hazardous materials into the environment. Mitigation Measures CU-14, CU-15, and CU-16 are suggested to ensure impacts of a potential release of hazardous materials into the environment are reduced to the largest degree possible. Mitigation Measure CU-14 requires environmental training on BMPs which would be employed for phases of construction in which hazardous materials are encountered. Mitigation Measure CU-15 requires the development of a Hazardous Substance Control and Emergency Response Plan. The plan would include BMPs for avoiding hazardous materials spills and specific measures to implement if a hazardous materials spill does occur. Operation the substation would require the storage and use of mineral oil onsite for the purpose of insulating the substation transformers. As part of Mitigation Measure CU-15, a Spill Prevention, Control, and Countermeasures (SPCC) Plan would be prepared to identify storage devices and containment measures for spill events. For operation of the project, Mitigation Measure CU-16 is also suggested, which would require the preparation of A Hazardous Materials Business Plan (HMBP), if operation of the Project required the handling or storage of hazardous materials equal to or greater 55 gallons for liquids, 500 pounds for solids and 200 cubic feet (at standard temperature and pressure) for compressed gases. The HMBP would also include an operation specific emergency response plan for the specific type of hazardous materials used on site. Although hazardous material would be used on site, with the implementation of Mitigation Measures CU14 through CU-16, the risks for the accidental release of hazardous materials into the environment would be reduced such that the project would not result in a considerable contribution to a significant cumulative impact.</p>
<p>Hydrology and</p>	<p>Construction of the Jackson Bulk Substation at Option 1 or Option 2</p>

<p>Water Quality</p>	<p>would result in increased sediment erosion because of ground disturbance associated with activities such as grading, trenching, foundation installation, fence construction, and road improvements. Increased erosion could affect water quality in on-site and offsite water bodies. Substation construction could also result in the degradation of water quality from runoff of petroleum-based products associated with the use of construction equipment. Option 1 contains wetland features and Option 2 contains two retention basins that are identified as freshwater ponds and classified as part of the Palustrine System, which includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, as well as all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5 ppt. Substation construction could result in changes in drainage patterns on the site. Substation construction would be required to comply with the Sacramento County Land Grading and Erosion Control Ordinance (Sacramento County Code Ch. 16.44). As discussed in the Geology and Soils section above, because the construction site would disturb more than one acre, it would also be required to comply with the State’s General Stormwater Permit for Construction Activities which is issued by the State Water Resources Control Board and enforced by the Regional Board. This permit would require the preparation and implementation of a site-specific Stormwater Pollution Prevention Plan (SWPPP). Based on the results of this permitting process, if deemed applicable, standard erosion control measures would be implemented to protect water quality consistent with Regional Water Quality Control Board (RWQCB) and County requirements. The use of standard control measures through the permitting process, would ensure that substation construction activity would not violate any water quality standards or waste discharge requirements. Implementation of standard construction-related hydrology and water quality measures listed below as well as implementation of Mitigation Measures CU-12, and CU-14 through CU-16 would feasibly reduce this impact. Further, the facility would be designed to meet current State and County stormwater and water quality standards for the operation of the facility such that no significant operational hydrology and water quality impacts would occur. Therefore, the project would not result in a considerable contribution to a significant cumulative hydrology or water quality impacts.</p>
<p>Noise and Vibration</p>	<p>Construction activities for the development of the Jackson Bulk Substation and related infrastructure under Option 1 or Option 2 would involve the use of off-road heavy-duty construction equipment resulting in noise and vibration levels that could result in impacts on nearby sensitive receptors (e.g., residential land uses). Site construction characteristics would be similar to those in Mather</p>

	<p>South Community Master Plan (i.e., construction activity occurring in close proximity to sensitive receptors). Existing noise sensitive receptors exists approximately 2,035 feet east of the substation location in Option 1 and within approximately 680 feet south of the project site boundary for Option 2.</p> <p>Construction activities would be intermittent and temporary in nature. Construction activities occurring during the quieter nighttime hours are of particular concern. If construction activities were to occur during the nighttime hours this could result in increased levels of annoyance and potential for sleep disruption to occupants of nearby dwellings. Because details regarding when construction activity would occur, temporary noise impacts may still occur. Construction of the substation would be the responsibility of SMUD and would not be subject to the control of the County. Nonetheless, SMUD would be responsible for implementing appropriate mitigation developed in consultation with regulatory agencies to mitigate air quality impacts. As such, construction noise mitigation strategies identified within Mitigation Measure CU-17 are proposed to mitigate substation construction activity on nearby noise sensitive receptors and could feasibly reduce this impact to below a level of significance. In general, this mitigation can and should be implemented by SMUD and would generally include the limitation of construction activity to daytime hours as prescribed in the Sacramento County Noise Ordinance, which are exempt from the County's noise standards. Although this mitigation would help to reduce potential impacts on nearby sensitive receptors, because the full detail of construction activity is not known at this time, including the type and amount of construction equipment to be used as well as when construction activity would occur, noise impacts may still occur.</p> <p>As noted in the Noise Section of this EIR, a 224 mega-volt ampere (MVA) transformer, is estimated to generate a maximum noise level of 80 dBA L_{eq}/L_{50} at 6 feet (SMUD 2016). The exact size of the proposed bulk substation is unknown at this point. For this analysis it is assumed, based on information included in the Noise Section regarding the Franklin Bulk Substation MND (SMUD 2016), the proposed bulk substation would be of a similar size as the Franklin Bulk Substation. The County's zoning designation of the nearest noise sensitive land use is AG-160 (Agricultural-160 Acres). According to Sacramento County Code, Section 6.68.070 (a), this designation is not considered a noise sensitive land use and, therefore, the County daytime and nighttime exterior noise standards would not apply.</p> <p>Although the adjacent noise sensitive land use is not subject to the</p>
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	<p>County's nighttime exterior noise standard, noise sensitive receptors on this property could be affected by operations of the bulk substation depending on its location under either Option 1 or Option 2. If the bulk substation were to generate noise levels of 80 dBA L_{eq}/L_{50} at 6 feet, the substation would not exceed the County of Sacramento's nighttime exterior noise standard of 45 dBA L_{eq}/L_{50} at the location of the nearest sensitive receptor for a (approximately 680 feet from the substation location for Option 2). Such mitigation could include the siting of noise-generating equipment away from sensitive receptors. With implementation of mitigation, project-related impacts would be reduced to below a level of significance. Mitigation Measure CU-17 below is recommended to reduce the project's contribution to this impact.</p>
<p>Transportation</p>	<p>Construction activities for the development of the Jackson Bulk Substation under Option 1 or Option 2 would result in construction-related commute and haul trips that could temporarily increase traffic volumes on local roadways. Construction of the facility would take place over approximately two years and would be temporary. Construction of the bulk substation would be the responsibility of SMUD and would not be subject to the control of the County. Nonetheless, SMUD would be responsible for implementing appropriate construction-traffic measures to ensure adequate access to and from the facility would be maintained. SMUD would also be required to coordinate with the County regarding construction-traffic management plans consistent with the Sacramento County Department of Transportation's Construction Traffic Management Program (Chapter 6 of the County's Project Delivery Manual). Therefore, no significant construction-related traffic impacts would occur. The facility would not require any permanent staff and would only require periodic maintenance. Therefore, this facility would not result in the substantial generation of operational traffic such that significant traffic impacts to local roadways and intersections would occur. Overall, the project would not result in a considerable contribution to a significant cumulative impact related to traffic impacts.</p>

SIGNIFICANCE AFTER MITIGATION

Project applicants for each of the community and master plan projects would be required to comply with Mitigation Measure CU-1 to pay the fair share cost of constructing the Jackson Bulk Substation. However, since the location and design of the facility is currently unknown, it would be speculative to determine the approximate cost in this EIR.

Additionally, the specific design and siting details for the construction and operation of the bulk substation are not known at this time. The EIR has provided an analysis of the potential project and cumulative impacts associated with development of the bulk substation and other ancillary off-site facilities (e.g., power lines) based upon the best available information at this time. Development of the facility is the responsibility of SMUD as the utility provider and SMUD can and should mitigate for impacts related to development. Additional or substitute mitigation may be available when a specific site and the design of the project is known. Where standard development policies and requirements can be implemented to reduce impacts, they have been assumed in the above analysis. It is anticipated that SMUD may take the recommended mitigation measures into consideration as specific site and design plans are developed. Therefore, the bulk substation's impacts would not have cumulatively considerable and significant impacts.

TRAFFIC AND CIRCULATION

The Traffic and Circulation chapter contains cumulative analyses of impacts to the transportation network. To summarize briefly, the Project contributes to multiple cumulative impacts and mitigation is required, as listed in the topical chapter. Some of these impacts cannot be fully mitigated, and impacts are *significant and unavoidable*.

CUMULATIVE MITIGATION MEASURES

The cumulative energy analysis identified the need for a new bulk substation to serve the proposed development within the Jackson corridor. SMUD will be responsible for the land acquisition, design, and construction of the bulk substation; therefore, the following mitigation measures are programmatic. Implementation of these mitigation measures will be SMUD's responsibility; substitute mitigation measures may be appropriate due to changes in applicable regulations at the time of construction or design changes due to application of recommended mitigation measures.

CU-1 **Coordination with SMUD Fair Share Contribution.** The project applicant of each of the following Specific and Community Master Plans: Newbridge Specific Plan, the West Jackson Highway Master Plan, the Jackson Township Specific Plan, and the Mather South Community Master Plan shall coordinate with SMUD to identify the timing of construction of the Jackson Bulk Substation and the project's fair share contribution, if any, towards construction of the facility including any mitigation requirements. While SMUD will ultimately be responsible for construction and implementation, the project applicant will be responsible for

~~funding its fair share portion of the mitigation costs. It is unknown and too speculative at this time to determine what specific mitigation would be required for the facility because detailed design of the facility has not occurred~~ **seek to facilitate efficiencies in grading and pre-construction activities as feasible, as a condition of this project.**

CU-2 Dust Control Plans. SMUD shall develop a Fugitive Dust Control Plan (FDCP) for the bulk substation. The FDCP shall be prepared prior to the start of construction activities. Measures to be included in the plan include, but are not limited to, the following:

- a. Water all exposed surfaces at least two times daily when soil moisture conditions have the potential to result in dust generation. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- b. Cover or maintain at least two feet of freeboard space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways ~~should~~ **shall** be covered.
- c. Use wet power vacuum street sweepers to remove any visible track out mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- d. Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- e. Temporary construction entrances shall be stabilized to control fugitive dust emissions.
- f. The FDCP shall identify a designated person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures, as necessary, to minimize the transport of dust offsite and to ensure compliance with identified fugitive dust control measures. Their duty hours shall include holidays and weekend periods when work may not be in progress. The names and telephone numbers of such persons shall be provided to the SMAQMD Compliance Division prior to the start of any grading, or earthwork.
- g. Signs shall be posted at the substation site entrance a minimum of 30 days prior to initiation of Project construction. The signs shall include the following information: (a) Project Name; (b) Anticipated construction schedule(s); and (c) Telephone number(s) for designated construction activity monitor(s) or, if established, a complaint hotline. The designated construction monitor shall document and immediately notify SMUD and SMAQMD of any air quality complaints received. If **complaints are received** ~~necessary~~, the contractor will coordinate with SMUD and SMAQMD to identify any additional **available** ~~feasible~~ measures and/or strategies to be implemented to address public complaints.

CU-3 NO_x Reduction Measures. Consistent with SMAQMD-recommended “basic” and “enhanced” NO_x reduction measures, the following measures shall be implemented during bulk substation construction:

Basic Measures:

- a. ~~Minimize idling time of diesel-powered equipment either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.~~
- b. ~~Maintain all construction equipment in proper working condition according to manufacturer’s specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before initial use in the project area. Documentation verifying compliance with this measure shall be retained on site and provided to SMAQMD upon request.~~
- c. ~~When leasing equipment, the contractor shall use alternatively fueled equipment (e.g., electric, propane, etc.), in lieu of diesel or gasoline fueled equipment, whenever possible and to the extent available.~~

Enhanced Measures:

- d. ~~A comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that would be used in aggregate of 40 or more hours during substation construction shall be submitted to the SMAQMD.~~
 - ~~The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment.~~
 - ~~The contractor shall provide the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman.~~
 - ~~This information shall be submitted at least four business days prior to the use of subject heavy-duty off-road equipment.~~
 - ~~The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs.~~
- e. ~~A plan shall be submitted to the SMAQMD demonstrating that combined emissions from heavy-duty off-road equipment (50 horsepower or more), construction vehicles, and haul truck to be used during substation construction, including owned, leased, and subcontractor vehicles, will achieve NO_x reductions sufficient to demonstrate compliance with the SMAQMD’s maximum allowable mass emissions threshold of 85 pounds per day (lbs/day) of NO_x.~~

- The plan shall include an inventory of all off-road equipment and haul trucks to be used during construction.
- Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, limitations on the use of off-road equipment and/or haul trucks, changes in construction schedules, the payment of mitigation fees to the SMAQMD, and/or other options as they become available. The SMAQMD's Construction Mitigation Calculator can be used to identify an equipment fleet that achieves this reduction.

f. SMUD shall ensure that emissions from all off-road diesel powered equipment used in the project area do not exceed 40% opacity for more than three minutes in any one hour.

- Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately.
- Non-compliant equipment shall be documented and a summary provided to SMAQMD monthly. A visual survey of all in-operation equipment shall be made at least weekly.
- A monthly summary of the visual survey results shall be submitted throughout the duration of the Project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey.

Once more detailed construction information becomes available, a refined emissions modeling analysis can be performed to determine if all or a portion of the above "Enhanced Measures" should be implemented to demonstrate compliance with SMAQMD's maximum allowable mass emissions threshold of 85 lbs/day of NO_x. This analysis shall be conducted in accordance with applicable SMAQMD recommended methodologies.

BASIC CONSTRUCTION EMISSIONS CONTROL PRACTICES (BEST MANAGEMENT PRACTICES)

The following Basic Construction Emissions Control Practices are considered feasible for controlling fugitive dust from a construction site. The practices also serve as best management practices (BMPs), allowing the use of the non-zero particulate matter significance thresholds.

Control of fugitive dust is required by District Rule 403 and enforced by District staff.

- **Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.**

- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.

The following practices describe exhaust emission control from diesel powered fleets working at a construction site. California regulations limit idling from both on-road and off-road diesel-powered equipment. The California Air Resources Board enforces the idling limitations.

- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.

Although not required by local or state regulation, many construction companies have equipment inspection and maintenance programs to ensure work and fuel efficiencies.

- Maintain all construction equipment is in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated.

Lead agencies may add these emission control practices as Conditions of Approval (COA) or include in a Mitigation Monitoring and Reporting Program (MMRP).

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Although not required by local or state regulation, many construction companies have equipment inspection and maintenance programs to ensure work and fuel efficiencies.

- Maintain all construction equipment is in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated.

Lead agencies may add these emission control practices as Conditions of Approval (COA) or include in a Mitigation Monitoring and Reporting Program (MMRP).

1. The project applicant, or its designee, shall provide a plan for approval by the Sac Metro Air District that demonstrates the heavy-duty off-road vehicles (50 horsepower or more) to be used 8 hours or more during the construction project will achieve a project wide fleet-average 10% NOX reduction compared to the most recent California Air Resources Board (CARB) fleet average. The plan shall have two components: an initial report submitted before construction and a final report submitted at the completion.
 - Submit the initial report at least four (4) business days prior to construction activity using the Sac Metro Air District's Construction Mitigation Tool (<http://www.airquality.org/businesses/ceqa-land-use-planning/mitigation>).

- **Provide project information and construction company information.**
 - **Include the equipment type, horsepower rating, engine model year, projected hours of use, and the CARB equipment identification number for each piece of equipment in the plan. Incorporate all owned, leased and subcontracted equipment to be used.**
 - **Submit the final report at the end of the job, phase, or calendar year, as pre-arranged with Sac Metro Air District staff and documented in the approval letter, to demonstrate continued project compliance.**
- 2. The Sac Metro Air District may conduct periodic site inspections to determine compliance. Nothing in this mitigation shall supersede other air district, state or federal rules or regulations.**
- 3. This mitigation will sunset on January 1, 2028, when full implementation of the CARB In-Use Off-Road Regulation is expected.**

CU-4 Biological Resources: General Construction Measures. The following general construction measures shall be implemented in order to avoid impacts to biological resources during construction of the bulk substation:

- Construction personnel shall minimize the work area footprint and the duration at a work area site, ~~to the extent possible.~~
- Construction personnel shall use existing paved and unpaved roads to access the work area where present. Vehicles and equipment shall be parked on pavement, existing roads, and previously disturbed areas **or other areas where no environmental resources could be disturbed** ~~to the maximum extent feasible.~~
- Trash dumping, littering, open fires (such as barbecues), hunting, and pets shall be prohibited in work areas.

CU-5 Biological Resources: Pre-Construction Surveys. The following measures shall be implemented in order to avoid impacts to special-status plants during construction of the bulk substation:

- Pre-construction surveys for special-status plants will be conducted within 250 feet of the Project Area, where access is possible, during the appropriate bloom period for identification.
- If surveys for special-status plants cannot be completed during the appropriate bloom period, topsoil (upper 2-4 inches) in the appropriate habitat for the surveyed specie(s) where ground disturbance will occur will be stockpiled prior to construction and respread after construction in suitable areas
- If any special-status plant species are found in the project area, orange or yellow construction flagging or fencing will be erected to provide a 20-foot - buffer area around the population to prevent encroachment by construction activities, if possible given the location of the population. The fencing will be maintained until construction is complete.

- If any special-status plant species are found in the project area and avoidance is not possible due to the location of the population, SMUD will consult with the appropriate resource agencies (California Department of Fish and Wildlife [CDFW] and/or California Native Plant Society [CNPS]) to develop mitigation and/or compensation measures needed to reduce the impact to a less than significant level.
- Where it is not feasible to avoid special-status plant locations within construction areas, **compensatory mitigation in the form of** seed collection and transplanting shall be performed for annual plant species in suitable areas. **The performance standard for this compensatory mitigation shall be no net reduction in the size and viability of the local plant population.**
- If an affected special-status plant is a perennial species, native plant nursery propagation shall be performed as well as planting within suitable areas.

All special-status plant restoration and planting areas shall be monitored for a minimum of one year.

CU-6 Biological Resources: Avoid Disturbance or Harm to Wildlife Species. Following preconstruction surveys and initiation of project construction, it is possible that wildlife species could subsequently enter or return to the project area. The following measures will be implemented to avoid disturbance or harm to these species:

- If any special-status species or other wildlife species are observed in the project area during construction, construction will cease until the species is allowed to move out of harm's way on their own accord.
- If they cannot be allowed to move out of harm's way on their own accord, SMUD field crews shall contact SMUD Environmental Management at (916) 732-5836, who will report the sighting to the appropriate agency (USFWS and/or CDFW). SMUD Environmental Management will have authority to stop activities until appropriate corrective measures have been completed or it is determined that the individual will not be harmed. Capture and relocation of trapped or injured species can only be attempted by agency-approved biologists.

CU-7 Biological Resources: Clean Water Act Permitting. SMUD will obtain relevant CWA permits (Section 404 and 401). Additionally:

- All proposed discharges of dredge or fill material into waters of the U.S. will first be authorized by the United States Army Corps of Engineers (Corps), pursuant to Section 404 of the CWA. All Corps permit conditions will be implemented.
- Pursuant to Section 401 of the CWA, SMUD will obtain Water Quality Certification from the RWQCB for the proposed Project.

CU-8 Biological Resources: Compensate for Permanent Loss of Wetlands. SMUD will compensate for the permanent loss of wetland habitat through the purchase of mitigation credits at a 1:1 creation ratio from the SMUD Nature Preserve Mitigation Bank or an alternative Corps-approved mitigation bank. This

mitigation requirement may be refined or superseded by the terms of the Corps Section 404 permit for the project.

- CU-9 Cultural Resources: SMUD shall complete cultural resource surveys prior to any ground disturbing activities or construction activities associated with the bulk substation. Surveys will be completed prior to any ground disturbing activities or the Project construction activities in order to inventory and evaluate cultural resources affected by the Project, or affected by any components that might be added to the Project, or any existing components that may be modified.
- CU-10 Cultural Resources: Prepare and implement Archaeological Resource Management and Treatment Plan to address significant or unique archeological resources.

In the case of the inadvertent discovery of a resource that is listed or eligible for listing in the National Register or California Register or of a unique archaeological resource as defined by CEQA, SMUD will have a qualified archaeologist prepare and implement an Archaeological Resource Management and Treatment Plan that specifies the treatment of the resources. Prior to implementation, this document shall be submitted for review to SMUD as CEQA Lead Agency. This plan shall be tailored to the specific needs of the Project and the particular resources present there. The proposed Archaeological Resources Management and Treatment Plan must minimally address the following:

A general research design shall be developed that:

- Charts a timeline of all research activities.
- Recapitulates any existing paleo-environmental, prehistoric, ethnohistoric, ethnographic, and historic contexts to create a comprehensive historic context for the Project Area.
- Poses research questions and testable hypotheses specifically applicable to the resource types encountered.
- Clearly articulates why it is in the public's interest to address the research questions that it poses.
- Artifact collection, retention/disposal, and curation policies shall be discussed, as related to the research questions formulated in the research design. These policies shall apply to archaeological materials and documentation resulting from evaluation and data recovery of the resource.
- Person(s) expected to perform each of the tasks, their responsibilities, and the reporting relationships between Project construction management and the mitigation and monitoring team shall be identified.
- The manner in which Native American observers or monitors shall be included, the procedures to be used to select them, and their roles and responsibilities shall be described.

- All impact-avoidance measures (such as flagging or fencing) to prohibit or otherwise restrict access to sensitive resource areas that are to be avoided during ground disturbance, construction, and/or operation shall be described. Any areas where these measures are to be implemented shall be identified. The description shall address how these measures would be implemented prior to the start of ground disturbance and how long they would be needed to protect the resources from Project-related impacts.
- The commitment to curate of all archaeological materials retained as a result of the archaeological investigations (survey, testing, data recovery), in accordance with CEQA Lead Agency requirements and the California State Historical Resources Commission's Guidelines for the Curation of Archaeological Collections (HRC, 1993), into a retrievable storage collection in a public repository or museum shall be stated.

CU-10 Storm Water Pollution Protection Plan. SMUD shall prepare and implement a SWPPP that includes erosion control measures and construction waste containment measures to ensure that waters of the U.S. and the State are protected during and after project construction. The SWPPP shall include site design measures to minimize offsite storm water runoff that might otherwise affect surrounding habitats. The SWPPP would also include a Spill Prevention and Response Plan (SPRP) and a construction-specific Hazardous Substance Control and Emergency Response Plan (HSCERP) to minimize the potential for accidental releases of hazardous materials into the environment.

The SWPPP shall be prepared with the following objectives: (a) to identify pollutant sources, including sources of sediment, that may affect the quality of storm water discharges from the construction of the project; (b) to identify BMPs to reduce or eliminate pollutants in storm water discharges and authorized non-storm water discharges from the site during construction; (c) to outline and provide guidance for BMPs monitoring; (d) to identify project discharge points and receiving waters; (e) to address post-construction BMPs implementation and monitoring; and (f) to address sedimentation, siltation, turbidity, and non-visually detectable pollutant monitoring, and outline a sampling and analysis strategy.

The contractor shall implement the SWPPP including all BMPs and perform inspections of all BMPs. Potential SWPPP BMPs could include, but would not be limited to the following:

- Placing fiber rolls around onsite drain inlets to prevent sediment and construction-related debris from entering inlets.
- Placing fiber rolls along the perimeter of the site to reduce runoff flow velocities and prevent sediment from leaving the site.
- Placing silt fences down-gradient of disturbed areas to slow down runoff and retain sediment.

- Stabilizing construction entrance to reduce the tracking of mud and dirt onto public roads by construction vehicles.
- Staging and covering excavated and stored construction materials and soil stockpiles in stable areas to prevent erosion.

The construction-specific SPRP and HSCERP shall include preparations for quick and safe cleanup of accidental spills. It shall prescribe hazardous materials handling procedures for reducing the potential for a spill during construction, and shall include an emergency response program to ensure quick and safe cleanup of accidental spills. The plan shall identify areas where refueling and vehicle maintenance activities and storage of hazardous materials, if any, will be permitted, with secondary containment.

Construction personnel shall not refuel or conduct equipment maintenance activities within 250 feet of any aquatic features. The SPRP and HSCERP shall identify BMPs in the event a spill occurs. BMPs may include, but are not limited to the following: use of oil-absorbent materials, tarps, and storage drums to contain and control any minor releases; and storage and use of emergency-spill supplies and equipment in locations adjacent to work and staging areas.

CU-11 Greenhouse Gas Reduction Measures. Prior to project construction, SMUD shall provide a plan to SMAQMD which demonstrates that the combined emissions from all off-road equipment, construction vehicles, and haul truck to be used in the construction project will implement GHG reduction strategies demonstrating that annual GHG emissions would be the SMAQMD's construction mass emissions threshold of 1,100 MTCO_{2e}/year.

- The plan shall include an inventory of all off-road equipment and haul trucks to be used during construction.
- Strategies for reducing GHG emissions could include the use of alternative fuels, changes in construction schedules, the phasing of haul truck trips, and/or other options as they become available.

If more detailed construction information becomes available a refined emissions modeling analysis can be performed. This analysis shall be conducted in accordance with applicable SMAQMD-recommended methodologies. The analysis shall include reduction measures sufficient to ensure construction activity would not exceed SMAQMD's mass emissions threshold of 1,100 MTCO_{2e}/year.

CU-12 Worker Training for Hazardous Materials. SMUD shall establish an environmental training program to communicate environmental concerns and appropriate work practices to all field personnel, including spill prevention, emergency response measures, and proper BMP implementation. All personnel will review all site-specific plans, including, but not limited to, the Project's SWPPP, health and safety plan, and fugitive dust control plan.

- CU-13 Spill Prevention, Control, and Countermeasures Plan. SMUD shall prepare and maintain an operation-specific Spill Prevention, Control, and Countermeasures Plan (SPCC Plan) in accordance with state and federal requirements, including 40 CFR 112. The SPCC Plan shall identify engineering and containment measures for preventing oil releases into waterways. An SPCC Plan is required when there is over 1,320 gallons of petroleum products on site (excluding vehicles).
- CU-14 Hazardous Materials Business Plan. SMUD will evaluate applicability of the Hazardous Materials Business Plan (HMBP) requirements (the project would use or store hazardous materials equal to or greater than 55 gallons of liquids, 500 pounds of solids and/or 200 cubic feet [at standard temperature and pressure] of compressed gases) and file operation-specific HMBP in accordance with local, state, and federal laws. The HMBP shall identify site activities, provide an inventory of hazardous materials used onsite, provide a facilities map, and identify an emergency response plan/contingency plan.
- CU-15 Limit Construction Activity to Daytime Hours. Per Sacramento County noise ordinance requirements (Sacramento County Code Section 6.68), construction activity associated with the development of the Jackson Bulk Substation shall be limited to the hours of 6:00 a.m. and 8:00 p.m. on weekdays and between 7:00 a.m. and 8:00 p.m. on weekends.

19 RESPONSE TO COMMENTS

The Draft Environmental Impact Report (DEIR) for the NewBridge Specific Plan (NSP) was released on July 27, 2018, for a 45-day public review period that concluded on September 13, 2018. A total of 15 individual letters were received during the comment period and four were received after the comment period ended. Each letter has been assigned a number, as indicated below, based on the date they were received.

For ease of review, individual comments addressing separate subjects within each letter are labeled based on the letter's numeric designation and comment number (e.g., the first comment in the first letter is Comment 1-1). The text of the comments has been provided, followed by a response. Note that the preface language of the letters is often excluded (where the text consists of salutations and brief descriptions of the commenting organization). Comment letters are included in their entirety in Appendix RTC-1.

Note that some of the written comments offer suggestions or express preferences related to the proposed development and do not address environmental issues or the adequacy of the DEIR. All comment letters will be forwarded to the Board of Supervisors for consideration via this EIR. In conformance with Section 15088(a) of the State CEQA Guidelines, written responses were prepared addressing comments on environmental issues raised in comments on the DEIR.

In addition, opportunity for oral comment on the DEIR was offered at the Vineyard Community Planning Advisory Council on August 7, 2018; the Cordova Community Planning Advisory Council on August 16, 2018; and at the Planning Commission hearing on September 10, 2018. The comments provided in these public hearings were related to aspects of the master plan proposal and did not address the analysis or conclusion in the DEIR. These comments were responded to by County staff during the meetings and are not included herein.

LIST OF WRITTEN COMMENT LETTERS

1. Central Valley Regional Water Quality Control Board, July 30, 2018
2. Sacramento Municipal Utility District, August 10, 2018
3. Lee Leavelle, August 17, 2018
4. Gay Jones, August 17, 2018
5. California Department of Fish and Wildlife, August 23, 2018
6. Sacramento Metropolitan Fire District, August 29, 2018

7. Sacramento County Water Agency, September 4, 2018
8. County of Sacramento Department of Waste Management and Recycling, September 5, 2018
9. Roxanne Fuentez, September 6, 2018
10. Sacramento Metropolitan Air Quality Management District, September 7, 2018
11. Cordova Recreation and Park District, September 10, 2018
12. Lozeau Drury LLP, September 10, 2018
13. California Native Plant Society, September 12, 2018
14. ECOS, September 13, 2018
15. LAFCo, September 13, 2018
16. City of Rancho Cordova*, September 20, 2018
17. Taylor and Wiley Attorneys*, October 1, 2018
18. Carl Werder*, November 20, 2019
19. Jeffer, Mangels, Butler and Mitchell*, December 20, 2019

*Letters 16 through 19 are untimely as they were received after the close of the 45-day public review period on September 13, 2018. Section 15105 of the CEQA Guidelines provides for a designated public review and comment period. Section 15088 of the CEQA Guidelines provides that lead agencies shall respond to comments received during the noticed comment period but need not respond to comments received after that period ends (see Section 15207; see also Public Resources Code sections 21091 and 21092.5 and *City of Poway v. City of San Diego* (1984) 155 Cal.App.3d 1037, 1043–1044). Comment letters 16, 17, and 18 address new issues not previously raised and therefore, the County has decided to respond to them here despite their untimeliness. Comment letter 19 does not raise new issues not addressed in this Final EIR; consequently, no responses are provided. Comment letter 19 also included as attachments comments on Draft EIRs for other projects, which the commentor claims are relevant to the NewBridge Specific Plan EIR. County staff disagrees. Every project is different, and comments on one EIR do not necessarily apply to another EIR. To be relevant, comments should be project-specific (see CEQA Guidelines sections 15088(a), 15204(a) and *Environmental Protection Information Center v. California Dept. of Forestry & Fire Protection* (2008) 44 Cal.4th 459, 484, 487). Further, Letter 19 was submitted more than 15 months after the noticed comment period ended, which is long-removed from any mandated period for which responses are required or warranted (see

Browning-Ferris Industries v. City Council (1986) 181 Cal.App.3d 852, 862).
Responding to them here would only serve to delay the Project in contravention of CEQA (see CEQA Guidelines Section 15006 and *City of Irvine v. County of Orange* (2015) 238 Cal.App.4th 526, 558).”

LETTER 1

Stephanie Tadlock, Senior Environmental Scientist, Central Valley Regional Water Quality Control Board, written correspondence; dated July 30, 2018 (also September 5, 2018).

Comment 1-1

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits¹

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

Industrial Storm Water General Permit

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ.

Response 1-1

The comment provides summaries of key water quality regulations implemented by the Central Valley Regional Water Quality Board. These regulations have been considered in the DEIR and are incorporated into the NSP. Chapter 1, "Project Description," lists five key aspects of the project (see page 1-21 of the DEIR). One of these Notable Project features is:

- Implementation of Low Impact Development (LID) to reduce water usage by reducing impervious surfaces, reducing turf, and implementing measures such as

disconnected roof drains, disconnected pavements, smart/centrally controlled irrigation controllers, etc.

Chapter 11, "Hydrology and Water Quality," includes a description of applicable regulations. The Construction General Permit is described on page 11-8 and 11-9 of the DEIR. The project does not propose industrial land uses, and the Industrial Storm Water General Permit would not apply.

Through implementation of the 2018 Stormwater Quality Design Manual for the Sacramento Region, all projects are required to select LID design features for credits. The adequacy of these measures is reviewed by Sacramento County Department of Water Resources through the permitting process. LID measures are also described in Chapter 11 of the DEIR under the heading "Impact: Contribution of Polluted Runoff" (page 11-31). As described herein, potential LID measures are depicted in Appendix E of the Drainage Master Plan and Section 7.4 of the NSP reiterates the implementation of LID measures.

Project-related activities would be required to incorporate stormwater quality measures in conformance with applicable County ordinances and standards, and state and federal law. The County is required by its Municipal Stormwater Permit (Order Number R5-2008-0142) to verify that the SWPPP program is adequate. Compliance with the County's current MS4 NPDES permit, as well as implementation of a SWPPP and BMPs, as described in Chapter 11 of this EIR, would reduce any potential impacts to water quality to less than significant levels.

Comment 1-2

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACOE). If a Section 404 permit is required by the USACOE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements.

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACOE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central

Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

Waste Discharge Requirements – Discharge to Waters of the State

If USACOE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

Response 1-2

The comment provides summaries of key water quality regulations that have been considered in the DEIR. It is anticipated that some projects within the specific plan area would require a Section 404 and Section 401 permit from USACE and the State Regional Water Quality Control Board or would be permitted through the South Sacramento Habitat Conservation Plan. Refer to Chapter 6, "Biological Resources," (FEIR page 6-10) and Chapter 11, "Hydrology and Water Quality," (FEIR page 11-8) for a description of 404 and 401 permits.

As described in Chapter 6, the Project Applicant has submitted a Section 404 permit application to the USACE and prepared a Mitigation and Monitoring Plan. Mitigation Measures BR-1 and BR-2 also directly address the issue of permitting under the Clean Water Act as it relates to protection of wetlands and water quality. All appropriate permits would be required prior to altering waters or wetlands.

Comment 1-3

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Risk General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Risk Waiver) R5-2013-0145. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

Response 1-3

The State's permitting requirements for dewatering of construction sites are noted. Project-related dewatering activities would be required to conform with County Ordinances and standards, including securing a Notice of Intent.

Comment 1-4**Regulatory Compliance for Commercially Irrigated Agriculture**

If the property will be used for commercial irrigated agricultural, the discharger will be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program. There are two options to comply:

1. **Obtain Coverage Under a Coalition Group.** Join the local Coalition Group that supports land owners with the implementation of the Irrigated Lands Regulatory Program. The Coalition Group conducts water quality monitoring and reporting to the Central Valley Water Board on behalf of its growers. The Coalition Groups charge an annual membership fee, which varies by Coalition Group. To find the Coalition Group in your area, visit the Central Valley Water Board's website at: http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/for_growers/apply_coalition_group/index.shtml or contact water board staff at (916) 464-4611 or via email at IrrLands@waterboards.ca.gov.
2. **Obtain Coverage Under the General Waste Discharge Requirements for Individual Growers, General Order RS-2013-0100.** Dischargers not participating in a third-party group (Coalition) are regulated individually. Depending on the specific site conditions, growers may be required to monitor runoff from their property, install monitoring wells, and submit a notice of intent, farm plan, and other action plans regarding their actions to comply with their General Order. Yearly costs would include State administrative fees (for example, annual fees for farm sizes from 10-100 acres are currently \$1,084 + \$6.70/Acre); the cost to prepare annual monitoring reports; and water quality monitoring costs. To enroll as an Individual Discharger under the Irrigated Lands Regulatory Program, call the Central Valley Water Board phone line at (916) 464-4611 or e-mail board staff at IrrLands@waterboards.ca.gov.

Response 1-4

The Project does not include irrigated agriculture. As such, these regulations do not apply.

Comment 1-5**Low or Limited Threat General NPDES Permit**

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for Dewatering and Other Low Threat Discharges to Surface Waters (Low Threat General Order) or the General Order

for Limited Threat Discharges of Treated/Untreated Groundwater from Cleanup Sites, Wastewater from Superchlorination Projects, and Other Limited Threat Wastewaters to Surface Water (Limited Threat General Order). A complete application must be submitted to the Central Valley Water Board to obtain coverage under these General NPDES permits.

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit.

Response 1-5

The comment provides summaries of key water quality regulations that have been considered in the DEIR. Compliance with the NPDES program was assumed in the analysis of potential impacts to water quality in Chapter 11, "Hydrology and Water Quality," of the DEIR. See also Response 1-1.

LETTER 2

Nicole Goi, Regional & Local Government Affairs, Sacramento Municipal Utility District, written comment; Dated August 10, 2018.

[Note: The comment identifies text edits based on SMUD's review of a preliminary draft of the energy analysis. For this reason, page numbers and text identified below may not reflect what was published in the public draft of the EIR.]

Comment 2-1

Page 84: Please add "distribution" to list of lines needed.

Page 308: Transmission Lines – please change this title to Electric Lines and add "sub-transmission" after 69kV.

Pole bolted and pad mounted electrical transformers are located along the 12kV distribution lines.

Response 2-1

In response to the comment, the suggested edits have been made to clarify the text of the Setting in Chapter 10, "Hazardous Materials" (page 10-6 of the DEIR). The list of lines referenced in the comment could not be located, and no revisions to the text of the

DEIR have been made. These text modifications do not affect the analysis or conclusions of the DEIR.

Comment 2-2

Page 571: SACRAMENTO MUNICIPAL UTILITY DISTRICT

The locations of existing and proposed dry utilities are shown on Plate PU-5. There are existing overhead sub-transmission lines (69kV) electrical distribution lines along Jackson Road and Sunrise Boulevard; only those lines along Jackson Highway are located within the Project area. There is a SMUD distribution substation at the northwest corner of Jackson Road and Sunrise Boulevard. The existing SMUD distribution substation will need to be expanded or replaced by a new distribution substation located west of the Folsom South Canal, depending on construction constraints at the time of development. If a new distribution substation is constructed, the existing distribution substation will be removed after the new location is in service. There are also four 230kV overhead transmission lines that traverse through the northern portion of the Project area. Two of the lines are owned by SMUD and two lines are owned by PG&E. In order to serve the electricity needs of the Project, SMUD will need to install new 69kV sub-transmission lines along Eagles Nest Road and Kiefer Boulevard.

The new 69kV sub-transmission lines along Eagles Nest and Kiefer Boulevard will be overhead lines. The placement of the poles that are located adjacent to the West Zinfandel Preserve (parcel W-30) will be coordinated with regulatory agencies to avoid sensitive habitat. The new line along Kiefer Boulevard will be incorporated into the landscape easement. A detailed analysis cannot be provided at this time, as construction-level designs have not been developed at this time. SMUD would act as lead agency on the electrical utility upgrades and prepare an environmental analysis consistent with CEQA. Electrical distribution lines (12kV) within the NSP will be placed underground in conjunction with roadway development and project phasing if the proposed new distribution substation is situated next to or close to existing or new 69kV sub-transmission lines. All of the on-site electrical line construction would be within areas already assumed to be impacted by the overall Project; however, if electrical lines need to cross Frye Creek, construction methods would have to comply with SSHCP avoidance and minimization measures or individual permits from regulatory agencies.

Response 2-2

In response to the comment, the suggested edits have been made to clarify the text of the Impacts and Analysis Section in Chapter 15, "Public Utilities" (page 15-31 of the FEIR). These text modifications do not affect the analysis or conclusions of the DEIR.

Comment 2-3

Page 835: Based on the size and land uses included within each project, SMUD has estimated the following future energy demand:

- Mather South Community Master Plan - 27 megawatts (MW)

- Jackson Township Specific Plan - 44 MW
- NewBridge Specific Plan - 21 MW
- West Jackson Highway Master Plan – 223 MW

Page 836: Each of the eight distribution substations would be approximately up to 1.5 acres in size and would be energized by connecting to 69,000 (69kV) sub-transmission lines that are supplied by the proposed Jackson Bulk Substation (described in detail below) and existing SMUD Bulk Substations. Bulk substations typically step down transmission line voltage of 230,000 Volts (230 kV) to sub-transmission voltage of 69 kV through power transformers. The distribution substations would in turn step down the electricity supply to 12,000 (12kV) for delivery to residential neighborhoods. Each distribution substation would include up to two transformers, eight capacitor banks, two battery systems, two metal clad switchgears, and 2 poles with a disconnect switch per pole. Substations will require access road(s) of at least 20-feet wide if the access roads are straight, and 24-feet if there are turns required.

Response 2-3

In response to the comment, the suggested edits have been made to clarify the text of the Energy Supply Cumulative Setting in Chapter 18, “Cumulative and Growth Inducing Impacts” (pages 18-9 and 18-10 of the FEIR). These text modifications do not affect the analysis or conclusions of the DEIR.

Comment 2-4

SPECIFIC AND COMMUNITY PLAN INFRASTRUCTURE

The following section describes the existing and required electrical infrastructure that would be required within each of the four specific and community master plan areas. The approximate locations of the proposed new electrical infrastructure are illustrated on Plate CU-1 and Plate CU-2. Additional 69kV routes may be required depending upon the final locations of the new distribution substations.

Page 838: NEW BRIDGE SPECIFIC PLAN AREA

The NewBridge Specific Plan Area would require one new distribution substation between Jackson Road and Sunrise Boulevard in the P/QP parcel (S-60). There is an existing SMUD distribution substation at this location that will need to be expanded or replaced by a new distribution substation located west side of the Folsom South Canal, depending on construction constraints at the time of development. If a new distribution substation is constructed, the existing distribution substation will be removed after the new location is in service. The four 230kV transmission lines described above also traverse the NewBridge Plan area in an easement that runs along the north central portion. There are additionally, two existing 69kV sub-transmission lines in the plan area, one located along the north side of Jackson Road and one on the east side of Sunrise Boulevard. The cumulative projects would require two new 69kV sub-transmission routes within the project area, including one on the west side of Eagles

Nest Road between Jackson Road and Kiefer Boulevard, and one on the south side of Kiefer Boulevard between the western NewBridge plan boundary and Sunrise Boulevard.

The project may also result in the removal of an existing distribution substation east of Bradshaw Rd on the north side of Kiefer Blvd if no longer required by the existing customer, in the vicinity of Kiefer Boulevard and Bradshaw Road.

Response 2-4

In response to the comment, the suggested edits have been made to clarify the text of the Public Utilities Cumulative Setting in Chapter 18, "Cumulative and Growth Inducing Impacts" (pages 18-10 and 18-11 of the FEIR). These text modifications do not affect the analysis or conclusions of the DEIR.

Comment 2-5

Page 839: Future Sub-transmission lines

Please include the purple line below as yellow. This will be additionally, a future 69kV route.

Response 2-5

In response to the comment, the suggested edits have been made to Plate CU-2 in the Public Utilities Cumulative Setting in Chapter 18, "Cumulative and Growth Inducing Impacts." Refer to page 18-13 of the FEIR. This modification does not affect the analysis or conclusions of the DEIR.

Comment 2-6

Page 842: BULK SUBSTATION

The bulk substations will step down transmission line voltage of 230 kV to sub-transmission voltage of 69 kV, for distribution to the distribution substations located within the four communities and masterplan areas. The bulk substation area would be graded and partially covered in crushed gravel, except where concrete foundations for the control building, transformers, circuit breakers and other equipment, oil containment, metal clad switchgear, and paved access roads would be built.

Page 843: The bulk substation will also include circuit breakers and circuit switchers to receive and distribute electricity. Circuit breakers would be approximately 25-feet tall and would contain sulfur hexafluoride (SF6) or other insulating medium. Sound levels would not exceed 140 decibels measured at a distance of 50-feet around the perimeter of the circuit breaker. Noise generated by the circuit breaker is typically intermittent.

Page 844: Please change Transmission Lines to Electrical Lines

Transmission and sub-transmission lines would be required in order to receive electricity from the grid at the Jackson Bulk Substation and distribute to the distribution substations.

Response 2-6

This comment generally confirms text in the DEIR. In response to the comment, the suggested edits have been made to clarify the text of the Public Utilities Cumulative Setting in Chapter 18, “Cumulative and Growth Inducing Impacts” (pages 18-14 and 18-16 of the FEIR). These text modifications do not affect the analysis or conclusions of the DEIR.

Comment 2-7

CUMULATIVE IMPACT ANALYSIS

Implementation of the four proposed specific and community master plans would result in a substantial increase in the regional demand for energy and the subsequent need to develop new supportive infrastructure (i.e., one bulk substation, eight distribution substations, two expanded distribution substations, transmission lines, sub-transmission lines, and accessory infrastructure).

Page 845: Potential Impacts; Aesthetics and Visual Resources; ...The proposed bulk substation would be typical of other bulk substations in the region and would include a two-story control building, transformers (approximately 35-feet tall), power circuit breakers (approximately 25-feet tall), a network of steel structures to support electrical equipment (up to 100-feet tall), and overhead conductors entering the substation from the interconnecting sub-transmission and transmission overhead lines (up to 130-feet tall).

SMUD operates two 230 kV electric transmission lines within an easement. Construction within the transmission easement is prohibited without the prior consent of SMUD. Developer shall submit plans to SMUD’s Real Estate Services Department to begin the consent process.

Response 2-7

In response to the comment, the suggested edits have been made to clarify the text of the Public Utilities Cumulative Setting in Chapter 18, “Cumulative and Growth Inducing Impacts” (page 18-16 and 18-17 of the FEIR). These text modifications do not affect the analysis or conclusions of the DEIR.

The existing 230 kV lines are listed as a component of the setting in Chapter 12, “Land Use.” SMUD’s easement and the required coordination for construction activities within the easement are noted and would be applicable to subsequent development proposals.

LETTER 3

Lee Leavelle, member of the community, written correspondence; dated August 17, 2018.

Comment 3-1

Under the heading of Request, item 2.a, General Plan Amendment to amend the Land Use Diagram to:..., please note the omission of any High Density Housing (HDR). When I made my comment to point this out the gentleman making the presentation pointed out on the exhibit that HDR is included in the project and said so. He, in fact, apologized that it was not mentioned in the agenda item. I am concerned that the verbiage in the agenda item will be cut and pasted into your recommendation and that subsequent documents will follow suite, eliminating any requirement for HDR. How can we be certain that this does not happen?

As you are well aware there is a desperate need for HDR in Sacramento County, we need to work together as a community to ensure that this need is met. If it is overlooked this time it will establish a precedent and make it easier for subsequent development to eliminate a requirement for HDR.

Please make sure that a requirement for HDR is included in the amendment to the General Plan and the NewBridge Specific Plan.

Response 3-1

The NSP does include high density residential (HDR) land uses, as shown on the land use diagram for the Specific Plan (see Plate PD-4 on page 1-8 of the DEIR). The confusion lies in the definition of high density residential in the Sacramento County General Plan versus the Sacramento County Zoning Code. The General Plan defines HDR land uses as those with densities 31-50 units per acre. The Zoning Code defines HDR as 20-40 units per acre. HDR land uses in the NSP have 23 or more units per acre. Therefore, the requested entitlement (i.e., the General Plan Amendment to amend the Land Use Diagram) identifying medium density residential is correct. The project provides 37.3 acres of HDR land uses, which accounts for 34.8 percent of all residential land uses within the NSP. The identified acreages are consistent with the Regional Housing Needs Assessment (RNHA) requirements for new developments.

LETTER 4

Gay Jones, Chair of the Cordova Community Planning Advisory Council, written correspondence; dated August 17, 2018.

Comment 4-1

The need for an additional vehicle connection to Sunrise over the canal. A long-standing comment from CorPAC with the realization it would be a long timeline.

Response 4-1

Additional vehicle connection to Sunrise Boulevard is not proposed with this Project. A new pedestrian connection mid-way between Kiefer Boulevard and Jackson Road is proposed over the Folsom South Canal and Sunrise Boulevard. The crossing would connect the trail system on the east side of Sunrise Boulevard with the trail system proposed in the NSP.

Comment 4-2

Ensure safe bicycle connections when neighborhood roads merge with major roadways. Attention to smooth, safe “feeders” is very important.

Response 4-2

The NSP has a robust pedestrian and bikeway system planned, including enhanced crossings that consist of design treatments (e.g., signage, striping, or other mechanisms to alert all parties to the crossing) to create safe crossings. This design would be reviewed during the tentative subdivision map process. Tentative subdivision maps are reviewed by the Community Planning Advisory Councils and additional comments or suggestions by Council members or the public will be taken into consideration at that time.

LETTER 5

Dylan Wood, Environmental Scientist, California Department of Fish and Wildlife, written correspondence; dated August 23, 2018.

Comment 5-1

The draft EIR describes activities that may have the effects (listed above) to vernal pools and seasonal wetlands on the Project site. These activities may be subject to Notification under Fish and Game Code section 1602; therefore, CDFW recommends that the EIR disclose obtaining a Lake or Streambed Alteration Agreement. CDFW approval of projects subject to Notification under Fish and Game Code section 1602 is facilitated when the environmental documentation discloses the impacts to and proposes measures to avoid, minimize, and mitigate impacts to perennial, intermittent, and ephemeral rivers, streams, and lakes, other features, and any associated biological resources/habitats present within the project study area. CDFW relies on the Lead Agency environmental analysis when acting as a responsible agency if it is necessary to issue a Lake or Streambed Alteration Agreement for a project.

Response 5-1

The DEIR includes discussion regarding regulatory permitting needs of CDFW on pages 6-12 and 6-13. Further, in the conclusion of direct and indirect impacts (page 6-29), the discussion acknowledges that the Project applicant would be required to obtain all required permits from CDFW. Due to the recent adoption of the South Sacramento Habitat Conservation Plan (SSHCP) by the County of Sacramento and approval by the regulators, the permitting requirements for the NSP would be most likely be completed through the SSHCP. CDFW is working with the County to develop a streamlined permitting pathway for projects utilizing the SSHCP.

LETTER 6

Jeff Frye, Economic Development Manager, Sacramento Metropolitan Fire District, written correspondence; dated August 29, 2018.

Comment 6-1**Public Facilities Financing Plan**

Comment #1 - The project proponent states Parcel N-60 is the planned site for a fire station within the project area. On January 2, 2018, the District submitted a comment letter requesting a change in location to the southeast corner of the project to satisfy 1st Due response coverage. The District acknowledges Parcel N-60 could potentially serve as a temporary site if NewBridge commences development ahead of the Mather South project. However, the District intends to build a station within Mather South that will provide 1st Due coverage to the northern portion of the NewBridge project. Therefore, Parcel N-60 will not serve the District's need for a permanent station site.

Comment #2 - In the Funding Sources section of the Fire Protection narrative, the proponent states, "The Developer will be required to dedicate land for the fire station site. The developer may receive credits against the SMFD Fire Fee for all or a portion of the site acquisition costs." The District's Capital Fire Facilities Fee includes property acquisition. The District prefers to collect the impact fees in total and purchase station sites at the fair market value of the land rather than developers dedicating sites.

Response 6-1

The comment describes the evolving plans for service in the region, the need for 1st Due Response to the Jackson Highway Corridor Projects, and Sacramento Metropolitan Fire District's preferred approach for land acquisition. While Chapter 1, "Project Description," describes a parcel along Kiefer Boulevard as the site of a new fire station, the discussion acknowledges that "Site selection may need to change based on approval and construction of surrounding developments" (page 1-20). Relocation of the fire station within the portion of the Plan Area identified for development or removal of the

site to an adjacent plan area would not substantially alter the analysis in this EIR. Adequate fire protection services would be provided to residents in the plan area.

The funding sources narrative described in the comment appears to reference the text of the Public Facilities Financing Plan, rather than the DEIR. The mechanism for fire station property acquisition is not germane to the analysis in the EIR. No revisions to the DEIR are required in response to this comment.

Comment 6-2

Urban Services Plan

Comment #1 -As previously stated, Parcel N-60 could serve as a temporary site but is not a suitable location for a permanent facility The NSP should depict a permanent station site in the southwest corner of the project.

Comment #2 - By calculating the District's operating costs on a per capita basis, the project proponent assumes the District's costs are almost entirely variable in nature; however, the District's costs are mostly fixed. In the January 2, 2018 comment letter, the District noted a new engine will need to be placed into service during Phase B. The USP estimates the project will produce approximately \$1.5 million (2017\$) in annual revenue for fire service by the end of Phase A. The District estimates its annual cost to operate an engine is \$2.9 million. Additionally, the USP needs to demonstrate the project can financially support its pro rata share of a Battalion Chief and truck company which cost \$1.2 million and \$3.4 million respectively. These additional resources are essential components of the District's 1st Alarm response.

Response 6-2

The comment provides feedback on the Urban Services Plan that does not affect the analysis or conclusions of the DEIR. No revisions to the DEIR are required in response to this comment. See also Response 6-1.

LETTER 7

Michael Grinstead, Senior Civil Engineer, Sacramento County Water Agency, written correspondence; dated September 4, 2018.

Comment 7-1

The large diameter transmission main from the domestic water tanks resulting from the Phase B NSA Project (NSA Terminal Tanks) to the intersection of Kiefer Blvd and Eagles Nest Road will be developer built with a credit/reimbursement agreement with SCWA. Once the NSA Terminal Tanks are installed, the transmission main connecting

the NSA Terminal Tanks to this intersection will be required to provide water service to NewBridge.

Response 7-1

Note that off-site improvements are evaluated under the heading “Impact: Construction of Infrastructure Could Result in Adverse Physical Effects” on pages 15-23 through 15-25 of the DEIR. The comment provides clarification regarding the anticipated off-site infrastructure; edits have been made on pages 15-23 through 15-25 in response to this comment. However, these edits do not change the conclusion in the DEIR.

Comment 7-2

The Phase A NSA Project is complete.

Response 7-2

The text on page 15-25 of the FIER has been updated as follows to clarify that the segment completed in 2016 is Phase A.

The interim pipeline (Phase A) was constructed in 2016. The timing of construction of the remaining portion of NSA pipeline (Phase B) cannot be precisely predicted at this time, as it is dependent on growth demand in the NSA.

These text modifications do not affect the analysis or conclusions of the DEIR.

Comment 7-3

Connection to the existing water supply transmission infrastructure at the intersection of Kiefer and Sunrise Boulevards will be required for the project. Portions of infrastructure (pipelines) connecting to this project including the P-1 Sunrise Blvd. Pipeline and the P-3A Shortened Kiefer Blvd. will be required and may be off-site.

Response 7-3

The text on page 15-25 of the FIER under the heading “Conclusion” has been updated as follows to expand on the connection to existing 16-inch water line on the east side of Sunrise Boulevard.

The Project will utilize the existing 16-inch water line on the east side of Sunrise and Kiefer Boulevards. This infrastructure would be required for the project and may be off-site.

These text modifications do not affect the analysis or conclusions of the DEIR.

Comment 7-4

Table PU-5 lists the Normal Year 2020 difference as 35,779, which should be updated to the correct number from Table 7-4 in the Water Supply Master Plan Amendment of 34,799.

The Sacramento County Water Agency worked closely with the NewBridge team to develop the Draft Zone 40 Water Supply Master Plan Amendment for the NewBridge Project, which is Appendix PU-1 of the Draft Environmental Impact Report.

Response 7-4

Table PU-5 in the DEIR is based on Table 10 of the NewBridge Specific Plan Water Supply Assessment. The comment suggests updates to the water supply and demand data presented in the DEIR based on the *Zone 40 Water Supply Master Plan Amendment for the NewBridge Project*, which is included as Appendix PU-1 to the DEIR. However, “Table 7-4. Projected Connections in 5-Year Increments – Baseline” on page 7-5 of the Master Plan Amendment does not include information on net demand. It is noted that a few of the values in Table PU-5 were incorrectly entered and have been updated to reflect the values presented in Table 10 of the NewBridge Specific Plan Water Supply Assessment. These text modifications do not affect the analysis or conclusions of the DEIR.

Comment 7-5

The Sacramento County Water Agency (SCWA) does not have any expertise in hardpan restoration and therefore cannot check a hardpan restoration treatment for adequacy during the plan checking process. SCWA would be opposed to any hardpan restoration treatment that limits excavation access or causes an undue increase in cost to access underground assets for future maintenance activities.

Response 7-5

The comment appears to be related to Mitigation Measure BR-3, which is identified in Chapter 6, “Biological Resources,” to address impacts to wetlands and surface waters. The measure indicates that “a hardpan restoration plan shall be developed by a qualified hydrogeologist and geotechnical expert.” This would occur “Prior to the approval of civil improvement plants for the sewer force main and water supply infrastructure in Eagles Nest Road” and would not be a component of SWCA’s plan checking process. The following revisions have been made to Mitigation Measure BR-3 to clarify roles and responsibilities, as well as acknowledge SWCA’s concerns about future access for maintenance activities.

- BR-3.** Prior to the approval of civil improvement plants for the sewer force main and water supply infrastructure in Eagles Nest Road, a hardpan restoration plan shall be developed by a qualified hydrogeologist and geotechnical expert and approved by Sacramento County to ensure consistency with SSHCP Avoidance and Minimization Measure EDGE-7.

The plan shall be implemented for sewer and water line construction adjacent to the proposed preserves on Parcels N-30 and W-30. The detailed plan shall include identification and documentation of the hardpan depths during excavation of the sewer and water line trenches, and appropriate backfill material to restore the hardpan functionality. The detailed hardpan restoration plan shall be included in the construction specifications for the proposed sewer and water supply lines. The Sacramento County Office of Planning and Environmental Review shall coordinate with the Sacramento County Water Agency to develop a feasible treatment plan that does not hinder access to infrastructure for maintenance.

LETTER 8

Dave Ghirardelli, Department of Waste Management and Recycling, written correspondence; dated September 5, 2018.

Comment 8-1

The Project will bring sensitive receptors into proximity to Kiefer Landfill, a source of odors, noise, and dust. Doing so will impact the continuing function of this critical facility, which serves the waste disposal needs of Sacramento County. Mitigation is necessary in the form of Restrictive Covenants, or some similar mechanism such a Nuisance Easement, recorded in perpetuity on deeds for all parcels created in the NewBridge Specific Plan Area, stating that property owners acknowledge the preexistence and proximity of the Kiefer Landfill and release rights to seek corrective action to the inevitable nuisance associated with a landfill such as dust, odors, and noise.

Response 8-1

The Kiefer landfill is discussed on pages 14-17 to 14-18 of the DEIR. The Office of Planning and Environmental Review recognizes the concern raised by the Department of Waste Management and Recycling regarding introduction of new residential land uses near an operating landfill. The Kiefer Landfill is approximately 2.5 miles from the eastern boundary of the project. Based on SMAQMD guidance of a buffer zone of 1 mile for landfills, the project's proximity to the landfill is not considered close enough to expose sensitive receptors to adverse odor impacts. The effects of dust and noise are, similarly, not anticipated due to the distance between the landfill and the NSP project area. On the Project site, the observed landfill noise is anticipated to be less than the transportation noise from area roadways and would not result in a significant impact pursuant to CEQA.

Further, the County has not established any land use restrictions related to the landfill and/or governing plans that would implement policies to prevent development such as the NSP. Nonetheless, the County has reviewed the Project and its proximity to land

uses that could result in potential conflicts. Because of the distance to the Kiefer Landfill, it is not anticipated that landfill operations would create substantial nuisances to new residents within NewBridge such that restrictive covenants or other nuisance notices would be necessary as mitigation measures. As described above, while these land use compatibility issues are important planning considerations, they do not constitute impacts that require mitigation in the EIR. The California Supreme Court has held (*California Building Industry Assn. v. Bay Area Air Quality Management Dist.*, (2015) 62 Cal.4th 369, 377) that CEQA documents need not address the effects of existing environmental hazards on project users and residents, except where the impacts of the project risk exacerbating those existing hazards, which is not the case here. The Impacts and Analysis section in Chapter 5, Air Quality, of the FEIR has been revised to include more detail on this concept in regards to odor. It may be appropriate to require disclosure to future residents that the development is near an operating landfill as a condition of project approval.

LETTER 9

Roxanne Fuentez, Public, written correspondence; dated September 6, 2018.

Comment 9-1

I am opposed to the Newbridge proposed project. This project is outside the Urban Policy Area and seeks to expand the Urban Policy Area. This is not a good idea since it will cause further loss of farmland in Sacramento County.

I attended every Sacramento County Planning Commission Hearing and every Sacramento County Board of Supervisors Hearing regarding the General Plan.

All the comments I heard from both bodies indicated the desire to preserve farmland in Sacramento County. Therefore; this proposed project should not be approved since it will cause further loss of valuable farmland. Demand for locally-sourced food continues to swell in Sacramento. More than a quarter of Sacramento County's farmland vanished between 1996 and 2016 according to State Department of Conservation data. The more farmland that's taken out, the less locally grown food is available for restaurants, farmers markets, and local markets.

Response 9-1

The loss of agricultural land is discussed in Chapter 4, Agricultural Resources, and Chapter 18, Cumulative and Growth Inducing Impacts, of the DEIR. The discussion highlights that while the Project on a singular level does not cause significant farmland impacts, it does on a cumulative level when looked at in conjunction with other proposed and pending projects (DEIR, p. 18-4). The discussion also highlights that the majority of the farmland in question is not economically viable (DEIR, pp. 4-1 and 4-14 to 4-15). The FEIR provides additional information on this farmland. Project-level

mitigation (Mitigation Measure AG-2) would require the preservation of 1 acre of farmland within a permanent conservation easement for every acre lost. Pursuant to General Plan Policy AG-5, land set aside by the Project Applicant as mitigation for the South Sacramento Habitat Conservation Plan would satisfy this mitigation requirement. Further, because the SSHCP is adopted, the Project proponent will be assessed a fee for the loss of grassland land cover type. This would be a greater amount than the loss of important farmlands alone and would represent all feasible mitigation. The discussion concludes that cumulative impacts associated with the loss of viable farmland is significant and unavoidable.

Comment 9-2

In addition, the project site contains habitat for vernal pool crustaceans, western spadefoot toads, Legenere (a wild flower), tricolored blackbirds, Swainsons Hawks, and many other wildlife species. The loss of 295.6 acres of Swainsons Hawk foraging habitat on this site is significant. Also Burrowing Owl habitat will be lost if this project is allowed to proceed.

Response 9-2

The comment highlights the potential effects on wildlife that could be associated with development of the NSP area. These impacts are addressed in Chapter 6, "Biological Resources," of the DEIR. Note that the discussion of impacts to Swainson's hawk identifies potentially significant impacts to the loss of Swainson's hawk foraging habitat. The Swainson's hawk ordinance establishes methods through which a project proponent can mitigate impacts to foraging habitat. The Project Applicant has proposed to permanently preserve suitable habitat within the NSP to equal the loss of suitable foraging habitat. The loss of suitable burrowing owl habitat would be off-set through the permanent preservation of land on-site, and mitigation for impacts to burrowing owls would follow the Staff Report on Burrowing Owl Mitigation (CDFW 2012), as specified in Mitigation Measure BR-9.

Comment 9-3

This entire project site was not surveyed, therefore other important biological and cultural impacts have likely been left out of this Draft Environmental Impact Report.

There are remnants of historic homesteads and farms dating back to the 1800's.

Response 9-3

The entire Project site could not be surveyed because the Project Applicant does not own all the land within the plan area and access was not granted. Nonetheless, an evaluation of potential resources present for the entire plan area was compiled based on a variety of readily available and current data including a Wetland Delineation (Appendix BR-1), a Draft Mitigation Monitoring Plan (Appendix BR-2), a Biological Resources Assessment (Appendix BR-3), an Initial Arborist Report and Tree Inventory

Summary (Appendix BR-4), *Redington: Sacramento Rendering Company Property: Cultural Resources Assessment, and East Sacramento Ranch: Cultural Resources Inventory and Evaluation*. The impact analysis was prepared based on the data observed during surveys of accessible areas, review of recorded data and studies, and potential presence of resources based on what was observed or is known to occur within the area. Mitigation was recommended that requires subsequent activities and projects to conduct conformational surveys to confirm the absence/presence of artifacts, species, and a habitat. Performance standards for mitigation compliance were provided to ensure that mitigation standards are achieved. When subsequent tentative map applications are prepared for the South or West Planning Areas (i.e., areas that have not been surveyed), the future project(s) would be required to prepare project-specific surveys based on the resources known to be present. If resources are identified, those projects must comply with the performance standards and other mitigation requirements identified in the DEIR. Therefore, the DEIR appropriately evaluated the potential biological and cultural resources impacts of the entire plan area, consistent with the requirements of CEQA.

Comment 9-4

This Proposed project will create significant new sources of greenhouse gas, and the project will exceed Sacramento County thresholds for the transportation sector in 2020 and 2030.

Response 9-4

Tables CC-3 and CC-4 in Chapter 7 of the DEIR summarize the Project's estimated GHG emissions for 2020 and 2030. These emissions are presented in metric tons of carbon dioxide equivalent per year per capita (MTCO₂e/year/capita) and evaluated against Sacramento County's thresholds of significance. Emissions from the transportation sector exceed the 2020 and 2030 per capita thresholds of significance by 1.15 MTCO₂e/year/capita. Chapter 7 of the FEIR has been revised to more appropriately focus analysis only on the 2030 and extrapolated 2032 thresholds, as well as to include construction emissions to achieve the most conservative analysis (see revised "Significance Criteria" and "Methodology" sections).

As shown in Table CC-8 and as applicable to revised analysis, adjusted operational emissions would still exceed the MTCO₂e/year/capita thresholds for 2030 and 2032. Following the application of Mitigation Measure CC-1, the Project's cumulative contribution to global climate change would be less than significant based on Sacramento County's thresholds of significance. . In a subsequent assessment prepared by air quality and GHG expert Raney Planning & Management, Inc., the Project also has been shown to comply with SMAQMD's Draft GHG thresholds (see FEIR, Appendix CC-2). Although this assessment is not required under CEQA, it is included in the FEIR to provide as much information as possible to decisionmakers.

Comment 9-5

Traffic impacts caused by this project cannot be mitigated. Upon build out, traffic noise from roadways may likely exceed County General Plan Policies for noise levels. Street lights and security lights will cause light pollution and ruin the night sky.

Response 9-5

The EIR identifies significant and unavoidable impacts to traffic and ambient noise that cannot be mitigated to a less-than-significant level (see Chapter 16, "Traffic and Circulation," and Chapter 13, "Noise"). The effects of new sources of light are similarly determined to be significant and unavoidable in the EIR (see Chapter 3, "Aesthetics")..

Comment 9-6

If this project is allowed to proceed, the view of rolling grasslands will be permanently altered. Once the land is destroyed, it will be lost to future generations.

Response 9-6

The effects on viewsheds in acknowledged in the DEIR (refer to the discussion under the heading "Impact: Degradation of Existing Views and Visual Quality" beginning on page 3-10 of Chapter 3, "Aesthetics." This evaluation acknowledges that the Project would substantially degrade the existing visual character and quality of the site and concludes that the effects on viewsheds would be significant and unavoidable (refer to DEIR page 3-16).

Comment 9-7

The project site contains wetlands, vernal pools, swales, creeks, and stock ponds. The payment into a mitigation bank cannot replace the loss of these resources.

Response 9-7

The Project includes the preservation of existing wetlands on site, as well as the restoration and re-establishment of 9.4 acres of vernal pools within the onsite preserves as discussed on page 6-27 of the DEIR, and in Appendix BR-2, Mitigation and Monitoring Plan. This restoration and re-establishment would exceed the loss of vernal pool habitat due to Project implementation. With the adoption of the SSHCP by the County Board of Supervisors and permitting by the regulators, the Project would be able to apply for permits for impacts to wetlands through the SSHCP. Mitigation Measures BR-1 and BR-2 have been revised in the FEIR to reflect the adoption of the SSHCP. The SSHCP is designed to accept in-lieu fees for the loss of various habitat types in the urban development area, to then purchase land or make agreements with land owners outside of the urban development area for the preservation of various habitat types in a coordinated and connected preserve system. The Project would be required to dedicate the two large preserve areas identified as hardline preserves to the South Sacramento Conservation Agency. Payment of in-lieu fees through the SSHCP would allow for the permanent preservation of these resources within the greater vicinity.

Comment 9-8

The City of Sacramento has built thousands of new housing units in the past 2 years, with more planned. It is not necessary to ruin all the rest of our open space and farmland in Sacramento County.

Response 9-8

Comment noted. This is not a comment on the analysis or conclusions in the DEIR. The preservation of open space is discussed on pages 1-19 and 4-10 of the DEIR. The conversion of farmland is discussed on pages 4-11 to 4-16 of the DEIR. The Board of Supervisors will consider the merits of the Project separate from a decision on the adequacy of this DEIR. It should be noted, however, that according to the State Legislature, the State of California is facing a housing supply and affordability crisis of historic proportions and has a backlog of nearly two million units that are needed to address unmet demand.

LETTER 10

Joanne Chan, Air Quality Planner/Analyst, Sacramento Metropolitan Air Quality Management District, written correspondence; dated September 7, 2018.

Comment 10-1**Short-term Construction Emissions of Criteria Air Pollutants and Precursors
Enhanced Exhaust Control Practices**

Several notification timeframes listed in Mitigation Measure AQ-1 shown on page 6 of the Executive Summary and page 5-24 of the Air Quality Chapter, as well as page 5-13, are either missing or are more stringent than the Sac Metro Air District's current Enhanced Exhaust Control Practices¹. To maintain consistency with the referenced Enhanced Exhaust Control Practices and the language used in Mitigation Measure CU-3, we recommend:

- adding the following sentences to Mitigation Measure AQ-1

*The project representative shall submit to the lead agency and SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment. The project representative shall provide the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman. This information shall be submitted at least **four** business days prior to the use of subject heavy-duty off-road equipment. The SMAQMD's Equipment List Form can be used to submit this information.*

- replacing the following existing phrase in Mitigation Measure AQ-1
“...the lead agency and District shall be notified within 48 hours of identification of non-compliant equipment...”

with the following new phrase for consistency

...non-compliant equipment will be documented and a summary provided to the lead agency and SMAQMD monthly.

Response 10-1

The language of Mitigation Measure AQ-1 (FEIR pages 5-4 through 6 and 5-24) has been amended as suggested by the commenter to reflect the current Enhanced Exhaust Control Practices.

This change does not alter the conclusions of the DEIR.

Comment 10-2

Construction Mitigation Fee Program

Page 5-14 of the Air Quality Chapter discusses the air quality construction mitigation fee and the current rate of \$30,000/ton. Please note that there is also an administrative fee associated with the mitigation and the price of mitigation increases based on the current cost-effectiveness rate established by the California Air Resources Board's Carl Moyer Incentive Program. Please ensure the mitigation requires the use of the current mitigation fee rate and the associated administrative fee to be calculated at the time of construction.

Response 10-2

The referenced text describes the methodology for determination of impacts associated with release of ozone precursors during construction; it is not a mitigation measure. Mitigation Measure AQ-2 has been modified to clarify that the current mitigation fee rate and the associated administrative fee will be calculated at the time of construction.

As described on page 5-22 of the DEIR, compliance with SMAQMD regulation and payment of mitigation fees would ensure that impacts associated with construction activities that would increase particulate matter emissions are less than significant. Mitigation Measure AQ-2 would require that a project proponent submit proof that the off-site air quality mitigation fee has been paid to SMAQMD, and that the construction air quality mitigation plan has been approved by SMAQMD and Sacramento County. The appropriate fees would be applied at this time.

Comment 10-3

Section 7 of the NSP Development Standards and the Air Quality Mitigation Plan (AQMP) state required energy conservation measures, such as requiring all residential, commercial and office buildings to be designed and constructed to accommodate an electric-only option and requiring energy-efficient appliances in all residential units. To ensure consistency between the DEIR, GHGRP, AQMP and NSP Development Standards, and to clarify that the suite of quantifiable GHG reductions measures listed in the GHGRP GHG-1 and DEIR's Mitigation Measure CC-1 should exceed the existing requirements, we recommend rephrasing the 3rd bulleted example measure in Mitigation

Measure CC-1 with following language, and also adding this language to the GHGRP GHG-1:

All-electric ENERGY STAR appliances, including water heaters and HVAC systems, in residential and non-residential development projects;

Response 10-3

In response to the comment, the suggested edits have been made to clarify the text of Mitigation Measure CC-1. This change does not alter the conclusion of the DEIR.

Comment 10-4

Page 7-12 of the DEIR and page 19 of the GHGRP list inherent design features that are not considered mitigation measures but would reduce the operational GHG emissions. Since the intent of the design feature is to reduce GHG emissions, Sac Metro Air District recommends:

replacing the following existing sentence

"Restriction of wood-burning devices (i.e., only natural gas fireplaces permitted, if any);"

with the following new sentence:

Restriction of wood-burning devices and natural gas fireplaces (i.e., only electric fireplaces permitted)

Response 10-4

The language on page 7-12 of the FEIR has been revised to reflect updated guidance from SMAQMD that prohibits the use of natural gas fire places in additional to wood-burning devices. The second bullet on page 7-12 now reads as follows:

- ~~Restriction of wood-burning devices (i.e., only natural gas fireplaces permitted, if any)~~ Restriction of wood-burning devices and natural gas fireplaces (i.e., only electric fireplaces permitted); and

This change does not alter the conclusion of the DEIR.

Comment 10-5

Other Comments Not Related to the Technical Adequacy of the DEIR

Exposure of Sensitive Receptors to Toxic Air Contaminants from Mobile Sources

Sac Metro Air District appreciates the reference to our Recommended Protocol for Evaluating the Location of Sensitive Land Uses Adjacent to Major Roadways, which was the current guidance at the time the Notice of Preparation for this DEIR was released. Please note that we have updated our guidance for locating sensitive receptors near high volume roadways with the Mobile Sources Air Toxics (MSAT) Protocol². The MSAT Protocol with its interactive online tool is intended to assist land use jurisdictions within Sacramento County in:

- (1) assessing the potential increased cancer risk of siting projects with sensitive receptors near high volume roadways and railways; and
- (2) determining whether exposure reduction measures should be incorporated into the project to protect future populations at a project site.

Response 10-5

The County acknowledges SMAQMD's updated guidance for siting sensitive receptors near roadways. The DEIR text describing the methodology for evaluating toxic air contaminants has been updated to reflect the most current methodology.

In response to this comment the following text describing the methodology for evaluating toxic air contaminants has been removed from Chapter 5, "Air Quality," (DEIR page 5-18).

~~For the assessment of significant impacts from exposure to TACs from mobile sources, the SMAQMD has issued the Recommended Protocol for Evaluating the Location of Sensitive Land Uses Adjacent to Major Roadways. The Protocol does not establish a threshold of significance for mobile sources, but indicates an evaluation criterion of that level of increased individual risk corresponding to a 70 percent reduction from the highest risk calculated at 50 feet (currently of 276 cases of cancer per million, Sacramento Metropolitan Air Quality Management District 2011). At this level, a Health Risk Assessment is recommended, the results of which should be disclosed in an environmental document.~~

In addition, the second paragraph of the discussion under the heading "Impact: Project Operation Would Result in TAC Emissions" (DEIR page 5-32) is revised as follows:

Within the Project there is the potential for the future construction of new sensitive receptors in proximity to new stationary TAC sources. Because the exact location of the potential new stationary TAC sources relative to new proposed sensitive receptors will be determined as part of later individual development proposals, it is not possible to conduct a proximity analysis at this time. Though General Plan policy AQ-3 states that buffers between sensitive land uses and sources of air pollution or odor should be provided, some of these future projects may only require building permits, and would not be subject to any review for TAC impacts unless conditions are imposed as part of the NewBridge Specific Plan. ~~Mitigation is included below to stipulate that a condition be added to the NewBridge Specific Plan requiring that a~~All uses would conform to the siting recommendations outlined by ARB. Any sensitive receptors proposed near high volume roadways would be sited using SMAQMD's Mobile Sources Air Toxics Protocol.

Further, any future CEQA documents prepared utilizing this EIR will follow the published guidance at the time of new application submittal. These changes do not alter the conclusion of the DEIR.

LETTER 11

Laura Taylor, Park Planning and Development Manager, Cordova Recreation and Park District, written comment; dated September 10, 2018.

Comment 11-1

Aesthetics

It is our understanding that the lights planned for the parks within the NewBridge project will have to comply with the International Dark Sky standards. Please explain what that will mean to the planned lit ball fields and other park amenities that may be lit.

Response 11-1

Impacts associated with Project lighting are discussed on pages 3-16 to 3-17. This discussion includes the Project's requirement to use only International Dark Sky Association approved fixtures (p. 3-17). The commenter's understanding of the applicability of the International Dark Sky standards to park facilities is accurate. At the time of park design and construction of such features, the District will need to incorporate the most current guidance from the International Dark Sky Association. These include criterion related to targeted illumination; specialized approaches to addressing backlight, uplight, and glare; lighting zoning; energy efficiency; automatic controls; and color (IDA 2018).

Comment 11-2

Cultural

On page 8-21, the document states that prior to the approval of a General Plan Amendment or a Specific Plan, an intensive cultural study of the affected properties must be performed. Since both a General Plan Amendment and a Specific Plan are being proposed for the property now, why has no cultural study been done for the South and Lower West areas? If there is no land use change, when will the study be required? Furthermore, mitigation measure CR-2 does not read the same in the summary mitigation chart as it does in chapter 8.

Response 11-2

As stated in the methodology discussion in Chapter 8, "Cultural Resources," (DEIR page 8-14), only the portion of the NSP owned by the Project Applicant could be fully surveyed because the Project Applicant could not grant access to unowned parcels for pedestrian surveys. The remaining portion of the NSP is evaluated at a programmatic level. For these areas of the Project, Mitigation Measure CR-2 (Cultural Resources Inventory Report for the South and Lower West Planning Areas [APNs 067-0120-059, 060, 067; 067-0080-013 – 016, 025, 029, 030, 037, and 047]) would apply. It requires cultural resources surveys prior to approval of further discretionary projects in areas that

have not previously been subject to intensive cultural resource investigation. The trigger for requiring this mitigation would be the first subsequent discretionary action undertaken by the County at such time as the property owner is engaged in participation in the development of the property. Prior to such indication of intent to develop, the detailed survey of the properties is not warranted. The programmatic level of investigation included in the DEIR is sufficient to inform the County's decision-making process. Refer also to Response 9-3.

The mitigation language in the Executive Summary (page 39) has been updated to be consistent with the language Chapter 8 of the DEIR. This change does not alter the conclusion of the DEIR.

Comment 11-3

Soils

It has been described in several places that the soil in the project area is not prime for agriculture. Please explain whether or not the soils in the project area are suitable for normal park landscaping. If the soils are not suitable, has the DEIR assumed the importation of suitable topsoil and evaluated those impacts?

Response 11-3

Soils and soil types on the Project site and in the Project area are discussed on pages 9-5 to 9-8 and 9-20 to 9-22; soils as they relate to agriculture are discussed on pages 4-4 and 4-11 to 4-16. The soils types are similar to those located east of Sunrise Boulevard. The CRPD should presume similar soil preparation would be required for parks within the NSP as those in the SunRidge Specific Plan Area. The DEIR did not assume the importation of suitable topsoil for the creation of parks or other features. Specific impacts associated with the construction of the proposed park sites would be reviewed for consistency with the NSP and this EIR and, if needed, additional environmental analysis would be prepared based on the project-specific design proposed.

Comment 11-4

Hazards and Hazardous Materials

We have reviewed the maps showing the location of the current effluent pond belonging to the Rendering Plant and believe that at least one of the future park sites may be located on the same property. Please verify whether or not our observation is correct, and that it is the responsibility of the developer/applicant to conduct any clean up measures that must be taken to clear the property from potential hazards created by the ponds. The Cordova Recreation and Park District will not accept any property which has not be cleared and is not free of encumbrances.

Response 11-4

Hazardous materials as they relate to the Sacramento Rendering Plant are discussed on pages 10-12 to 10-13 and 10-15 of the DEIR; park and recreation services are discussed on pages 14-19 to 14-22. The position of the Cordova Recreation and Park District with respect to acceptance of dedicated property is noted. As shown on Plates PD-4 and PS-2 of the DEIR, there are no parks proposed in the area of the current effluent ponds associated with the rendering plant. Parks N-51 and N-52 are located west and east respectively of the effluent ponds. Further, note that Mitigation Measure HM-1 requires that “all remediation requirements associated with the closure and demolition of the Rendering Plant, including but not limited to the floor sumps, settling ponds and surrounding ditches, have been completed to the satisfaction of the Central Valley Regional Water Quality Control Board and the Sacramento County Environmental Management Department” prior to issuance of a grading permit, site improvement plan, building permit, or the dedication of property, whichever occur first.

Comment 11-5

Noise

The District is concerned about the evaluation of noise impacts onto the future residential portions of the project. It is known that there will be organized sporting events held within the future park sites and that those events will create noise. It is further noted that the Sacramento County Noise Ordinance exempts parks from compliance with the provisions in the ordinance. Therefore, please confirm that the park sites within the NewBridge project do not have to comply with Mitigation Measure NO-2.

Response 11-5

The Sacramento County General Plan Noise Element is discussed on pages 13-5 to 13-10 of the DEIR. According to General Plan Noise Element Table 2 (see page 13-8 of the DEIR), new park land uses proposed as part of the Project would not be exempt from Mitigation Measure NO-2. In terms of future individual events and activities at developed park sites, Sacramento County Code Chapter 6.68 (Noise Control Ordinance) contains exemptions for such activities on parks, provided such parks grounds are owned and operated by a public entity.

Comment 11-6

Utilities and Service Systems

Page 14-20 of the DEIR states that parks will have turf limitations, low water plants and smart irrigation central control. The District confirms this broad design parameter but wants it to be known that there will be turf used within the parks.

Response 11-6

Comment noted. Turf is not prohibited within the NSP, but turf will be reduced to meet water conservation efforts. This includes the installation of turf within public parks, specified in the NewBridge Development Standards, Section 7.

Comment 11-7

Appendix PS-1 NSP PFFP July 2018 and PS-2 NSP PFFP July 2018

The District submitted comments relative to the Public Facilities Finance Plan and the Urban Services Plan on September 4, 2018.

Response 11-7

The District's comments on the Public Facilities Finance Plan and the Urban Services Plan are acknowledged and will be addressed separately through the County's Special Districts Section review process.

LETTER 12

Richard Drury, Lozeau Drury LLP, written correspondence; dated September 10, 2018.

Comment 12-1

After reviewing the DEIR, we conclude that the DEIR fails as an informational document and fails to impose all feasible mitigation measures to reduce the Project's impacts. Commenters request that the County of Sacramento Planning and Environmental Review Department, and your staffs address these shortcomings in a revised draft environmental impacts report ("RDEIR") and recirculate the RDEIR pursuant to the California Environmental Quality Act ("CEQA"), Public Resources Code section 21000, et seq., prior to considering approvals for the Project. We reserve the right to supplement these comments during review of the Final EIR for the Project and at public hearings concerning the Project. *Galante Vineyards v. Monterey Peninsula Water Management Dist.*, 60 Cal. App.4th 1109, 1121 (1997).

Response 12-1

The comment does not identify a specific impact(s) in which all feasible mitigation was not explored or specifically how the DEIR is lacking. Recirculation of the DEIR is not required. The analysis and conclusions are supported by substantial evidence, and none of the conditions under CEQA requiring recirculation have been met (see CEQA Guidelines section 15088.5).

LETTER 13

Carol Witham, Sacramento Valley Chapter Treasurer, California Native Plant Society, written correspondence; dated September 12, 2018.

Comment 13-1

Western Spadefoot

Conclusions drawn on pages 6-56 and 6-57 regarding impacts to western spadefoot are not supported by evidence. If it occurs, loss of western spadefoot breeding habitat on the Newbridge Project site would be significant. There are less than a handful of extant populations within the Urban Development Area of Sacramento County and these occur on the very periphery of its range. Larval surveys must be conducted to determine if any breeding habitat occurs on the site. Should breeding habitat be identified on the project site, additional mitigation measures must be implemented to ensure that impacts are reduced to a less than significant level. These measures will also need to be implemented during any compensatory mitigation construction within the preserves as per the *Mitigation & Monitoring Plan*.

Even if there are no breeding sites on Newbridge, there is a known population to the immediate north that is proposed for protection. Several avoidance and minimization measures (AMMs) outlined in the SSHCP must be implemented on the Newbridge Project to reduce indirect effects to the adjacent protected population. These AMMs shall be implemented during construction of the project and also during implementation of the *Mitigation & Monitoring Plan*.

Response 13-1

As discussed on page 6-57 of the DEIR, the loss of potential western spadefoot breeding habitat through Project implementation would be offset by the restoration and re-creation of 9.4 acres of vernal pool habitat within the onsite preserves as discussed in Response 9-7. The Project is required to comply with the SSHCP and all avoidance and minimization measures outlined in Chapter 5 of the SSHCP for western spadefoot toad would be implemented for construction activities. The SSHCP is a comprehensive plan for the preservation of higher quality habitat for 28 species.

Comment 13-2

Invertebrates

Mitigation Measure BR-12 states that no action is required if an occupied vernal pool is totally avoided. However, the *Mitigation & Monitoring Plan* submitted as Appendix BR-2 calls for modification of several avoided vernal pools as part of the overall compensatory mitigation plan. Surveys must be conducted for the shrimp and Ricksecker's water scavenger beetle prior to any earth movement related to the compensatory mitigation plan. Should any of the vernal pool invertebrate species be found in areas where disturbance is planned, a monitoring program needs to be

designed and implemented in order to demonstrate that the compensatory mitigation is in fact beneficial to these species.

Response 13-2

Mitigation Measure BR-12 is written to ensure a reduction of Project impacts to vernal pool invertebrates if the Project were to enter into an individual permit with the USACE. Since the release of the DEIR, the SSHCP has been adopted and permits secured. This Project is a covered activity and will obtain authorization for species and wetland permitting under the SSHCP and will need to comply with Mitigation Measure BR-13. Projects permitted under the SSHCP are required to follow avoidance and minimization measures stated in the SSHCP and permit conditions. Further, any restoration or creation activities within the hardline preserves, are required to prepare a Preserve Management Plan approved by the SSHCP Technical Advisory Committee. Appendix BR-2 lists BMPs that would avoid impacts to vernal pool invertebrates by performing mitigation activities in the late summer/fall when existing vernal pools are dry. There are also performance standards for floral composition and monitoring to assess the success of the mitigation in restoring vernal pools. In addition, Mitigation Measure BR-12 would be applied to mitigation activities that are part of the proposed action. This measure addresses Ricksecker's water scavenger beetle by including surveys and either potential avoidance or compensation for associated vernal pool invertebrates that have the same habitat requirements. As described in Mitigation Measure BR-13, the Project Applicant shall follow all avoidance and minimization measures outlined in the SSHCP and compensate for the loss of habitat pursuant to the Plan.

Comment 13-3

Plants – *Legenere limosa*

The Newbridge DEIR identifies *Legenere* as known to occur in the project site in two vernal pools. These pools are proposed to be protected within the onsite preserves. Unfortunately, the document and its appendices fail to specifically identify the location of these populations. Additionally, the *Mitigation & Monitoring Plan* contains no mention of this rare plant or any avoidance measures to be implemented during the compensatory mitigation construction. Impacts to this species will be less than significant only after appropriate protection measures are included in the mitigation plan.

Response 13-3

Both locations of these populations are identified in the California Natural Diversity Database: one is located on the east side of Eagles Nest Road and one on the west side of Eagles Nest Road (see pages 6-60 to 6-61 of the DEIR). Mitigation Measures BR-14 and BR-15 would apply to the compensatory mitigation outlined in the Mitigation and Monitoring Plan and would require a rare plant survey and avoidance, or compensation measures for *legenere*. Projects permitted under the SSHCP are required to follow avoidance and minimization measures stated in the SSHCP and permit conditions. As stipulated in the SSHCP, restoration and/or creation activities

within the preserves requires a plan that is approved by the South Sacramento Conservation Agency Technical Advisory Committee.

Comment 13-4

Plants – Orcutt grasses

While there are no known occurrences of Orcutt grasses on the Newbridge Project, a portion of the project contains designated Critical Habitat for *Orcuttia viscida*. While this area of the project site is proposed for protection, it will be subject to grading in order to implement the *Mitigation & Monitoring Plan* for the compensatory mitigation being proposed for the project. This will constitute modification of Critical Habitat albeit temporary. In order to ensure that the temporary disturbance does not adversely affect designated Critical Habitat, an invasive species prevention and removal plan will be implemented as part of the *Mitigation & Monitoring Plan*.

Response 13-4

Appendix BR-2 Draft Mitigation & Monitoring Plan was prepared in anticipation of the individual 404 permit process. The Project will be subject to the SSHCP conservation strategies and avoidance and minimization measures which provides specific survey and avoidance methods to ensure preservation of Orcutt grasses. For instance, Orcutt-1 requires surveys if a covered activity is located within one mile of the Mather Core Recovery Area and Orcutt-2 details preservation measures. Invasive species control is an objective of the SSHCP Monitoring and Management Program. Mitigation Measure BR-16, as described on page 6-63, would require an invasive species prevention and removal plan. This plan would provide methods to remove invasive species from preservation areas, including those areas of *Orcuttia viscida* critical habitat subject to the compensatory mitigation activities described in the Mitigation and Monitoring Plan.

LETTER 14

Alex Kelter MD, Chair Land Use Committee, ECOS, written correspondence; dated September 13, 2018.

Comment 14-1

Alternatives

Alternative 5 (No Project) is found not to be the most environmentally friendly, yet Table AL-5 clearly shows its environmental superiority over all the other alternatives.

Air Quality

Alternative 1 contains the same number of dwelling units on a smaller footprint, so that “air quality impacts would remain similar”. But the smaller footprint should be more conducive to efficient transit, yet this well-known phenomenon is not factored into the analysis.

Alternative 5 would allow the SRC to continue operations. Are we to assume that reduction of existing odor production is another justification for the project?

Response 14-1

The analysis in Chapter 2, “Alternatives,” indicates that the No Project Alternative would reduce all the Project’s anticipated impacts, as summarized in Table AL-5 (DEIR page 2-19). Nevertheless, the DEIR (page 2-17) indicates that the No Project Alternative cannot be considered the environmentally superior alternative because it does not satisfy the Project Applicant’s primary Project Objective (i.e., relocation of the Rendering Plant and development of the site). In addition, Section 15126.6(e)(2) of the State CEQA Guidelines requires that an EIR identify an environmentally superior alternative among the other alternatives considered in the EIR if the analysis concludes that the No Project Alternative is environmentally superior.

The commenter’s observations regarding the potential for operational air quality effects to be reduced under Alternative 1 due to a smaller footprint that would be conducive to efficient transit is noted. However, based on the size of the plan area and because the Project includes a transit program, this is not anticipated to result in a notable reduction in air quality impacts during operation. The continuation of the SRC under Alternative 5 is discussed on page 2-11 and contributes to the analysis.

Comment 14-2

Land use

This area should be treated in the same fashion as the remainder of the Jackson Corridor. ECOS has long indicated that the County must establish a logical and progressive schedule for the development of the Jackson Corridor, consistent with mitigation measures LU-1 - LU-3 in the EIR for the Sacramento County General Plan.

For example: “LU-1. Growth within the Jackson Highway Corridor and Grant Line East New Growth Areas shall be phased through master planning processes. The phases shall be defined by a specific geographic area, with the earliest phases closest in to the existing urban areas, and the later phases farthest outward. Each phase shall represent a geographic area that will accommodate no more than 10 years of growth, based on the latest SACOG projections. Development within the phases shall occur sequentially, and residential or commercial development in each subsequent phase shall be prohibited until the prior phase is developed to at least 50% of holding capacity.”

Without such a schedule for the entire area, the development pattern will be a free-for-all and the resulting development will exemplify that. Further, the development will not be consistent with the mitigation measures **required** in the CEQA review for the Sacramento County General Plan. A scheduled plan for the entire Jackson Corridor area must be prepared before any development proceeds. The Board of Supervisors has been reluctant in the past to apply any meaningful logical progression to new development, including in the General Plan, despite the mitigation measures that the County **committed to** as part of CEQA review for its general plan. ECOS continues to believe this to be a massive error in judgement, one that should not be repeated in this DEIR. Failure to establish such a schedule pits project against project for, among other things, allowable greenhouse gas emissions (as per SB 375’s Sustainable

Community Strategy), and allows “the market” to set the County’s priorities, instead of the Board setting them.

Response 14-2

The commenter requests a schedule for development of the Jackson Highway Corridor based on the language in Mitigation Measure LU-1 from the EIR prepared for the Sacramento County General Plan. The Board of Supervisors did not adopt this mitigation. As such, consistency with this mitigation is not required and the County has not committed to its implementation. In lieu of Mitigation Measure LU-1, the Board adopted Policies LU-119 and LU-120 for projects that require expansion of the Urban Policy Area. As described in Chapter 12, “Land Use,” under the heading “Impact: Conflict with Land Use Plans, Policies and Regulations” on page 12-33 of the DEIR, the Project would be consistent with these policies.

Comment 14-3

We do not believe this project meets all criteria PC-1 through PC-10 in LU-120, and therefore does not qualify for adjustment of the UPA. In particular, we are having trouble understanding how the project is consistent with SACOG’s Blueprint when a substantial amendment is needed to achieve this “consistency”. This amendment would change the timing of developing here from “after 2030” to “before 2030.” SACOG projects the NEED for *future* development of this area. Nothing in the proposal demonstrates why that “future” is “now”. We assume it’s because the developer is ready now, rather than that the NEED has suddenly arisen.

LU-120 lists the 10 criteria that must be met to expand the UPA.

PC-1. We do not see a vision for connectivity based upon anything other than wishful thinking. Certainly transit connectivity has no visible means of support in this proposal.

PC-5 Transit-oriented Design (TOD) is required. Without a plan for how the transit would be supported, we do not agree that this criterion is being met.

PCC-7 It is not possible to confirm the cost-neutrality of this proposal without a more completely described method of supporting transit.

PC-9 consideration of regional planning efforts is not satisfied when the only way the project is said to be “consistent” with Blueprint is if it is amended. That sounds more like **inconsistency** to us.

Consistency with Blueprint also is said to be satisfied by proximity to the “existing community” of SunRidge Specific Plan, only after taking great pains to identify how connectivity to truly adjacent developments are limited by a wetland preserve and the vernal pool preserve at Mather. In the end, adjacency is established by neither the north side nor the east side of the proposed development, but rather ONE POINT (the corner of the property).

Project also includes a “multi-modal transportation system”, but does not demonstrate how the financial viability of the system will be accomplished. It’s an idea, not a plan, and therefore does not satisfy LU-34, etc. After all, without a T, there is no TOD.

Response 14-3

As described in Response 14-2, the analysis in the DEIR concluded that the NSP would be consistent with LU-120 (see Table LU-2 beginning on page 12-34 in Chapter 12, “Land Use”). The specific criterion of concern are addressed in greater detail below.

- PC-1: The Project provides connectivity to surrounding and planned developments through the planned water and sewer connections to serve new areas, connection of regional trails to the north, east and west. Planning roadways around established regional roadways and lining up new roads with proposed developments circulation systems.
- PC-5: There is a plan for proposed transit through the Specific Plan area and to connect with the future development to the north and west. Further, the City of Rancho Cordova would like to coordinate transit planning efforts to develop an efficient system. The NSP has identified two transit centers oriented around higher density uses. As identified in the Public Facilities Financing Plan, funding to operate a transit service with 15-minute peak hour headways is identified. Reference the NewBridge Specific Plan document Section 5.5.
- PC-7: This measure specifically requires cost neutrality to the County’s General Fund and existing rate payers and that existing levels of municipal services will not be negatively impacted. Transit is not an existing municipal service in the area of the County. The financing plan does identify funding for proposed transit facilities and operations.
- PC-9: The SAGOG Blueprint, adopted in 2005, acknowledged the Jackson Highway Corridor as an appropriate and logical area to urbanize. Amendment is not required. Refer to the discussion in Table LU-2 (DEIR page 12-35).

Specific Plans shall employ the primary concepts in LU-34 wherever feasible. The Project identifies direct multiple linkages for bicycles and pedestrians to the “core area,” identifies transit centers near the commercial, and includes higher density land uses.

Comment 14-4

Biological Resources

This comment letter incorporates by reference the comment letter prepared by the California Native Plant Society. This project must rely on the SSHCP for endangered species coverage and follow its conservation strategy and mitigation guidelines. In the absence of the SSHCP, it must follow the Record of Decision for the Sunridge Properties project.

Response 14-4

The Project will apply for coverage under the SSHCP. At the time the DEIR was prepared, the SSHCP had not been approved by the permitting agencies. Subsequent to the DEIR publication, the SSHCP was adopted by the County Board of Supervisors and the Plan Partners; the FEIR has been revised to reflect this change (see revised MM BR-13). In July 2019, the SSHCP received permits from the USFWS, the USACE,

and water quality certification from the CVRWQCB. An incidental take permit from CDFW was issued August 2019.

Comment 14-5

Traffic and Circulation

Providing adequate transit service to this project, and other projects in the Jackson Corridor, must be a critical component of this Specific Plan to achieve the objectives of the General Plan. Only through the provision of a robust transit system can vehicle miles traveled be reduced and greenhouse gas reductions be achieved. When ECOS last met with County staff and representatives of the projects in the Jackson Corridor we were assured that a Transportation Services District (County Service Area) would be established for all the projects in the Jackson Corridor. In fact, we were provided with a draft document which indicated the annual assessment per dwelling unit for each project (attached).

In reviewing the DEIR, what we find is a very vague and in our view unenforceable mitigation measure TC-4.

MITIGATION MEASURE TC-4: TRANSIT SYSTEM The Project applicant shall coordinate with Sacramento County and Sacramento Regional Transit District (or other transit operators) to provide the additional transit facilities and services assumed in the transportation analysis, or a cost-effective equivalent level of transit facilities and services. Ultimate transit service consists of 15- minute headways during peak hours and 30-minute headways during non-peak hours on weekdays. The implementation of the transit routes and service frequency must be phased with development of the Project and the ultimate service will be required at full development of the Project.

The operative word in this mitigation measure appears to be "coordinate". There is no assurance that adequate transit service will be provided or, most importantly, how it will be funded. Therefore, based upon our previous assurances from the County and the project proponents in the Jackson Corridor, the mitigation measure must be revised to read:

MITIGATION MEASURE TC-4: TRANSIT SYSTEM Prior to the recordation of any final subdivision map for the New Bridge Project, a Transportation Services District shall be formed. This can be accomplished through the annexation to County Service Area 10 or through the establishment of a new County Service Area. Prior to annexation to County Service Area 10 or the establishment of a new County Service Area, an engineering study shall be undertaken to determine the annual dwelling unit equivalent assessment for the projects in the Jackson Corridor to provide the additional transit facilities and services assumed in the transportation analysis. Ultimate transit service consists of 15- minute headways during peak hours and 30-minute headways during non-peak hours on weekdays. The implementation of the transit routes and service frequency must be phased with development of the Project and the ultimate service will be required at full development of the Project.

Only a clearly stated mitigation measure, as we have stated here, can withstand legal challenge. While ECOS has supported development in the Jackson Corridor, that support was predicated upon the assurance that adequate transit service would be provided to significantly reduce environmental impacts. This approach has been applied to other projects in the southeast County area in the past and there is no reason to change the approach now.

This project is part of the Jackson Corridor Development Area, so the project area should be treated the same as the other projects in the area. As advocated by ECOS in the past, the other projects in the Corridor have agreed to establish a Transportation Services District with a per dwelling unit equivalent assessment for transportation services. This approach is critical to the development of this entire area and is crucial to reducing ozone precursors and greenhouse gas emissions.

Without the mitigation measures described here and under **Land Use** [above], this DEIR must be considered incomplete and inadequate, since these and other feasible mitigation measures have not been applied.

Response 14-5

The comment expresses concern about the enforceability of Mitigation Measure TC-4 and the potential that the Project would not include transit service. A conceptual transit system to serve the Jackson Corridor Projects (including the NewBridge Project) was developed as part of a joint transit planning process involving Sacramento County, SacRT, DKS Associates, and the applicants of the Jackson Highway Corridor Projects. The proposed transit system was assumed as an attribute of the NewBridge Project in the traffic modeling and analysis in the Joint TIS; and, thus, would be included as a condition of approval for the Project. Furthermore, the NewBridge Specific Plan's Public Facilities Financing Plan (Appendix PS-1) and Urban Services Plan (Appendix PS-2) contain assumptions for capital costs and ongoing operations and maintenance costs for the transit system and service assumed in the traffic modeling and analysis in the Joint TIS that is consistent with General Plan Policy LU-120.

The paragraph describing the transit analysis on page 16-95 of the FEIR is revised as follows to address this concern and clarify that that transit services will be a required component of the Project:

TRANSIT ANALYSIS

Public transit is not currently provided to, or in the vicinity of, the NewBridge project site. In the preparation of this analysis, a conceptual transit system to serve the NewBridge project and adjacent future projects was developed. The proposed transit system was assumed as an attribute of the NewBridge Project and was included in the traffic modeling and analysis in the Joint TIS. The additional transit service was assumed to be funded by the NewBridge project. However, Although the timing and implementation of the transit system are uncertain at this

time, the assumed transit routes and service frequency would be required at full buildout of the NewBridge Project and would be included as a condition of approval.

The NewBridge project would increase demands for public transit facilities. Because adequate transit facilities would be provided, the impact of the NewBridge project on the transit system is *potentially less than significant*.

The paragraph describing the transit system mitigation on page 16-214 is revised as follows:

TRANSIT SYSTEM MITIGATION

~~The applicant of the NewBridge project shall coordinate with Regional Transit (or other transit operators) to provide the additional transit facilities and services assumed in transportation analysis, or a cost-effective equivalent level of transit facilities and services.~~

The assumed transit routes and service frequency would be required at full development of the NewBridge project. The full level of transit service would not achieve adequate transit ridership during the early stages of development. Thus the ultimate transit service, like the roadway system serving the NewBridge project, must be phased with development of the NewBridge project. Mitigation Measure TC-4 has been included to ensure ~~reduce~~ this impact remains at a ~~to~~ *less-than-significant* level.

The paragraph describing the Mitigation Measure TC-4 on page 16-227 is revised as follows:

MITIGATION MEASURE TC-4: TRANSIT SYSTEM

The Project applicant shall coordinate with Sacramento County and Sacramento Regional Transit District (or other transit operators) to provide the additional transit facilities and services assumed in the transportation analysis, or a cost-effective equivalent level of transit facilities and services. Ultimate transit service consists of 15-minute headways during peak hours and 30-minute headways during non-peak hours on weekdays. The implementation of the transit routes and service frequency must be phased with development of the Project and the ultimate service will be required at full development buildout of the Project. **Prior to recordation of any final small lot subdivision map for the project, formation of a transportation services district or annexation to County Service Area 10 shall occur to ensure sufficient transit service funding is available for each phase and full buildout of the project.**

These text changes clarify the existing analysis and increase the consistency of the discussion among the Jackson Highway Corridor Projects. Additionally, the text changes describe that that the transit system improvements would be required as a condition of approval; thus, ensuring that the proposed transportation system would be

implemented if buildout of the Project were to occur. Some of the changes to the mitigation measure proposed in the comment have been included to clarify the timing of implementation. These changes do not alter the conclusion of the DEIR.

LETTER 15

Don Lockhart, Executive Officer, Sacramento Local Agency Formation Commission (LAFCo), written correspondence; dated September 13, 2018.

Comment 15-1

Project Description – The project description needs to explicitly include all required LAFCo actions and entitlements. The project description needs to include a discussion regarding the role and sequence of LAFCo in the decision-making process.

Response 15-1

As described in Chapter 1, “Project Description,” an annexation application would be submitted to LAFCo concurrent with, or subsequent to, the Sacramento County entitlement process. This process would include the definition of the ultimate geographical boundaries of SRCSD and SASD, disclose the present and planned land uses in the area, and describe the present and probable need of public facilities in the area; describe the present capacity of those services and facilities; and disclose the presence of any relevant social or economic communities of interest in the area. Annexations are defined under California Government Code Section 56017 as the “inclusion, attachment, or addition of territory to a city or district.” Sacramento LAFCo is a responsible agency under CEQA for the following annexations that would be required for the Project:

- Annexation to Sacramento Area Sewer District (SASD)
- Annexation to Sacramento Regional County Sanitation District (SRCSD)

The spheres of influence for both districts are co-terminus with the County’s Urban Policy Area (UPA) in the area of the Project. Currently, the UPA extends to Kiefer Boulevard at the northern boundary of the Plan Area and Sunrise Boulevard at the eastern boundary of the Plan Area. As part of the Project, the Applicant is requesting that the County extend the UPA to include the Plan Area.

This was disclosed in the DEIR. Chapter 1, “Project Description,” includes the following description of the entitlement process (see pages 1-20 and 1-21 of the DEIR):

SACRAMENTO LAFCo ENTITLEMENTS

The Project will require a request to the Sacramento Local Agency Formation Commission (LAFCo) to amend the service boundaries of the Sacramento

Regional County Sanitation District (SRCSD) and Sacramento Area Sewer District (SASD) to provide wastewater services to the Project. The Project will require discretionary action which would take place subsequent to County Board of Supervisors Project approval and will require LAFCo review, proceeding, and action.

Concurrent with, or subsequent to the Sacramento County entitlement process, an annexation application to LAFCo must be submitted. This process would include the definition of the ultimate geographical boundaries of SRCSD and SASD, disclose the present and planned land uses in the area, describe the present and probable need of public services and facilities in the area, describe the present capacity of those services and facilities and disclose the presence of any relevant social or economic communities of interest in the area. LAFCo has sole authority and discretion to act on the aforementioned request, and as a responsible agency, will contribute to and rely on this EIR.

The comment does not provide an explanation of what LAFCo actions or elements of the approval process should be added to this description. No changes to the EIR have been made in response to this comment.

Comment 15-2

Population, Employment and Housing – The evaluation should discuss the presence and potential loss of affordable housing within the project area and, if there would be any loss, what affect the loss would have on a countywide basis. LAFCo is required to ensure that there be no net loss of targeted housing resources on a countywide basis. While such resources are may not be located within the study area, the EIR sections discussing Population and Housing should explicitly state this fact and determine that there would be no impact. If targeted housing resources are located, or planned for the project area, the EIR should evaluate whether the project would maintain such resources or continue to allow their potential development. If not, the EIR should explain how this loss of affordable housing would affect the County’s provision of targeted housing types, and propose mitigation to ensure that the County remains able to meet their regional housing needs allocation (RHNA) for the adequate provision of housing affordable to all household income levels.

Response 15-2

The project area contains approximately five existing residential units west of Eagles Nest Road which are proposed to remain. Providing affordable housing consistent with the General Plan and meeting the Regional Housing Needs Allocation are stated objectives of the Project (see Objectives 8 and 9 on page 1-22 of Chapter 1, “Project Description,” in the DEIR). Further, as stated on page 1-18, “...the residential component of this project requires that it comply with the County’s Affordable Housing Ordinance...The Project is meeting the obligation by dedicating land and by paying fees for construction of affordable units.”

Note that the EIR does not have a chapter or section titled “Population and Housing.” Instead, the issue of affordable housing is evaluated in Chapter 12, “Land Use.” Consistency with the County’s RHNA standards is evaluated in Table LU-2: NewBridge Criteria-Based Standards Determination (see page 12-34 of the DEIR.). As stated therein,

The NSP is required to accommodate greater than 90% of its share of the unincorporated County’s proportional obligation of the RHNA. Current RHNA obligation is 38.7% of the housing stock. Ninety percent of that obligation would require 34.8% of the housing stock in the NSP be suitable for low and very-low income units.

The NSP include 1,071 residential units designated High Density Residential or Mixed Use with planned densities of 22.0 units per acre. This accounts for 34.8% of the units in the NSP and satisfy the NSP’s share of the County’s overall RHNA obligation.

In addition, Chapter 12 of the DEIR included the following discussion of affordable housing that satisfies LAFCo’s request that the EIR explicitly state that there is no affordable housing in the Plan Area and that there would not be an effect on affordable housing in the County (see page 12-45 of the DEIR).

Comment 15-3

Public Services – The DEIR states that the evaluation of public services would meet LAFCo requirements. To meet this standard, the evaluation should focus on the following issues, including whether any physical facilities would need to be improved, constructed or expanded to serve the project, including those outside of the project site, whose construction potentially could have environmental effects. If so, the secondary effects of expanding, improving, constructing and operating such facilities should be evaluated. These would include any necessary offsite wastewater service infrastructure. Secondly, the evaluation should assess whether the districts have (1) the service capability and capacity to serve the project area, and (2) whether they can provide services to the project area without adversely affecting existing service levels elsewhere in their service area.

The analysis may benefit from consideration of the required annexation Plan for Services regarding the financing and timely provision of sustainable wastewater services - collection, conveyance and treatment, with no adverse impact to existing ratepayers.

Response 15-3

Chapter 14, “Public Services,” in the DEIR evaluated potential effects on fire protection, law enforcement service, solid waste service, the school district, the park district, and libraries. Offsite improvements associated with wastewater service infrastructure are evaluated in Chapter 15, “Public Utilities”. A Financing Plan has been developed for the

Project that includes fire facilities, landscape corridors, parks, open space and trails, habitat and wetlands, library facilities, transit facilities, and schools to serve the Plan Area.

The Impacts and Analysis discussion in Chapter 14, "Public Services," of the DEIR discusses each of these services and their capacity to serve, as well as the potential to adversely affect existing service. The environmental effects of constructing or expanding physical facilities within the Project boundaries in areas designated for developed uses, consistent with the provisions of the Specific Plan, are evaluated under IMPACT: CONSTRUCTION OF FACILITIES (beginning on page 14-15 of the DEIR). Wastewater is addressed in Chapter 15, "Public Utilities," of the EIR. This analysis indicates that the Plan Area would be annexed into the Services Areas of the Sacramento Regional County Sanitation District (SRCSD) and the Sacramento Area Sewer District (SASD) (page 15-4 of the DEIR).

As indicated on page 15-28 of the DEIR,

"A Sewer Study was prepared for the Project (Level 1 Sanitary Sewer Study for NewBridge Specific Plan, August, 2013, MacKay and Soms Civil Engineers, Inc, Appendix PU-3) in order to satisfy the Sacramento County Sewer District's (SASD) Level One Minimum Sewer Study Requirements and determine if sufficient sewer service is available for the Project."

"The applicant has requested an interim shed shift from the Laguna Creek Eagles Nest trunk shed to the Mather Kiefer trunk shed. The interim shed shift requires a pump station and force main facilities to transport wastewater north. The request was approved by the sewer districts."

The analysis continues:

"The approved Mather Field Specific Plan/Special Planning Area project (PLNP2013-00044) EIR included a project-specific analysis of the Mather East Trunk line along Zinfandel Drive from North Mather Boulevard to 2,100 feet south of Woodring Drive. The proposed Mather South Community Master Plan project (PLNP2013-00065) will extend the line down to Kiefer Boulevard. If the sewer line is not constructed by the time the Project is ready for development, the Project will have to construct the Mather East Trunk line. Physical impacts associated with the construction of the Mather East Trunk line have been identified in the Mather Field Specific Plan/Special Planning Area FEIR. All of the regional off-site infrastructure shown is already contemplated in SASD or SRCSD master planning documents.

If the regional infrastructure is not in place by the time the Project begins construction, the Project will have construct the necessary regional sewer infrastructure to serve the Project. Mitigation adopted for the Mather Field Specific Plan/Special Planning Area will be applied and is included as

recommended mitigation for this Project. Construction of regional infrastructure will not result in utility-specific adverse physical impacts; impacts are *less than significant*.”

As described in Chapter 15, “Public Utilities,” the Project would connect to infrastructure already anticipated in the applicable planning documents prepared by SASD and SRCSD. The nearest interceptor is located north of the Project. The preferred alternative is to connect to the interceptor to the north via the future Mather trunk line (extending down Zinfandel Drive). An initial sewer study has been prepared, which concluded that there is sufficient interim capacity within the existing offsite interceptor system to accommodate the Project (MacKay and Somps 2013). No changes to the DEIR have been made in response to this comment.

Further, the annexation would be a logical and reasonable extension of the SASD and SRCSD service areas, which border the Plan Area to the north and east, and initial studies indicate that there is existing capacity to serve the Plan Area without affecting existing service. The County believes that the proposed annexation is a timely, appropriate action that does not encourage urban sprawl, and the Project would be consistent with Sacramento LAFCo policies and responsibilities for planning and shaping the logical and orderly development and coordination of local government agencies so as to advantageously provide for the present and future needs of the County.

Comment 15-4

Natural Resources - Agricultural Lands – The CEQA analysis must adequately include the evaluation of agricultural resources to provide information to allow LAFCo to make findings with respect to applicable LAFCo statutory criteria, and Sacramento LAFCo local policies and standards. To permit LAFCo to complete this evaluation, the analysis should include a discussion of any current agricultural uses and activities within and adjacent to the project area, including the presence of any lands protected by Williamson Act contracts or within a Farmland Security Zone. The evaluation should also discuss the characteristics of soils found within the area (NRCS land use capability classification and storie index rating [from soil survey], and FMMP classification [from DOC Important Farmlands Map]) to determine the presence or absence of “prime agricultural land” as defined by Government Code §56064. Areas of prime agricultural land should be displayed on a map. In addition to soils information, if agricultural uses are present, for each use or operation the EIR should determine if the use supports, at a minimum, one Animal Unit (AU)/acre or has returned, or would return if planted with fruit or nut bearing trees, an agricultural value of at least \$400/acre for 3 of the last 5 years. Describe the location and determine the acreage of such areas. (See GC §56064) If there are lands protected by Williamson Act contracts or within a Farmland Security Zone, determine the status, location, and acreage of such lands (active, renewal, non-renewal contract status), and if non-renewal, the expiration date of the contract(s). If the project would result in the loss of prime agricultural land or protected agricultural lands, evaluate the trend of agricultural land loss countywide and in adjacent areas of Placer

County, and what portion of the overall inventory and loss that this project represents. The analysis should propose mitigation to reduce any potential impacts to important agricultural resources to a less-than-significant level.

LAFCo is required to make findings regarding five tests of “prime agricultural land” as defined by GC §56064. The analysis needs to provide information regarding such lands to permit LAFCo to make these findings as a responsible agency.

Response 15-4

As described in Chapter 4, “Agricultural Resource,” portions of the Plan Area are currently used for grazing. At the northeastern boundary of the Plan Area, 8.6 acres is designated as Farmland of Statewide Importance, and 75.2 acres at the northeast corner of the Plan Area is designated as Farmland of Local Importance on the Sacramento County Important Farmland Map (California Department of Conservation 2016). See Plate AR-2 in Chapter 4. Further, approximately 121 acres in the southeastern quadrant of the site are under a Williamson Act contract (72-AP-026). The contract is in non-renewal and is expected to expire in 2021. See Plate AR-3 in Chapter 4.

Information about soils in the Plan Area and potential to support agriculture are also provided in Chapter 4. Plate AR-4 is a NRCS soils map. Table AR-1 includes information about soils in the Plan Area. For a discussion of the potential for conversion of Farmland to non-agricultural use, refer to IMPACT: CONVERSION OF PROTECTED FARMLAND TO NON-AGRICULTURAL USES.

"Prime agricultural land" is defined in Section 56064 of the Cortese-Knox-Hertzberg Local Government Reorganization Act as an area of land that has not been developed for a use other than an agricultural use that meets any of several qualifications, as described below:

- (a) Land that qualifies, if irrigated, for rating as class I or class II in the U.S. Department of Agriculture (USDA) NRCS land use capability classification, whether or not land is actually irrigated, provided that irrigation is feasible.
There are not any class I or class II soils in the plan Area (see Table AR-1 in Chapter 4, “Agricultural Resources”).
- (b) Land that qualifies for rating 80 through 100 Storied Index Rating.
Most of the Plan Area is rated between 80 and 100 on the Storied Index (soil units 145, 191, 192, 193, and 195 in Plate GS-2 in Chapter 9, “Geology and Soils” of the DEIR).
- (c) Land that supports livestock used for the production of food and fiber and that has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the USDA in the National Range and Pasture Handbook, Revision 1, December 2003.

Based on NRCS soil productivity data for irrigated pasture, the majority of the Plan Area could support between 4 and 10 animal units per acre. Because much of the open area of the Plan Area is used for grazing, this criterion would likely include most of the Plan Area.

- (d) Land planted with fruit or nut-bearing trees, vines, bushes, or crops that have a nonbearing period of less than 5 years and that will return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than four hundred dollars (\$400) per acre.

No portion of the Plan Area meets this criterion.

- (e) Land that has returned from the production of unprocessed agricultural plant products an annual gross value of not less than \$400 per acre for three of the previous 5 calendar years.

No portion of the Plan Area meets this criterion.

Based on the evaluation above, the Project would result in the conversion of Prime Agricultural Land that is currently in open space use. Mitigation Measure AG-2 has been identified to address effects on Farmland pursuant to General Plan Policy AG-5. This measure would require the preservation of one acre of Farmland within a permanent conservation easement for every acre lost. Further open space and grazing land conservation may occur under the SSHCP, because the Project Applicant would be assessed a fee for the loss of grassland land cover type. Therefore, although conversion of Prime Agricultural Land, as defined by LAFCO, would occur, all available mitigation has been incorporated into the Project.

To approve the reorganization, LAFCo must find that the proposal will lead to the planned, orderly, and efficient development of an area. There are several approved developments (Sunrise Douglas Community Plan including the SunRidge and SunCreek Specific Plans) and one proposed plan (Arboretum Specific Plan) on the east side of Sunrise Boulevard. These plans incorporate a mix of land uses, such as, residential, commercial, office park, park, and schools. To the west are agricultural, agricultural-residential, and industrial uses. There are proposed master plans to the west and north of the NSP site – Jackson Township Specific Plan, West Jackson Highway Master Plan, and Mather South Community Master Plan. There is an active mine to the south. The Project is located adjacent to the City of Rancho Cordova, and is adjacent to the existing service areas of SASD and SRCSD on two sides. As a specific plan, the Project sets forth a conceptual land use plan that would lead to the orderly development of the area that would be consistent with other planned development in the region. There is insufficient area within the existing spheres of influence to accommodate the scale and type of development proposed with the Project.

The proposal would not have an adverse effect on the physical and economic integrity of most adjacent agricultural lands because most of the area is planned for similar development independent of the NSP. However, development of the Project could result in development pressures on the agricultural residential land remaining within the in NSP West Planning Area.

Buildout of the Project would occur over a span of roughly a decade and would be dependent on market conditions. As described in Chapter 15, "Public Utilities," sewer service would be phased as follows:

Phase A: In the event that the BR Mather East Trunk has not been constructed by others, the NSP would be required to construct it from North Mather to Kiefer Boulevards. On-site improvements include construction of a sewer force main on Eagles Nest Road between Kiefer Boulevard and Bridgewater Drive and on Bridgewater Drive from Eagles Nest Road to the south limit of Phase A development. Eight and ten inch sewer collection pipes would be constructed within the streets. A 3.23 million gallons per day pump station located within Phase B would be constructed as part of Phase A.

Phase B: On-site improvements include the construction of a sewer force main from Bridgewater Drive south to the pump station and construction of 8-inch and 10-inch sewer collection pipes within streets.

Phase C: On-site improvements include the construction of 8-inch and 10-inch sewer collection pipes within streets.

The NSP Urban Services Plan and Fiscal Impact Analysis demonstrate that existing levels of municipal services would not be adversely affected by implementation of the NSP. The NSP includes 336.5 acres of open space preserve that are consistent with the SSHCP hardline and linkage preserves, and mitigation would be required to address the conversion of Farmland. The County believes that the Project represents the logical and orderly expansion of the UPA and that all reasonable mitigation has been identified.

Comment 15-5

Natural Resources - Open Space - The analysis should include an evaluation of any open space resources as defined by GC §65560 that are located within or adjacent to the project area. Such resources should be depicted on a map. If the project would result in the loss of open space resources, the analysis needs to evaluate the trend of open space loss countywide, and what portion of the overall inventory and loss that this project represents. The analysis should propose mitigation to reduce any potential impacts to open space resources to a less-than-significant level.

Response 15-5

Government Code 65560 defines "open space land" as an area that is devoted to open space use, and that is designated on a local, regional, or state open-space plan for: the preservation of natural resources; use for the managed production of resources, including agricultural land, groundwater recharge, streams that support commercial fisheries, and areas of major mineral deposits; recreational areas, including areas of outstanding scenic, cultural or historic value; areas that require management due to the

potential for hazards, such as fault zones; military installations; open space for the protection of certain Native American resources.

As indicated above, portions of the Plan Area that would be developed through implementation of the NSP currently meet the LAFCo definition of open space. Specifically, the 83.8 acres of mapped Farmland would be converted. The NSP does, however, include 336.5 acres of open space preserve that are consistent with the SSHCP hardline and linkage preserves. As acknowledged in Chapter 12, "Land Use," loss of open space is inherent in greenfield development. By preserving the highest value, or most sensitive, open space (i.e., much of the vernal pool habitat), and as a result of mitigation required to address the loss of Farmland, the loss of open space would be partially mitigated. Nonetheless, substantial conversion of open space would occur. As discussed above, to approve the proposal, LAFCo must determine that the Project would result in the planned, orderly, and efficient development of the area. For the reasons described in Response 15-4, the County believes the Project meets this standard.

Comment 15-6

Environmental Justice - State law requires LAFCo to consider the extent to which the project will promote environmental justice. "Environmental justice" means the fair treatment of people of all races, cultures, and incomes with respect to the location of public facilities and the provision of public services. The analysis should provide sufficient evidence to permit LAFCo to make a determination regarding this issue.

Response 15-6

CEQA requires consideration of economic and social effects only if they could potentially lead to a significant physical change to the environment (see CEQA Guidelines sections 15064(e) and 15131). Government Code 56668 requires LAFCo to consider several social and economic factors when reviewing proposals for annexation, but does not require those factors be assessed in a CEQA document (see page 1-21 of the DEIR for more information on the process). Further, as described above, there is not readily-available information about the race, culture, or income level of the occupants of the Plan Area and the immediate vicinity that can be compared to the average demographics of the remainder of the County. However, the Project is not anticipated to affect the provision of existing public services. Moreover, the Project has been designed to distribute future public facilities and services in an equitable fashion amongst the proposed land uses and a Public Facilities Financing Plan has been developed.

The Project includes nearly 515 acres of parks and open space areas, as well as land for an elementary school and a site for a fire station. The Project includes several internal neighborhood and community parks strategically located so that all residents are within 0.5 mile of park amenities. An initial sewer study and an initial water system study have been prepared, both of which indicate adequate capacity to serve the NSP through existing and planned infrastructure (MacKay and Soms 2011, 2013).

The effects of providing these public services and utilities are evaluated throughout this EIR as part of the overall proposal. The EIR concludes that there are a number of significant and unavoidable impacts related to: degradation of existing views and visual quality, new sources of light or glare, construction emissions, operational emissions, conflict with air quality plans, loss of vernal pool resources, introduce greenhouse gas emissions sources, increased water volume downstream (offsite), increase in the ambient noise level, and effects on operation of existing intersections. See Table ES-1 in “Executive Summary,” for a summary of anticipated impacts. Existing land uses, including residences, the cemetery, and the adjacent mine would be subject to these effects. However, the proposal would not be implemented in a manner that discriminates against any population with respect to the location and provision of public services and utilities. The Project would be consistent with state policies designed to ensure that the location of public facilities and the provision of public services carried out in a manner that ensures the fair treatment of people of all races, cultures, and income levels, including minority populations and low-income populations.

Environmental justice was not evaluated in the DEIR as a resource topic or impacts because it is not a requirement of CEQA. LAFCo would be responsible for making a determination on the issue pursuant to State law.

Comment 15-7

Floodplain Areas – The scope of the analysis of hydrology and water quality/stormwater quality set forth in the analysis should include an evaluation of the County’s and the project’s compliance with the requirements of the Central Valley Flood Protection Plan, and with the regulations of all other applicable federal, State, and regional agencies.

Response 15-7

Chapter 11, “Hydrology and Water Quality,” includes a discussion of applicable federal, State, and regional agencies and their regulations on pages 11-3 through 11-9 under the heading “Regulatory Framework.” The Central Valley Flood Protection Plan is not addressed in this document because the Folsom South Canal is not a facility identified in the Central Valley Flood Protection Plan and implementation of the Project is not subject to any requirements in the plan.

Comment 15-8

Land Use and Planning – The analysis of topics to be evaluated within Land Use should include a consistency evaluation with not only the SACOG Blueprint, but also the current Metropolitan Transportation Plan/Sustainable Communities Strategy.

Response 15-8

See Table LU-2. As indicated on page 12-35 of the DEIR, although the NSP is not included in the land use scenario for the Metropolitan Transportation Plan/Sustainable

Communities Strategy, it is designed to be consistent with the sustainability and transportation principles of the MTP/SCS.

Comment 15-9

Also, the following edits are suggested to the text on page 15-10:

Local Agency Formation Commissions (*LAFCo's*) are *independent (in many counties, including Sacramento)* countywide commissions, required in each California County. LAFCo's govern the formation of new agencies, incorporation of new cities and districts, consolidation or reorganization of special districts and/or cities, as well as municipal service reviews and sphere of influence updates, and annexations of cities and special districts. The broad goals of the Sacramento LAFCo's directive are to ensure the orderly formation of local governmental agencies, to preserve agricultural and open space lands, and to discourage urban sprawl. LAFCo's must, by law, create Municipal Service Reviews and update, *as necessary*, Spheres of Influence for each independent local governmental jurisdiction within their countywide jurisdiction.

Response 15-9

In response to this comment, the following edits have been made to clarify the text of the Regulatory Setting in Chapter 15, "Public Utilities" (page 15-10 of the FEIR):

SACRAMENTO LOCAL AGENCY FORMATION COMMISSION

Local Agency Formation Commissions (LAFCos) are independent countywide commissions, required in each California County. LAFCos govern the formation of new agencies, incorporation of new cities and districts, consolidation or reorganization of special districts and/or cities, as well as municipal service reviews and sphere of influence updates, and annexations of cities and special districts. The broad goals of the Sacramento LAFCo's directive are to ensure the orderly formation of local governmental agencies, to preserve agricultural and open space lands, and to discourage urban sprawl. LAFCos must, by law, create Municipal Service Reviews and update, as necessary, Spheres of Influence for each independent local governmental jurisdiction within their countywide jurisdiction.

These text modifications do not affect the analysis or conclusions of the DEIR.

LETTER 16

Albert Stricker, Director of Public Works, City of Rancho Cordova, written correspondence; dated September 20, 2018.

Comment 16-1

The bulk of our comments relate to the Transportation Impact Report, Appendix TR-1. While our comments address the NewBridge project, we will also comment on transportation analysis scenarios that include all four Jackson Corridor projects.

The CEQA Cumulative scenario is a significant effort that attempts to envision circulation effects and transportation impacts in a future that builds communities supporting nearly 100,000 new homes south of Highway 50. This is an ambitious effort that attempts to avoid piece-meal evaluations so that we can have a clear vision of what could occur when all contemplated developments are built. The City of Rancho Cordova sees value in this analysis, but is concerned about the practicality of planning for developments that will take, at least, decades to build. The CEQA Cumulative vision is useful for planning, but the vision will likely change dramatically over the next century. We anticipate that new technology and changing social and economic realities will redirect development planning along Jackson Highway as these projects are further developed.

Response 16-1

As stated on page 18-25 of the DEIR, “[t]he Traffic and Circulation chapter contains cumulative analyses of impacts to the transportation network.” This comment does not identify any deficiencies in the Draft EIR’s analysis but speaks to changing transportation technology. The County does not disagree with the commenter’s concern regarding the practicality of planning for developments that, if approved, will take multiple decades to build out. In fact, in the time between the adoption of the 2030 General Plan (November 2011), the beginning of the transportation analysis for the Jackson Corridor master plans (April 2013), and publication of the first two Draft EIRs for Mather South and NewBridge, advances in technology and transportation network companies have disrupted the transportation industry and prompted local jurisdictions including Sacramento County to reevaluate current transportation and land use planning practices. However, per CEQA, the analysis in the NewBridge EIR is based on the best currently available information and does not speculate or attempt to foresee the unforeseeable on potential changes over the next century, as it should not (see CEQA Guidelines sections 15144 and 15145).

Comment 16-2**Parks and Recreation**

The City believes that there are many benefits to providing adequate parks and recreational facilities for residents within a community. The NewBridge Specific Plan includes various neighborhood and community parks, as well as open space areas that provide an opportunity for pedestrian and bike pathways. Upon review of the NewBridge Specific Plan Public Facilities Financing Plan, park construction cost estimates were determined by utilizing the Cordova Recreation and Park District (CRPD) Impact Fee

Nexus Study and funding for the park improvements will be through the payment of the CRPD impact fee. Adopting the CRPD Park Impact fee will ensure that a similar level of park and recreational facilities enjoyed by the residents of the City of Rancho Cordova will also be constructed for the residents of NewBridge.

Response 16-2

The comment does not identify any deficiencies in the DEIR analysis. As indicated on page 14-22 of Chapter 14, "Public Services," the evaluation of potential impacts to parks and recreation services in the DEIR assumed that park improvements would be funded through payment of the CRPD Park Impact Fee. Although this fee has not yet been adopted by the County, the Financing Plan assumes fee adoption.

Comment 16-3

Transportation City/County Cost Sharing

In 2015 the County Board and City Council entered into an agreement to share transportation improvement costs associated with environmental impacts across jurisdictions. This agreement is based on the existing plus project scenarios associated with development projects in either jurisdiction. It is our intent to identify Jackson Corridor Development impacts within Rancho Cordova based on the Existing Plus 4 Projects scenario, and then to apply percentage cost shares for improvements based on travel use percentages identified in the CEQA Cumulative model.

The Mather Field Road/Rockingham and Highway 50 EB Ramps/Zinfandel intersections are impacted in the Existing Plus 4 Projects scenario and the EIR identifies these impacts as unavoidable. This is not a complete evaluation. Mitigation projects need to be identified for these impacts.

Response 16-3

Consistent with CEQA practice, the EIR analysis identified impacts based on the Existing Plus Project and CEQA Cumulative Plus Four Projects scenarios. The Existing Plus Four Projects scenario in the TIS was used as additional information, not used to identify impacts in the EIR; therefore, identification of mitigation is not required for the Existing Plus Four Projects scenario. The CEQA Cumulative Plus Four Projects scenario identifies potential mitigation options for facilities under Caltrans jurisdiction (Mitigation Measure CU-TR-3). Note that the mitigation strategy described starting on page 16-220 of the DEIR includes the Dynamic Implementation Tool, which is designed to estimate the vehicle trips that would be generated, where those new vehicle trips would go, and if the addition of those new vehicle trips causes any roadway segments or intersections to operate at an unacceptable LOS. As stated on page 16-220 of the DEIR, the Dynamic Implementation Tool is based on, and is consistent with, the traffic modelling conducted for the joint TIS, and would identify each project's financial

obligation for transportation improvements based on the Project-specific fair shares of its traffic impacts in the CEQA Cumulative Plus Project scenario.

The existing intersection configuration at Mather Field Road and Rockingham Drive is constructed with its ultimate geometry, as defined in the TIS; the existing constraint of lack of right-of-way due to development surrounding the intersection limits the ability to improve the intersection. Thus, it was determined in the Joint TIS that no additional feasible mitigation measures are available. The DEIR reflects this conclusion.

Comment 16-4

Joint Roadways Border Roads managed by both the City and County

Many impacts and mitigations identified in the "plus project" EIR scenarios fall on joint City/County facilities; Sunrise Boulevard, Jackson Highway, Bradshaw Road and Old Placerville Road. The City would like to create a mechanism to assure timely County participation on improvements to these facilities as the City moves forward with capital improvements on these roadways. We are requesting the initiation of an effort to move that process forward.

Response 16-4

The comment requests that the County participate in the City of Rancho Cordova's planned improvements to joint facilities. No specific comments are provided on the contents of the DEIR. The City's desire to create a mechanism to assure timely County participation on joint County/City facilities is beyond the scope of this EIR. The comment has been provided to County DOT staff for consideration.

The County acknowledges that some of the roadways potentially affected by implementation of the NewBridge Project are joint County/City facilities. Due to the magnitude of development proposed in the Jackson Highway Corridor and the dynamic environment anticipated over the buildout period, the County has developed an innovative mitigation strategy. Roadway improvements associated with the implementation of the Jackson Highway Corridor Projects would be prioritized based on this Dynamic Implementation Tool and would be fully funded by the individual project applicants up to their fair share.

In 2015 Sacramento County and the City of Rancho Cordova adopted a reciprocal funding agreement and master operational agreement between the jurisdictions to share transportation improvement costs. City of Rancho Cordova staff will need to continue coordination with County DOT staff to develop a project-level operational agreement for the NewBridge project. The project is responsible to fund its fair share of improvements on regional roadways in the City's jurisdiction, provided there is a project-level operational agreement in place. The timing of improvements will be identified using the Dynamic Implementation Tool, as described in the Jackson Highway Corridor

Transportation Mitigation Strategy adopted by the Board of Supervisors on July 23, 2019.

Comment 16-5

Existing Plus 4 Projects Scenario

Bradshaw Road from Old Placerville Road to Lincoln Village Drive, including the Old Placerville intersection are impacted and there is no mitigation project identified. This is an incomplete evaluation. Mitigations projects need to be identified for these impacts.

Response 16-5

Although the Joint TIS analyzes the Existing Plus 4 Projects scenario (Existing Plus Jackson Corridor Projects scenario), the DEIR does not include analysis of, or address the Existing Plus Jackson Corridor Projects scenario. The Existing Plus 4 Projects scenario was included in the Joint TIS for informational purposes only and was not used for the CEQA analysis. The CEQA analysis only evaluated the Existing, Existing Plus Project, Cumulative, and Cumulative Plus Project scenarios. The comment specifically addresses the Existing Plus 4 Projects scenario; thus, this comment does not directly address content of the DEIR or contest the significance determinations of any of the transportation impacts examined in the DEIR. Therefore, no changes to the DEIR are necessary.

Comment 16-6

CEQA Cumulative Scenario

Mitigation projects for several links fully within Rancho Cordova City Limits and along the City/County boundary have not been identified. This is an incomplete evaluation. Mitigations projects need to be identified for these impacts.

Within city limits:

- Kiefer Boulevard, Sunrise Boulevard to Rancho Cordova Parkway
- Sunrise Boulevard, Douglas Road to Rio del Oro Parkway
- Rancho Cordova Parkway, Rio del Oro Parkway to White Rock Road
- Old Placerville Road, Routier Road to Rockingham Drive (partially a boarder roadway)
- Sunrise/Douglas Intersection
- Mather Field/Rockingham Intersection

Along border:

- Bradshaw Road, Old Placerville Road to Highway 50 EB ramps, including the Highway 50 EB Ramps and Old Placerville Road Intersections

- Happy Lane/ Old Placerville Road Intersection

Response 16-6

The Cumulative Plus Four Projects analysis shows that there is not an impact at Bradshaw Road & US 50 EB Ramps. The analysis also provides mitigation at Happy Lane & Old Placerville Road which suggests the modification to access control.

Base geometric assumptions for cumulative condition for roadway segments and intersection within and bordering or in the City of Rancho Cordova were determined by taking input from the City at the start of the transportation impact analysis. It was decided to utilize the best information at the time - that is the land use and segment and intersection geometry in the Transportation Impact Fee Program adopted in 2013. Table TC-88 on page 16-168 of the DEIR summarizes the results of the operations analysis for the study area roadway segments with mitigation. As stated on page 16-162 of the DEIR, the number of roadway lanes was increased to mitigate the impact along the roadway segments where identified physical constraints did not preclude roadway widening. However, in some cases where physical constraints are present that limit the ability to widen the roadway it was determined that there was no feasible alternative mitigation. Given that there are multiple solutions to improving impacts and the varying feasibility of different improvements, the County will not determine feasible improvements in other jurisdictions, though the County would work with the City to develop an improvement list as part of a reciprocal funding agreement.

Comment 16-7

Transit

As the transit system is being developed within the City of Ranch Cordova and along the Jackson Corridor, both agencies along with transit service providers should develop a joint concept for service. Independent transit plans designed for individual developments are inefficient and not useful to the traveling public. A statement of joint transit system development should be added to the EIR.

Response 16-7

As described starting on page 16-61 of the DEIR, a transit planning effort involving staff from Sacramento County, Regional Transit and the applicants of the Jackson Corridor Projects was conducted to define an appropriate transit network and frequency that could serve the proposed development in the Jackson Highway Corridor consistent with the intent of the County's policies. The transit planning effort defined standalone transit systems for each of the Jackson Highway Corridor Projects that would not only serve the transit needs of each of the Jackson Highway Corridor Projects independently, but would also serve as cohesive and complementary transit system units that could operate efficiently together should more than one of the Jackson Corridor Projects be approved for development. Therefore, as stated in the DEIR, the transit planning effort

and resulting transit system concept and plan was developed as a joint project transit system for that Jackson Highway Corridor Projects that could be implemented on a project-by-project basis. No changes to the DEIR are required.

The County agrees that coordination and cooperation is helpful but CEQA requires feasible mitigation for an individual project to stand alone. However, the County recognizes that if multiple projects are approved and moving forward with development on similar timelines, cost and service efficiencies may be gained by coordinating delivery of transit service.

Comment 16-8

Technical

The Mather Field Road/Rockingham intersection delay is reduced by 9.7 seconds with the addition of the NewBridge traffic. We would like to verify that this is an accurate report. Page 76 TIS.

The legend on the graphic for Trip Distribution does not match the percentage labels. Page 118,191,273 TIS.

Response 16-8

The commenter is referring to page 76 of Appendix TR-1 of the DEIR (the TIS), which shows a decrease of delay in the PM Peak Hour at Mather Field Road and Rockingham Drive. The traffic forecasts for this study result from applying the SACSIM regional model, which is best practice for a project of this size. SACSIM does not apply project traffic additively to existing conditions, but rather takes into consideration the uses and context of land use surrounding the project. The model then redistributes trips in the region for each scenario. With the addition of 3,075 dwelling units, the Project will change the distribution of employees commuting in and out of the City of Rancho Cordova - more commute traffic will come from the south and less from US 50. To that end, it is reasonable that delay at some intersection may improve with the addition of the project.

The figures on pages 118, 191 and 273 in the TIS referred to by the commenter have been updated. The Project's percent trip distribution by roadway segment values shown on those figures were previously incorrectly pulled from the travel demand model and have been corrected. Estimated roadway volumes, vehicle-miles of travel and other values used for impact analysis purposes were pulled from the model independently from the Project's trip distribution values; therefore, the corrected percent distribution values do not alter the project impact analysis or results in the environmental document. The Project's trip distribution information on those figures was provided as additional information.

LETTER 17

James Wiley, Taylor & Wiley Attorneys, written correspondence dated, October 1, 2018

Comment 17-1

Global Comment

At the time the DEIR was published, the preparers of the document had readily available cumulative traffic analysis incorporating changes to the Mather South Project and the West Jackson Project. Yet that analysis was not employed, with the preparers choosing instead to rely upon clearly outdated and inaccurate information. This is particularly troubling since the various project changes were substantial, involving as they did changes to road networks and job centers. For example, in the Mather South Project, there is no longer a university proposed, which seriously alters traffic impacts. Similarly, the amount of land dedicated to job centers in the West Jackson Project has been significantly reduced. As a result, the cumulative traffic analysis overstates the overall traffic impacts of the four projects, which, in turn, results in an inaccurate picture of cumulative effects. Furthermore, it also skews the accuracy of fair-share traffic mitigation obligations associated with the four projects. Oddly, the updated information was available in early 2018, well before the July 30, 2018 publication of the Newbridge DEIR. In any event, the by-product of not using that readily available data is that the published document now contains information which is not today accurate, with the result being that the analysis is defective not only with respect to traffic, but also with regard to other key subject areas, such as air quality, climate change and noise. To rectify these problems the DEIR must now be revised employing the best currently available information.

Response 17-1

The cumulative traffic analysis presented in the DEIR included the data and conclusions in the traffic study prepared for the NewBridge Project in 2015. The cumulative traffic analysis was based on the best available information of approved and proposed projects at the time the Notice of Preparation was issued on January 8, 2013. After completion of the NewBridge traffic analysis, the project proponents for the proposed West Jackson Highway Master Plan (PLNP2008-00240) and the Mather South Community Master Plan (PLNP2013-00065) independently decided to substantially revise their respective land use plans and internal roadway networks. A Revised Notice of Preparation for West Jackson Highway Master Plan was issued on February 15, 2017. Subsequent to the Revised NOP publication, the project proponent made further revisions to the proposed land use plan and roadway network, and a second Revised NOP was issued on April 26, 2017. The Revised NOP for the Mather South Community Master Plan was issued on January 5, 2017. These changes resulted in the need to revise the cumulative transportation analysis for the West Jackson Highway Master Plan, the Jackson Township Specific Plan, and the Mather South Community Master Plan. The administrative draft of the revised cumulative transportation analysis was

submitted to the County for review in early 2018 and was not ready for publication at the time the NewBridge Draft EIR was published. The Newbridge DEIR used the best information available at the time of document preparation. Although changes were made to other Jackson Highway Corridor Projects prior to the publication of the NewBridge DEIR that alter the projections of the cumulative scenario, these changes were not finalized prior to publication.

The cumulative traffic data contained in the NewBridge traffic study and DEIR was compared with the cumulative traffic data in the Traffic Study for the Jackson Township Specific Plan project. The traffic analysis for all of the Jackson Highway projects were conducted in the same manner, comparing the traffic impacts of all four projects together and separately. The data for the CEQA cumulative with all four projects was compared using the following tables from the traffic studies: Table 6.4, 6.5, 6.7, 6.8, 6.10, and 6.11.

Table 6.4: CEQA Cumulative Roadway Segment Levels of Service

The traffic analysis looked at over 260 individual roadway segments and determined a level of service for each segment. A direct comparison is not possible between the two traffic analyses due to modifications in the surrounding land use plans. Some segment lengths changed and others are new segments (new roadways). However, the majority of roadway segments are unchanged.

The updated cumulative traffic analysis for the Jackson Township project identifies 16 roadway segments that will experience a degrading level of service (LOS) in comparison to the values in the DEIR. Conversely, 42 roadway segments will experience an improving level of service in comparison.

Table 6.5: CEQA Cumulative Plus Four Projects Intersection Levels of Service

The traffic analysis looked at over 150 individual intersections and determined a level of service for each intersection. Again, a direct comparison is not available due to the surrounding land use plan modifications. Some intersections have been deleted and others changed turning movements. However, this is a very small portion of the study intersections.

The updated traffic analysis identifies decreases in levels of service for the following intersections:

- Grant Line Rd/Douglas Rd – PM peak hour from LOS E to F
- Rock Creek Pkwy/Jackson Rd – AM and PM peak hour LOS D to F
- Douglas Rd/Rock Creek Pkwy – PM peak hour LOS D to E
- Tree View Ln/Jackson Rd – AM peak hour LOS C to D and PM peak hour LOS A to B (not significant)

Over half of the study intersections will see an improvement to the level of service for the AM/PM or both peak hours.

Table 6.7: CEQA Cumulative Plus Four Projects Peak Hour Freeway Mainline Level of Service

No differences in the peak hour level of service for the freeway mainline were identified between the traffic analysis comparison.

Table 6.8: CEQA Cumulative Plus Four Projects Peak Hour Freeway Ramp Junction/Weaving Level of Service

Comparing the data from the two analyses, there are slight changes to the maximum queue length for all study freeway ramps. None of the revised numbers affect the conclusions of the traffic analysis presented in the DEIR.

Table 6.10: CEQA Cumulative Plus Four Projects Peak Hour Freeway Ramp Termini Queuing

Comparing the data from the two analyses, there are slight changes to some of the queue length; however, there are no additional impacts identified.

Table 6.11: CEQA Cumulative Plus Four Projects Functionality Impacts

The updated forecasted traffic volumes are different from those presented in the NewBridge DEIR; however, the changes are not significant. For most of the roadway segments, the functionality impact conclusion does not change. There are two segments with notable impact conclusions. Happy Lane from Old Placerville Road to Kiefer Boulevard is now shown as a two-lane road with a forecasted volume of $\pm 13,000$, not $\pm 51,000$. Mather Boulevard-Excelsior Road from Douglas Road to Kiefer Boulevard is now shown with a forecasted volume of $\pm 6,400$ and will not have a functionality impact.

Conclusion

The updated traffic data shows that there is a slight shift in the traffic volumes and patterns in the Cumulative Plus Project condition. Comparing the information presented in the DEIR with the updated cumulative data, there are differences in impacted roadway segments and intersections. Generally, there are more improvements in level of service, than deteriorations. These differences would not change the overall impact conclusion of the DEIR which identified that there will be significant and unavoidable impacts in the cumulative plus project scenario. Further, recommended mitigation includes the use of a Dynamic Implementation Tool which will model where the roadway improvements are needed as development occurs throughout the Jackson Highway planning area. This ensures that improvements are directed to those areas with degrading levels of service. This approach is more flexible, especially considering the shifting cumulative environment.

Comment 17-2**Aesthetics**

We are making this comment to ensure that all four Jackson Highway projects are treated uniformly in their environmental analysis of aesthetics. That being said, the DEIR finds the impact to aesthetics is Significant and Unavoidable and that there is no mitigation available. However, there are mitigation measures available, although they may not reduce the impact to less than significant. Measures such as open space preservation and specific plan design guidelines that provide strategies for tree planting and screening are just a few measures that have been used on past projects to lessen this type of impact. They are to be considered in this situation as well.

Response 17-2

As described on pages 3-10 to 3-16 of the DEIR, the significant and unavoidable conclusion is based on the loss of unobstructed viewshed to the Sierra foothills. Valley grassland is generally characterized as expansive grasslands with few scattered trees, which provides sweeping views. The Project includes dedication of open space consistent with the hardline preserves in the SSHCP (see page 1-19 of the DEIR). The addition of vertical infrastructure (either built or landscape) degrades the unobstructed viewshed. Therefore, using trees or other shrubs as visual screening would not reduce the loss of an unobstructed viewshed. In addition, the NSP Design Guidelines include strategies for screening and landscaping (Appendix PD-1, Design Guidelines). The County has determined that all feasible mitigation has been recommended.

Comment 17-3**Air Quality**

The DEIR analysis uses two different versions of the CalEEMod model - 2013 for the Air Quality analysis and 2016 for Climate Change analysis. This lack of consistency should be corrected or an explanation for it should be provided and the use of the CalEEMod models should be applied uniformly among all four projects.

Response 17-3

The AQMP was prepared before the Greenhouse Gas Reduction Plan, which explains why two different versions of the CalEEMod modeling software were used (see Appendices AQ-1 and AQ-1 of the DEIR). The 2013 model uses the EMFAC 2011 emission values and the 2016 model uses the EMFAC 2014 emission values. Generally, EMFAC emission values decrease (i.e., vehicle emissions decline over time as regulations improve the energy efficiency of the transportation sector) every year. Therefore, the emission estimates calculated in the 2013 model would be higher resulting in a greater amount of pollution than the emission estimates calculated in the 2016 model. As such, the analysis presented in the NewBridge DEIR provides a conservative, worst case projection. Under CEQA, generally, the date of the NOP sets

the environmental and analytical baseline for preparation of the analysis such as the models used for technical studies, but for conditions that fluctuate, a lead agency may use a differing baseline. (see CEQA Guidelines section 15125(a)(1)). The NOP was released in January 2013, and, therefore, using the CalEEMod 2013 version is appropriate and in compliance with CEQA. It also would have been appropriate to use the 2013 version for the subsequent greenhouse gas modeling, but the lead agency may, and appropriately did, choose to use a more recent model version for subsequent greenhouse gas modeling. Nevertheless, both the Air Quality Mitigation Plan and Greenhouse Gas Reduction Plan were revised to include assumptions regarding prohibition of natural gas and use of EV charging infrastructure. Both of the revised analyses use the 2016 version of CalEEMod.

Comment 17-4

1. There is no analysis regarding the demolition of the rendering plant which would result in impacts to air quality. This lack of analysis should be remedied since it is clear that no development is likely to occur within the specific plan absent the demolition and removal of the rendering plant.

Response 17-4

The air quality and GHG analysis performed in the DEIR does not include the demolition of the existing rendering plant because the demolition¹ and relocation of the rendering plant will be analyzed in a separate environmental document. It is correct to assume that no development in Phase A would happen until the rendering plant moves; however, that process has not been initiated and is not part of this project.

Although not required under CEQA, to provide ample information to decisionmakers and the public, the County had the Air Quality consultant, Raney Planning and Management, model the emissions associated with dismantling the plant and the detailed findings are presented below. In summary, any additional emissions as a result of demolition of the rendering plant, when added to Project emissions, would not result in a substantial increase above Project emissions stated in the DEIR nor would they change any impact conclusions.

The SRC facility is located on approximately 60 acres in the northwest corner of the Project site and includes landscape, settling ponds, paved parking areas, concrete flatwork, and the rendering plant buildings. The SRC facility consists of administrative and office spaces in portable trailers, tallow and grease storage silos, a vehicle maintenance garage, landscape storage shed, crematorium boiler room, maintenance

¹ The majority of the plant will be dismantled and relocated to a new location. Demolition will involve the removal of concrete floors/footings and the removal of soil from the effluent ponds and floor sumps in accordance with the requirements of the Regional Water Quality Control Board and County Environmental Management Department.

shops, storage sheds, and a rendering plant. The crematorium, boiler room, maintenance room, and plant are housed in metal shell buildings that have been added incrementally over time.

The rendering plant is located south of the main office and east of the boiler room. The plant contains a carcass receiving area at the west end and houses a grease dumpster cleansing area, vehicle wash rack, and water treatment area on the east end. Carcasses are processed in the central portion of the plant and converted to tallow and bone meal through a series of processes including breaking up and cooking of the carcasses. These processes require a vast network of pipe for water and pressurized gas, pressure valves, storage tanks, heating chambers, and manufacturing equipment to produce a wide range of products. Most notable on the site are two tall venting stacks that expel emissions at a slight elevation above ground level. The stacks contain sophisticated gas heat devices to control odors.

Thirteen tallow and grease storage silos and empty 55-gallon storage drums are located east of the main office. Metal scrap, trucks and truck parts, empty 55-gallon drums, an old loading dock, and other various stored items are south of the rendering plant. The ground surface adjacent to and the plant structures are asphalt, concrete, gravel, bare ground, and landscaping.

Demolition of the plant consists of dismantling and relocation of vehicles, equipment, plant components and rendered product. Existing vehicles and equipment (trailers, trucks, drums, pipe, tanks, vents, etc.) and rendered product (animal product, tallow, bone meal, etc.) will be relocated. Mechanical equipment, pipes, tanks, heating chambers, and machinery and existing building trailers, portable structures and metal shell buildings will be dismantled and relocated. All materials may be relocated to the new plant site or transported to another location for repurposing. Asphalt, concrete and other surfaces will be removed during project clearing and grading.

At this time, a new site for relocating rendering plant operations has not been identified. According to the SRC ownership, the new plant site is likely to be located in the Sacramento region, within approximately 50 miles of the existing plant location.

For the purpose of this analysis, it is estimated that the SRC plant consists of approximately 250-300,000 tons of mechanical equipment, product, parts, and metal shell building components that will be relocated to a new rendering plant or transported for recycling or repurposing. Transporting equipment and product to the new plant site (approximately 50 miles) or other location would require approximately 12-15 trailer truck trips and wheeled mobile equipment would be driven or trailered off the site.

The truck trailer trips required to transport material from the site are projected to result in transportation-related emissions, as shown in the table below:

Total Emissions for Demolition Activities and Hauling				
	ROG	NOx	PM10	PM2.5
Hauling Emissions (pounds/day) ²	1.544624	19.00616	1.146622	1.001033
Demolition Equipment (pounds/day) ³	0.147663	1.354564	0.086583	0.081882
Total Emissions (pounds/day)	1.692287	20.36072	1.233205	1.082915
Totals from Table AQ-5, Construction Year 2016	33.78	377.45	46.5	32.05
New Totals	35.47	397.87	47.73	33.13
Percent Increase	5%	5%	2.6%	3.3%

Source: Raney Planning & Management, Sept 2019.

The following are notable assumptions used to calculate the information above:

- Demolition equipment was selected based on a standard list from CalEEMod.
- Assumed demolition equipment would be used for 15 days on-site.
- Assumed demolition equipment was model year 2010.

The table above shows the demolition emissions added to the first year of construction emissions presented in Table AQ-5 of the Draft EIR. The additional emissions would not result in a substantial increase in the severity of the project's emissions presented, nor would the additional emissions change the less than significant conclusion for NOx emissions (DEIR p. 5-22) and the significant and unavoidable conclusion for particulate matter emissions (DEIR p. 5-23).

These emissions have been estimated using CalEEMod Version 2016.3.2 and are disclosed in this FEIR. Text changes have been made to pages 5-23 through 5-30 in Chapter 5, "Air Quality."

These updates do not alter the conclusions of the DEIR.

Comment 17-5

² The hauling emissions are based on EMFAC emissions factors: California Air Resources Board. *Emission Factors Model 2017*. Available at: https://www.arb.ca.gov/emfac/2017/?_ga=2.134624885.587666554.1568414943-371863815.1546447283. Accessed September 2019.

³ The Demolition Equipment emissions are based on SMAQMD's Construction Mitigation Tool: Sacramento Metropolitan Air Quality Management District. *SMAQMD Construction Mitigation Tool*. April 20, 2018.

The Air Quality analysis does not address toxic air contaminants for demolition and construction related activities. Other documents have consistently done so.

Response 17-5

Toxic air contaminants (TACs) are discussed on pages 5-17 to 5-18, 5-20, and 5-30 to 5-31 of the DEIR. See also MMs AQ-1 to AQ-3. Demolition of the existing rendering plant could generate emissions of criteria air pollutants and toxic air contaminants (TACs) from the movement of materials and exhaust from diesel- and gasoline-combustion. TACs, particularly diesel particulate matter (diesel PM), would be emitted during construction activities as well. However, given that demolition of the existing rendering plant would happen in advance of Project construction, the emissions associated with demolition would not be additive to the Project emissions.

TACs are pollutants of local concern; however, no sensitive receptors are currently located within the vicinity of the Project site. Further, no substantive thresholds or guidance from ARB and SMAQMD on construction TACs exist; agency guidance primarily includes the siting of permanent facilities away from TAC mobile sources (DEIR, pp. 5-18, 5-20). While construction-generated TAC emissions would occur, such pollutants would quickly dissipate, thus not affecting existing sensitive receptors, which would be located several hundreds of feet away (DEIR, p. 5-30). Construction-related emissions of Toxic Air Contaminants (TACs) are of concern primarily where intensive construction activities would be concentrated in close proximity to sensitive receptors. The CARB Handbook acknowledges that diesel particulate matter (DPM) is a highly dispersive gas, the concentration of which rapidly decreases with distance from the source. The proposed project site is located approximately 200 feet away from the nearest existing residential receptors located on the west side of Eagles Nest Road, southwest of the development area. In addition, under construction, only portions of the site would be disturbed at a time, with operation of construction equipment regulated by federal, State, and local regulations, including SMAQMD rules and regulations, and occurring intermittently throughout the course of a day. In addition, extensive development within the westernmost portion of the project would not occur, as such areas are proposed to be designated for and preserved as open space.

Consequently, construction activities would not occur in close proximity to any nearby existing sensitive receptors for an extended period of time. Furthermore, as stated on page 5-1 of the Draft EIR, winds within the project area are predominantly from the southwest. Thus, any emissions associated with construction activities on the project site would be carried away from the nearest sensitive receptors. Given the highly dispersive nature of DPM, the distance to the nearest sensitive receptors, and the prevailing wind direction, the likelihood that any one sensitive receptor would be exposed to high concentrations of DPM for any extended period of time would be low. Therefore, the conclusion in the Draft EIR (page 5-31) regarding TACs remains unchanged.

SMAQMD's CEQA Guidelines state that a significance threshold has not been identified and that projects should be reviewed on a case-by-case basis depending on construction-related characteristics and proximity to off-site receptors (currently none surrounding development Phase A). The Guidelines further acknowledge that an accurate analysis of construction-related TAC emissions may not be possible for some projects due to the level of information known. For example, the land use plans presented herein are specific plan level; therefore, the level of detail required to perform an informative and meaningful Health Risk Assessment is not available. Prior to the acquisition of building permits, an evaluation of the locations of new sensitive receptors combined with the locations and land use types of finalized land use maps would occur. Generally, implementation of the SMAQMD's Basic Construction Emission Control Practices and if necessary the Enhanced Exhaust Control Practices reduce diesel particulate matter (TAC emissions) during construction. These measures are included as rules or mitigation measures.

For clarity, the preceding BCEC Practices and Enhanced Exhaust Control Practices have been included as Mitigation Measures AQ-1 and AQ-2 in the FEIR. These updates do not alter the conclusions of the DEIR.

Comment 17-6

- As discussed above in the global comment, the best available traffic information should be employed for the cumulative air quality analysis. Corrective analysis is necessary.

Response 17-6

Reference Response 17-3.

Comment 17-7

Biological Resources

- The DEIR fails to provide even a general description of wetlands for the lower west side of the specific plan, even though (as with traffic) the information was readily available through the South Sacramento Habitat Conservation Plan and/or aerials. To elaborate, the applicant has requested that the Urban Policy Area be moved to accommodate the project. That being the case, the DEIR should have discussed the biological impacts of doing so. Its failure to do so must be corrected.

Response 17-7

Table BR-2 of the DEIR discloses that 4.4 acres of surface waters occur within the lower West Planning Area of the specific plan. The acreage of these waters is estimated based on wetland identifiers from aerial images, and will be further refined once a formal wetland delineation is performed and verified by the USACE prior to

development of this Planning Area. Furthermore, the lower West Planning Area of the NSP is not proposed for development, as no changes in the General Plan land use designations are proposed. Subsequent environmental review will be needed if and when specific development proposals are made in this area.

Comment 17-8

- The DEIR does not address biological impacts associated with offsite water improvements, the construction of which may be required to implement the specific plan.

Response 17-8

The North Service Area pipeline project was identified as an off-site water supply improvement associated with the Project. The environmental impacts associated with the construction of the pipeline were disclosed in a separate environmental document, a Mitigated Negative Declaration certified on September 14, 2010 (County Control No. 2007-70373). No other off-site water supply infrastructure has been identified to serve the Project, and, therefore, no additional analysis of the biological impacts of offsite water improvements are needed.

Comment 17-9

Climate Change

- Again, a different CalEEMod model was used than that employed for the Air Quality Analysis.

Response 17-9

Reference Response 17-3.

Comment 17-10

- A uniform approach should be used for determining the impacts of Climate Change for the four projects along the Jackson Corridor.

Response 17-10

CEQA does not require separate projects to utilize the same approach for analyzing impacts, even those that occur within the same jurisdiction. It is up to the lead agency to determine thresholds of significance for each project, which may be created for use on a case-by-case basis (CEQA Guidelines section 15064.7(b)). This broad discretion was recognized in *Save Cuyama Valley v. County of Santa Barbara* (2013) 213 Cal.App.4th 1059, 1068, where the court noted that agencies may develop thresholds for individual projects. In general, it is up to the “careful judgement on the part of the public agency” to determine whether a project may have a significant effect, which “may vary with the

setting” (CEQA Guidelines section 15064(b)(1)). The use of this careful judgement is part of the discretion afforded to agencies in the CEQA process on their path toward informing the public and decision makers of the direct and indirect environmental impacts of a “proposed project,” not that of multiple, separate projects (CEQA Guidelines sections 15002(i) and 15003(c)).

Local and regional projects and their impacts related to climate change and all other resource areas, in conjunction with the proposed Project, were properly considered in the cumulative impact analysis presented in Chapter 18 of the DEIR (see pages 18-5 to 18-6). Further, Chapter 7 of the FEIR has been revised to best reflect current climate change related circumstances and data.

Comment 17-11

- The use of a 2020 full build-out of the project is not a realistic measure of its impact and is misleading. It is highly unlikely that any building will even commence prior to 2020.

Response 17-11

Reference Response 17-3. As stated in response to Comment 17-3, the emission calculations in the older air quality modeling that were used in response to potential 2020 full buildout are higher and therefore, a more conservative estimate. The actual timing of any construction and operation of any phase of this Specific Plan development is speculative.

Comment 17-12

- The DEIR indicates that construction thresholds have not been developed. However, although the County may have not adopted thresholds, the Sacramento Metropolitan Air Quality Management District has published thresholds. They should be employed uniformly among all Jackson Corridor projects.

Response 17-12

Reference Response 17-10. As the lead agency tasked with environmental review of the Project consistent with CEQA Guidelines Section 15050, Sacramento County may elect to use its own thresholds of significance instead of using SMAQMD’s thresholds. Sacramento County has not adopted numerical construction thresholds of significance for criteria air pollutants and ozone precursors (see page 7-8 of the DEIR); however, Sacramento County has developed its own thresholds of significance for climate change impacts for operational emissions from residential energy, commercial and industrial energy, and transportation (see page 7-8 of the DEIR). The FEIR, Chapter 7, has been revised to include more information on these thresholds and to quantifiably account for

climate change related construction emissions; see revised sections Significance Criteria, Methodology, and Impacts and Analysis.

Comment 17-13

- Once again, as discussed above in the global comment, the cumulative analysis is not based upon the best available traffic information.

Response 17-13

See Response 17-1.

Comment 17-14

Hydrology

- The DEIR does not define a climate change impact and instead defers analysis of this issue to future entitlements. In doing so, it fails to address potential climate related onsite and offsite flooding impacts.

Response 17-14

The effect of climate change on rainfall patterns and subsequent potential for flooding was identified as a potential area of concern by County staff after preparation of the DEIR for NewBridge. An analysis of the potential for the Project to exacerbate flooding in a future climate change scenario has since been completed. This analysis (Appendix HY-2 of this FEIR) employs the “bookend” approach recommended by County DWR staff analyzing low and high scaling factors to determine if Project design changes would be required under a range of climate change conditions. Consistent with the fundamental purpose of CEQA, this analysis has been prepared to inform County decisionmakers of the range of potential impact scenarios that could occur. The Hydrology chapter of the EIR has been updated to include this analysis, and mitigation is recommended to reduce any potential impact to less-than-significant levels.

Comment 17-15

- Although we recognize that the hydrology on the Newbridge site may be less complicated than other projects, a uniform approach among the four projects is still necessary with respect to the employed assumptions, i.e., the same rainfall assumptions, the same flows from upstream assumptions, the same climate change assumptions, etc.

Response 17-15

Refer to Response 17-14 for a discussion of climate change as it relates to hydrologic impacts.

Comment 17-16**Noise**

- We are making this comment to ensure that all four Jackson Corridor projects are treated uniformly in their environmental analysis of noise. The DEIR finds the impact for cumulative offsite noise to be Significant and Unavoidable with no mitigation available. However, there clearly is mitigation available, although it might not reduce the impact to less than significant. Measures such as rubberized asphalt, setbacks, and sound walls are examples of suggested mitigation from prior projects.

Response 17-16

The traffic noise modeling included as part of the cumulative traffic noise level analysis has been updated to include the most recent cumulative traffic modeling, including all current land use plans for the four Jackson Highway Corridor Projects. Based on the updated traffic noise modeling, two new off-site roadway segments under the cumulative conditions would result in a substantial increase in noise of 2 dB based on the criteria in Table NO-6 (Significance of Changes in Noise Exposure) of the DEIR, which was used as the significance criteria for this analysis. The revised cumulative traffic analysis also resulted in decreases in traffic noise levels along one roadway segment to a less-than-significant level. Three notable differences in the revised cumulative traffic noise analysis are detailed below:

- The only significant increase to off-site roadway noise was identified along Elder Creek Road from Mayhew Road to Bradshaw Road. This segment would increase 2 dB over cumulative no project, which is a change of 2 dB greater than the prior analysis.
- Kiefer Boulevard from E Collector MS-1 to Sunrise Blvd. This segment would increase 2 dB over cumulative no project, which is a change of 1 dB greater than the prior analysis.
- In the DEIR, the analysis indicated a 2 dB increase for Eagles Nest Road from Kiefer Blvd. to Jackson Rd. The revised analysis indicates this change to be 1 dB; thus, this impact is no longer considered significant.

An updated table based on the revised cumulative traffic noise modeling is included in Chapter 13, "Noise," on page 13-40 of the FEIR and shows the changes from the traffic noise level presented in the DEIR. As a result of the updated traffic noise modeling, traffic noise levels increased along some affected roadway segments and decreased along other roadway segments. This impact would remain significant, as discussed in the DEIR. However, the location (roadway segments) where the significant impact would occur has changed.

Mitigation Measure NO-1 included in Chapter 13 on page 13-33 of the DEIR requires that all residential development as part of the Project exposed to greater than 65 dB L_{dn}

at the property line adjacent to affected portions of Kiefer Boulevard, which includes Kiefer Boulevard from E Collector MS-1 to Sunrise Blvd, be designed and constructed, through the use of a barrier or other means, to reduce noise levels to within General Plan Noise Element standards for exterior activity areas. A sound barrier that is just tall enough to break the line of sight between vehicles traveling on a roadway and ground level receptors results in at least 5 dB of noise reduction and can achieve an approximate 1 dB additional reduction for each 2 feet of height above where the sound barrier breaks the line of sight (with a maximum theoretical total reduction of 20 dB) (FHWA 2011:56). As a result, this mitigation would reduce traffic noise levels along the portion of Kiefer Boulevard discussed above under cumulative conditions to within General Plan Noise Element standards and would not result in a substantial increase in traffic noise levels.

For the roadway segment along Elder Creek Road from Mayhew Road to Bradshaw Road that would experience a substantial increase in traffic noise levels under cumulative conditions, a new mitigation measure and further discussion have been included in Chapter 13 beginning on page 13-35 of the FEIR. The mitigation measure includes using rubberized hot mix asphalt along Eagles Nest Road between Kiefer Boulevard to Jackson Road and on all off-site roadway improvements to reduce exterior traffic noise levels for these properties. However, the attenuation provided by the rubberized asphalt would not reduce significant impacts for all affected roadways. Therefore, the conclusion to this impact remains significant and unavoidable.

Comment 17-17

- Again, as discussed in the global comment, the cumulative analysis is not based upon the best available information since the outdated traffic analysis was employed.

Response 17-17

See Response 17-1.

Comment 17-18

- The noise impacts to the specific plan area from the adjacent mining operation should be analyzed similar to the analyses being prepared for the Jackson Township and West Jackson plans addressing noise from the Sacramento Raceway.

Response 17-18

Analysis and discussion specific to potential impacts from the mining operation just south of the Project site have been included in Chapter 13, "Noise," starting on page 13-20 of the FEIR.

The discussion demonstrates that noise levels from the mining operation are lower than the existing traffic noise associated with Jackson Road. There is no difference in the noise level when adding the two levels together. Therefore, traffic noise is the dominant noise level for new sensitive receptors in the South Planning Area. Noise associated with the mining operation does not contribute significantly to the existing noise environment for the proposed Project.

Comment 17-19

Public Utilities

- Water Supply - It appears that the DEIR water supply infrastructure improvements are not consistent with those discussed in the EIR under preparation for the Jackson Township Project. Specifically, there is no discussion of the need to connect through Mather South to the future storage tanks. This inconsistency needs to be resolved.

Response 17-19

Reference Response 17-10. A discussion of the NSA Pipeline Project was included on pages 15-24 through 15-25 of the DEIR in Chapter 15, "Public Utilities." The NSA Pipeline Project includes the future storage tanks within Mather South. Minor revisions to the text on page 15-25 have been made to be consistent with other EIRs in the Jackson Highway corridor.

Comment 17-20

- It is our understanding that the other EIRs along the Jackson Corridor will have a separate Energy chapter. At a minimum, there should be uniform energy related analysis provided for all the Jackson projects.

Response 17-20

Reference Response 17-10. In the DEIR for NewBridge energy impacts are sufficiently addressed pursuant to CEQA Guidelines Section 15126.2(b). These impacts are discussed in several locations: Chapter 7, Climate Change, Chapter 15, Public Utilities, Chapter 17, Summary of Impacts and Their Disposition, and Chapter 18, Cumulative and Growth Inducing Impacts. The DEIR addresses energy as it relates to greenhouse gas generation and the potential for energy-efficient construction methods to mitigate impacts related to climate change in Chapter 7. Energy consumption as it relates to irreversible environmental changes is addressed in Chapter 17.

Electricity and natural gas are evaluated in Chapter 15, "Public Utilities," in the DEIR. The following three thresholds are used in the NewBridge DEIR to conduct the energy analysis:

Would the project:

1. Result in wasteful, inefficient, or unnecessary consumption of energy, during project construction or operation, as evidenced by a failure to decrease overall per-capita energy consumption or decrease reliance on fossil fuels such as coal, natural gas, and oil?
2. Fail to incorporate feasible renewable energy or energy efficiency measures into building design, equipment use, transportation, or other project features, or otherwise fail to increase reliance on renewable energy sources? or
3. Exceed the available capacities of energy supplies that require the construction of facilities?

The first threshold addressing “wasteful, inefficient, and unnecessary consumption of energy” is discussed in Chapter 15 of the DEIR on pages 15-37 and 15-38 under the heading “Impact: Result in an Energy Demand That Cannot be Met By Energy Service Providers;”; however, the discussion was primarily qualitative. For clarity and to provide ample information to decisionmakers, the impact discussion in Chapter 15 of the FEIR has been expanded to include a quantitative assessment of energy consumption by the Project. This new information does not change the severity of any impacts presented in the DEIR; nor is it “significant new information” in that it only presents information that already existed in the DEIR in a different manner (see CEQA Guidelines section 15088.5).

The second threshold addressing the incorporation of renewable and energy efficiency improvements is discussed in Chapter 7 of the DEIR. The third threshold addressing the exceedance of energy supplies is discussed in Chapter 15 of the DEIR on pages 15-31 to 15-33, under the heading “Energy Services and Dry Utilities.”

Comment 17-21

Transportation

- The DEIR Transportation Mitigation Program description is incomplete.

Response 17-21

The DEIR discusses of the transportation mitigation strategy on pages 16-100 to 16-111, 16-163 to 16-196, and 16-210 to 229. Pages 16-220 to 16-229 explicitly discuss strategy for implementing transportation mitigation measures. While County DOT continues to refine the details of the mitigation strategy, the description in the DEIR provides sufficient detail for the programmatic analysis, which is what is warranted here. The FEIR includes refined transportation mitigation measures based on the Board of Supervisors’ approval of the Transportation Mitigation Strategy on July 23, 2019.

Comment 17-22

- As noted repeatedly above, the cumulative analysis is not based upon the best available information.

Response 17-22

See Response 17-1, above.

Comment 17-23

- The cumulative transit analysis is inaccurate as circulation patterns and service assumptions have been modified in the revised cumulative traffic analysis.

Response 17-23

See Response 17-1, above.

Comment 17-24

Finally, there are similar consistency and uniformity issues - which give rise to fairness concerns- within other Newbridge documents including the Urban Services Plan and Finance Plan. These should be corrected and made uniform so as to assure consistency and mitigation fairness among the four projects.

Response 17-24

Reference Response 17-10.

LETTER 18

Carl Werder, email correspondence, November 20, 2019.

Comment 18-1

You requested this information at the Vineyard meeting last Thursday. The point of my presentation was to alert everyone to the fact that there may not be water available for all of this development along Jackson Hwy. Sacramento Central Groundwater Agency (SCGA) is now tasked with developing a Groundwater Sustainability Plan (GSP) by January 2022. (See Draft Plan Schedule)

Response 18-1

A Water Supply Assessment was prepared by Sacramento County Water Agency (Appendix WS-2 to the EIR) pursuant to California Water Code Sections 10910-10915 and demonstrates that water supply is available for the project. The comment raises a concern regarding the availability of water for the proposed project, as well as the three other proposed master plans concurrently in the entitlement process along Jackson

Highway. The four projects are within Sacramento County Water Agency's Zone 40 service area and the South American Sub-Basin. The comment is correct that Sacramento Central Groundwater Authority is responsible for submitting a Groundwater Sustainability Plan (GSP) for the Sub-basin to the California Department of Water Resources by January 2022. As stated on page 15-34 of the DEIR, SCWA has sufficient supply to provide water service to the Project.

Comment 18-2

SCGA originally submitted an Alternative Plan to DWR that was shot down this year. The primary reason for the denial of the Alternative Plan is the reliance on the negotiated groundwater extraction amount of 273,000 AF/yr. There is no scientific bases for this amount of groundwater extraction. Therefore, SCGA has until January 2022 to develop a GSP that scientifically determines a groundwater sustainability amount to insure that the basin remains at historical groundwater levels.

Response 18-2

The comment questions the validity of the 273,000 acre-feet per year sustainable yield that is the basis of the Water Forum Agreement, citing SCGA's Alternative submittal to CA DWR (that also relied on 273,000 af/year) which was not approved. CA DWR was not able to determine from the information presented in the Alternative whether the 273,000 acre-feet per year (AFY) sustainable yield, is equivalent to the sustainable yield defined by the Sustainable Groundwater Management Act (SGMA). Therefore SCGA will be preparing a SGMA compliant GSP that will determine the sustainable yield of the Sub-basin to avoid undesirable results, as defined by SGMA. Until the time of an approved GSP by CA DWR there is no other sustainable yield number to use besides the 273,000 AFY.

Comment 18-3

As part of your office's documents in support of development along Jackson Hwy is the attached Water Supply Assessment dated January 9, 2018. (See attached File) If you look at page 18 of this document you will see the paragraph I marked that talks about the Central Basin GMP. SCGA must address trigger points from the plan, but they have yet to do so. I've included one page showing these trigger points from the 2006 GMP. (See GMP 2006 trigger Points)

As you can see by SCGA-6 monitoring well located on Eagles Nest Road between Florin and Grantline Roads the groundwater has dropped 50 feet in 15 years. (See attached SCGA-6 2019 and Monitoring Well Location Map) Note that the groundwater elevation has been below the WF low threshold for many years, a trigger point. This is just one example as a cone of depression exists under the Vineyard area. (See Fall 2018 GW Elevations) The red lines I've added are Jackson Hwy, Florin and Excelsior Roads. I've included an existing Supply Facilities map from 2014 so you can see the

problem if additional wells are developed at the Excelsior Wellfield. Additional wells will only increase the problem we already have in this area.

Response 18-3

The comment cites trigger points from the 2006 Central Basin Groundwater Management Plan as potential thresholds for action consistent with the Basin Management Objective No. 2, which is to maintain specific groundwater elevations within all areas of the basin consistent with the Water Forum "solution". The comment also cites a 2018 groundwater elevation exhibit showing the groundwater elevation decline over the last 15 years, and refers to additional wells in the Excelsior Road well field which are included in SCWA's Zone 40 Water Supply Master Plan (WSMP). However, the comment does not reference the Technical Memorandum regarding Groundwater Elevation BMO Threshold Development prepared for SCGA (RMC, 2015) which is publicly available on SCGA's website (<https://scgah2o.saccounty.net/pages/reports.aspx>, accessed December 2, 2019). As stated in the Technical Memorandum, BMO No. 2 was established in the GMP with defined actions, but without fully quantified thresholds. Threshold values were based on percentages of a range of groundwater elevations, but that range of groundwater elevations was not defined in the GMP. Instead, a methodology was presented to define the groundwater elevation range, termed the bandwidth, relative to specific wells. The effort outlined in the Technical Memorandum implements that methodology, adjusting for changes that have occurred in the basin from both a management and technical standpoint, to fully implement BMO No. 2.

The 273,000 AFY sustainable yield is supported by the Water Forum Agreement Final Environmental Impact Report (https://www.waterforum.org/wp-content/uploads/2015/09/FEIR_WF_RES.pdf, accessed December 2, 2019) and the SCWA Zone 40 WSMP Final EIR (<https://waterresources.saccounty.net/Pages/Reports-Z40-EIR.aspx>, accessed December 2, 2019). Both of these EIRs identified the environmental effects associated with the groundwater extraction of 273,000 AFY, and are hereby incorporated by reference. The WFA's sustainable yield is the best currently available information; identifying an alternative sustainable yield for the South American Sub-basin would be speculative and is outside the scope of this EIR. The SCGA will prepare a GSP and submit it for CA DWR's review by January 2022. Following submittal, CA DWR has two years to review and approve the GSP. Through that process, a new sustainable yield may be identified.

Comment 18-4

As I stated on Thursday, the problem is that this area is not being recharged due to Aerojet's extraction wells to contain their contaminates. Any plans to use surface water at the Vineyard Treatment Plant are subject to USBR available quantities of water under contract. I understand that this water is third tear water subject to ups and downs of mother nature.

Response 18-4

The comment is correct that surface water treated by the Sacramento County Water Agency delivered to them through the Freeport Regional Water Authority is subject to curtailment during dry years. Surface water deliveries are thoroughly analyzed in the Freeport Regional Water Project EIR {reference can be found here - Freeport Regional Water Project CEQA: <https://ceqanet.opr.ca.gov/Project/2002032132> (State Clearinghouse) and <http://www.freeportproject.org/nodes/explore/environmental.php> (FRWA Website)} which is hereby incorporated by reference. Surface water and groundwater availability are the basis for SCWA's conjunctive use program as explained in SCWA's Zone 40 Water Supply Master Plan and associated EIR. The subsequent water supply planning process for each of the four master plans will include written verification from SCWA consistent with SCWA's first come, first served policy at the tentative subdivision map stage (SB 610 and SB 221, 2001) as each project is developed over time . These subsequent steps in conjunction with SCGA's SGMA compliant GSP will ensure the Sub-basin is sustainably managed.

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World Meteorological Organization (WMO). 2005: Statement on the Status of the Global Climate in 2005: Geneva, 15 December 2005.

Yang, Christopher; McCollum, David; McCarthy, Ryan; Leighty, Wayne. Identifying Options for Deep Reductions in Greenhouse Gas Emissions from California Transportation: Meeting an 80% Reduction Goal in 2050 Full Report including Policymaker Summary and Appendix. University of California at Davis, One Shields Avenue • Davis, California.

Zarn, M. 1974. Burrowing Owl, report no. 11. Habitat management series for unique or endangered species. U. S. Department of the Interior, Bureau of Land Management, Denver, Colorado. 25pp.

RECORDING REQUESTED BY AND
WHEN RECORDED MAIL TO:

Sacramento County
Office of Planning and
Environmental Review

COUNTY MAIL CODE: 01-225
No Fee – For the Benefit of Sacramento
County (Code 6103)

SPACE ABOVE THIS LINE RESERVED FOR RECORDER'S USE

COUNTY OF SACRAMENTO

OFFICE OF PLANNING AND ENVIRONMENTAL REVIEW

MITIGATION MONITORING AND REPORTING PROGRAM

CONTROL NUMBER: PLNP2010-00081

NAME: NewBridge Specific Plan

LOCATION: The project site is located in the Vineyard community, southeast of Mather Airport and just west of the City of Rancho Cordova.

ASSESSOR'S PARCEL NUMBER(S): 067-0050-048; 067-0080-013, 014, 015, 016, 025, 029, 030, 037, and 047; 067-0090-002, 005, 018, 019, and 021; and 067-0120-018, 059, 060, 066, and 067

OWNER/APPLICANT:

East Sacramento Ranch, LLC
11350 Kiefer Boulevard
Sacramento, CA 95830
Attn: Michael Koewler

PROJECT DESCRIPTION:

The NewBridge Specific Plan (NSP or Project) is located on 1,095.3± acres at the northwest corner of Sunrise Boulevard and Jackson Road. The Project is divided into three Planning Areas: North, South, and West. Properties within the North and South Planning Areas (which encompass 790.3± acres east of Eagles Nest Road, north of Jackson Road, west of the Folsom South Canal, and south of Kiefer Boulevard) are proposed for land development. Within the North and South Planning Areas the applicant proposes land uses that include mixed use; low, medium and high-density residential; commercial; public/quasi-public, parks; and open space.

The West Planning Area is comprised of a large, single parcel, in the southwest corner of Kiefer Boulevard and Eagles Nest Road (upper West Planning Area), which will serve as open space/habitat mitigation (197.6 acres), and ten smaller parcels in the northwest corner of Jackson Road and Eagles Nest Road (lower West Planning Area) that are not proposed for land development as a component of this project (105.4 acres), and major roadways (2.0 acres).

The proposed Project is a master planned community designed to meet the growing needs of the Sacramento Region. Requested Entitlements:

1. A **General Plan Amendment** to move the Urban Policy Area (UPA) boundary south and west to include approximately 1,095.3 acres encompassing the NewBridge Specific Plan area which includes (Plate PD-6):
 - NewBridge North Planning Area (658 acres)
 - NewBridge South Planning Area (132.3 acres)
 - NewBridge West Planning Area (305 acres)
2. A **General Plan Amendment** to amend the Land Use Diagram to:

Change the land use designations from Extensive Industrial (513.3 acres), General Agriculture (20 acre) (411.6 acres), Recreation (65 acres) to Low Density Residential (470.0 acres), Medium Density Residential (42.1 acres), Commercial & Offices (47.9 acres), Mixed Use (13.5 acres), Natural Preserve (294.2 acres), Cemetery, Public & Quasi-Public (5.0 acres), and Recreation (116.0 acres). *Note: A portion of the NewBridge West Planning Area on the northwest corner of Jackson Road and Eagles Nest Road (105.6 acres) will retain all existing General Plan Land Use Designations.*

Remove the Aggregate Resource Areas combining land use designation on the area designated General Agriculture (20 acre) – Aggregate Resource Areas.

3. A **General Plan Amendment** to change the Bicycle Master Plan to add and amend on- and off-street bikeways as shown in the Bicycle Master Plan Amendment Diagram.
4. **Amend the General Plan Transportation Diagram** to change:

Kiefer Boulevard between Eagles Nest Road to Sunrise Boulevard from developing post-2030 (4-lane arterial) to developing pre-2030 (4-lane arterial), as shown in the Transportation General Plan Amendment Diagram.

Sunrise Boulevard between Kiefer Boulevard to Jackson Road from developing post-2030 (thoroughfare) to developing pre-2030 (thoroughfare).

Jackson Road between Eagles Nest Road and Sunrise Boulevard from developing post-2030 (thoroughfare) to developing pre-2030 (thoroughfare).

5. A **General Plan Amendment** to amend the General Plan, including the Land Use Diagram, to include a Mixed Use Designation.
6. A **Community Plan Amendment** to amend the Vineyard Community Plan to change the Community Plan designation of the parcels located within the NewBridge Specific Plan area (1,095.3 acres) from Permanent Agriculture (AG-160) (411.6 acres), Permanent Agriculture (AG-80) (105.4 acres), Permanent Agriculture (AG-20) (5.0 acres), Heavy Industrial (313.7 acres), Light Industrial (199.6 acres), and Recreation (60.0 acres) to NewBridge Specific Plan Area (1,095.3 acres).
7. Adoption of the NewBridge Specific Plan for the approximately 1,095.3± acre NewBridge Specific Plan area including a Specific Plan Land Use Diagram, Design Guidelines and Development Standards.
8. Acceptance of an Affordable Housing Strategy for the NewBridge Specific Plan consisting of on-site construction of affordable units and/or dedication of land.
9. Adoption of a Development Agreement(s) for the NewBridge Specific Plan by and between the County of Sacramento and the landowners.
10. Adoption of a Public Facilities Financing Plan for the NewBridge Specific Plan area.
11. Adoption of an Urban Services Plan for the NewBridge Specific Plan area.

The project will also require the following:

12. Annexation into or creation of a County Service Area (CSA). A subsequent action may be required by the County Board of Supervisors to establish a Benefit Zone, to implement funding and service provision.
13. Annexation into Sacramento Area Sewer District (SASD) and Sacramento Regional County Sanitation District (SRCSD). Requires SASD and SRCSD Board of Directors approval.
14. Adoption of a Water Supply Master Plan Amendment: Amends the existing Zone 40 Water Supply Master Plan to include provision of water service to the NewBridge Specific Plan Area. Requires Sacramento County Water Agency Board of Directors approval.
15. Approval of a Water Supply Assessment for the NewBridge Specific Plan. Required by the California Water Code to link land use and water supply planning activities. Requires Sacramento County Water Agency Board of Directors approval.

TYPE OF ENVIRONMENTAL DOCUMENT: Environmental Impact Report

PREPARED BY: Sacramento County
Office of Planning and Environmental Review
827 7th Street, Room 225
Sacramento, CA 95814

PHONE: (916) 874-6141

MITIGATION MONITORING AND REPORTING PROGRAM

ADOPTED BY:

DATE:

ATTEST: _____

SECRETARY/CLERK

California All-Purpose Acknowledgment

Pursuant to SB 1050 (Chapter 197, Statutes of 2014), Civil Code section 1189 has been amended to provide that any certificate of acknowledgment taken within the State of California shall be in the following form:

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
)
County of _____)

On _____ before me, _____, Notary Public, personally
(Insert name and title of officer)
appeared _____ who proved to me on the basis of
satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument
and acknowledged to me that he/she/they executed the same in his/her/their authorized
capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity
upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing
paragraph is true and correct.

Witness my hand and official seal.

(Signature) (Seal)

DECLARATION OF AGREEMENT

This Mitigation Monitoring and Reporting Program applies to certain real property, a Legal Description of which is attached as Exhibit A. I (We) the undersigned agree that this Mitigation Monitoring and Reporting Program applies to the real property described in Exhibit A. I (We) the undersigned am (are) the legal owner(s) of that property, and agree to comply with the requirements of this Mitigation Monitoring and Reporting Program. (Summary and Mitigation Measures attached).

IN WITNESS WHEREOF, this declaration is hereby executed by the undersigned named legal owner(s) of the subject property on this ____ day of _____, 20_____.

OWNER(S): _____
(Print name and title above) (Signature above)

(Print company, corporation, or organization name above, if applicable)

California All-Purpose Acknowledgment

Pursuant to SB 1050 (Chapter 197, Statutes of 2014), Civil Code section 1189 has been amended to provide that any certificate of acknowledgment taken within the State of California shall be in the following form:

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
)
County of _____)

On _____ before me, _____, Notary Public,
(Insert name and title of officer)
personally appeared _____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

Witness my hand and official seal.

_____ (Seal)
(Signature)

TABLE OF MEASURES

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PURPOSE AND PROCEDURES

Pursuant to Section 21081.6 of the Public Resources Code and Chapter 20.02 of the Sacramento County Code, a Mitigation Monitoring and Reporting Program (MMRP) has been established for the project entitled NewBridge Specific Plan (Control Number: PLNP2010-00081).

PURPOSE

The purpose of this program is to assure diligent and good faith compliance with the Mitigation Measures which have been recommended in the environmental document, and adopted as part of the project or made conditions of project approval, in order to avoid or mitigate potentially significant effects on the environment.

NOTIFICATION AND COMPLIANCE

It shall be the responsibility of the project applicant/owner to provide written notification to the Environmental Coordinator, in a timely manner, of the completion of each Mitigation Measure as identified on the following pages. The Environmental Coordinator will verify that the project is in compliance with the adopted MMRP. Any non-compliance will be reported to the project applicant/owner, and it shall be the project applicant's/owner's responsibility to rectify the situation by bringing the project into compliance and re-notifying the Environmental Coordinator. Any indication that the project is proceeding without good-faith compliance could result in the imposition of administrative, civil and/or criminal penalties upon the project applicant/owner in accordance with Chapter 20.02 of the Sacramento County Code.

PAYMENT

TIME AND MATERIALS

It shall be the responsibility of the project applicant/property owner to reimburse the County for all expenses incurred in the implementation of the MMRP, including any necessary enforcement actions. The applicant/property owner shall pay an initial deposit of \$10,000.00. This deposit includes administrative costs of \$900.00, which must be paid to the Office of Planning and Environmental Review Division prior to recordation of the MMRP and prior to recordation of any final parcel or subdivision map. The remaining balance will be due prior to review of any plans by the Environmental Coordinator or issuance of any building or grading permits. Over the course of the project, Office of Planning and Environmental Review will regularly conduct cost accountings and submit invoices to the applicant/property owner when the County monitoring costs exceed the initial deposit.

RECORDATION

In order to record the adopted MMRP with the County Recorder as required by Section 20.02.050(b)(2) of the Sacramento County Code, the project applicant/owner shall provide to the Office of Planning and Environmental Review a Legal Description for the real property that is the subject of the project.

COMPLETION

Pursuant to Section 20.02.060 of the Sacramento County Code, upon the determination of the Environmental Coordinator that compliance with the terms of the approved MMRP has been achieved, and that there has been full payment of all fees for the project, the Environmental Coordinator shall record and issue a Program Completion Certificate for the project.

PROPERTY TRANSFER

The requirements of an adopted MMRP run with the real property that is the subject of the project, as described in Exhibit A. Successive owners, heirs and assigns of the real property are bound to comply with all requirements of the adopted MMRP.

Prior to any lease, sale, transfer or conveyance of any portion of the real property that is the subject of the project, the record owner(s) at the time of the application for the project, or his or her successor's in interest, shall provide a copy of the adopted Program to the prospective lessee, buyer, transferee, or one to whom the conveyance is made.

PENALTIES

Chapter 20.02 of the Sacramento County Code permits civil remedies and criminal penalties to be imposed in the event of non-compliance with an adopted MMRP. The civil remedies, which are found in Section 20.02.090 of the Sacramento County Code, include injunctive relief, stop work orders, revocation of any special permit granted concurrently with the approval of an MMRP, and the abatement of any resulting nuisance. The criminal penalties, which are found in Section 20.02.080 of the Sacramento County Code, include a fine not to exceed \$500.00 or imprisonment in the County jail not to exceed 6 months, or both.

Plans that are inconsistent with the adopted Mitigation Measures will not be approved.

In the event of an ongoing, serious non-compliance issue, the Environmental Coordinator may call for a "stop work order" on the project.

STANDARD PROVISIONS

Page one of all Project Plans must include the following statement in a conspicuous location:

“All Plans associated with this project are subject to the conditions of Mitigation Monitoring and Reporting Program PLNP2010-00081. For any questions regarding compliance with the MMRP document, contact MMRP staff at (916) 874-6141.”

All Project Plans and any revisions to those Plans shall be in full compliance with the adopted MMRP. The project applicant/owner shall submit one copy of all such Plans and any revisions to the Environmental Coordinator prior to final approval by the Sacramento County Building Permits and Inspection Division or Site Improvement and Permit Section. If the Environmental Coordinator determines that the Plans are not in full compliance with the adopted MMRP, the Plans shall be returned to the project applicant/owner with a letter specifying the items of non-compliance, and instructing the applicant/owner to revise the Plans, and then resubmit one copy of the revised Plans to the Environmental Coordinator, for determination of compliance, prior to final approval by the Sacramento County Building Permits and Inspection Division or Site Improvement and Permit Section.

Additionally, the project applicant/owner shall notify the Environmental Coordinator no later than 48 hours prior to the start of construction and no later than 24 hours after its completion. The applicant/owner shall notify the Environmental Coordinator no later than 48 hours prior to any/all Final Inspection(s) by the County of Sacramento.

MITIGATION MEASURE AG-1:

The applicant shall disclose to all buyers of properties located within 500 feet of the north, west, and south NewBridge Specific Plan boundaries that they could be subject to inconvenience or discomfort resulting from accepted farming activities as per provisions of the County Right-To-Farm Ordinance. Large Lot Subdivision Maps and Small Lot Subdivision Maps shall contain a note stating that residents may be subject to inconvenience or discomfort resulting from accepted farming activities per provisions of the County Right-To-Farm Ordinance.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include a note stating that residents may be subject to inconvenience or discomfort resulting from accepted farming activities per provisions of the County Right-To-Farm Ordinance on all Large Lot Subdivision Maps and Small Lot Subdivision Maps, and submit one copy to the Environmental Coordinator for review and approval prior to the sale of property in the Plan Area.

Verification (Action by the Environmental Coordinator):

1. Review and approve the Large Lot Subdivision Maps and Small Lot Subdivision Maps.

Comments:

Completion of Mitigation Verified:

Signature: _____ **Date:** _____

MITIGATION MEASURE AG-2:

Prior to the issuance of a grading permit, the project proponent shall participate in the South Sacramento Habitat Conservation Plan by setting aside 635 acres of land, which will satisfy any mitigation requirement from General Plan Policy AG-5 and compensate for the loss of 8.6 acres of Farmland of Statewide Importance as well as the loss of the 75.2 acres of undeveloped land currently mapped by DOC as Farmland of Local Importance and being used for effluent disposal and passive grazing.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Submit evidence that 635 acres of land in the Project area have been dedicated to the South Sacramento Habitat Conservation Agency to the Environmental Coordinator.

Verification (Action by the Environmental Coordinator):

1. Review materials to confirm that land in the Project area has been dedicated to the South Sacramento Habitat Conservation Plan prior to issuing grading permits.

Comments:

Completion of Mitigation Verified:

Signature: _____ **Date:** _____

□ MITIGATION MEASURE AQ-1

Construction exhaust and fugitive dust emissions controls. All individual public and private subsequent projects within the project area shall implement SMAQMD's Basic Construction Emission Control Practices and SMAQMD's Enhanced Exhaust Control Practices during any construction or ground disturbance activities to reduce construction-related fugitive dust emissions, diesel PM, and NO_x emissions. These measures are included below.

Basic Construction Emissions Control Practices (Best Management Practices)

The following Basic Construction Emissions Control Practices are considered feasible for controlling fugitive dust from a construction site. The practices also serve as best management practices (BMPs), allowing the use of the non-zero particulate matter significance thresholds.

- Control of fugitive dust is required by District Rule 403 and enforced by District staff.
- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.

The following practices describe exhaust emission control from diesel powered fleets working at a construction site. California regulations limit idling from both on-road and off-road diesel-powered equipment. The California Air Resources Board enforces the idling limitations.

- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.

Although not required by local or state regulation, many construction companies have equipment inspection and maintenance programs to ensure work and fuel efficiencies.

- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated.

Lead agencies may add these emission control practices as Conditions of Approval (COA) or include in a Mitigation Monitoring and Reporting Program (MMRP).

Enhanced On-Site Exhaust Control Practices

1. The project applicant, or its designee, shall provide a plan for approval by the Sac Metro Air District that demonstrates the heavy-duty off-road vehicles (50 horsepower or more) to be used 8 hours or more during the construction project will achieve a project wide fleet-average 10% NOX reduction compared to the most recent California Air Resources Board (CARB) fleet average. The plan shall have two components: an initial report submitted before construction and a final report submitted at the completion.
 - a. Submit the initial report at least four (4) business days prior to construction activity using the Sac Metro Air District's Construction Mitigation Tool (<http://www.airquality.org/businesses/ceqa-land-use-planning/mitigation>).
 - b. Provide project information and construction company information.
 - c. Include the equipment type, horsepower rating, engine model year, projected hours of use, and the CARB equipment identification number for each piece of equipment in the plan. Incorporate all owned, leased and subcontracted equipment to be used.
 - d. Submit the final report at the end of the job, phase, or calendar year, as pre-arranged with Sac Metro Air District staff and documented in the approval letter, to demonstrate continued project compliance.
2. The Sac Metro Air District may conduct periodic site inspections to determine compliance. Nothing in this mitigation shall supersede other air district, state or federal rules or regulations.
3. This mitigation will sunset on January 1, 2028, when full implementation of the CARB In-Use Off-Road Regulation is expected.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the

Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

3. Submit the off-road heavy-duty equipment list and plan to the Sac Metro Air District for review and approval.

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Consult with Sac Metro Air District as needed for compliance with this measure.
4. Participate in any Final Inspection(s) as necessary.

Comments:

Completion of Mitigation Verified:

Signature: _____ **Date:** _____

□ MITIGATION MEASURE AQ-2

To mitigate the additional emissions that cannot be offset through implementation of Mitigation Measure AQ-1, above, the following shall apply: Prior to the approval of improvement plans or the issuance of grading permits, the proponent will submit proof that the off-site air quality mitigation fee (at the prevailing rate including associated administrative fee) has been paid to SMAQMD, and that the construction air quality mitigation plan has been approved by SMAQMD and Sacramento County.

The fee calculation shall be based on the sum of emissions associated with all individual construction activities or phases occurring within the project area boundary at any one time during the buildout period. Payment schedules shall be negotiated between SMAQMD and the developer and based on finalized construction parameters before the issuance of any grading permit or groundbreaking activities. If, for instance, the construction contractor of one builder is constructing one village while the construction contractor of another builder is constructing another village, the developer is responsible for determining the proportion of necessary combined offset fees that each builder must contribute. Once initial construction activities are finalized by the developer, quantification of construction-related emissions shall be verified. As each individual construction phase is finalized throughout the duration of the project buildout, the mitigation fee shall be calculated based on current information, available construction equipment, and proposed construction activities. As construction activities occur over the buildout period, the developer shall work with SMAQMD to continually update mitigation fees based on actual on-the-ground emissions. The final mitigation fees shall be based on contractor equipment inventories provided by the developer to SMAQMD and shall reconcile any fee discrepancies due to schedule adjustments and increased or decreased equipment inventories. Equipment inventories and NO_x emission estimates for subsequent construction phases shall be coordinated with SMAQMD, and the off-site mitigation fee measure shall be assessed to any construction phase that would result in an exceedance of SMAQMD's mass emission threshold for NO_x.

1. The environmental document identified that construction-generated emissions of nitrogen oxide (NO_x) will exceed the Sac Metro Air District's threshold of significance. The project applicant, or its designee, shall pay a mitigation fee and an administrative fee to the Sac Metro Air District to reduce the project impacts from construction NO_x emissions to a less than significant level.
2. The project applicant, or its designee, shall pay the mitigation and administrative fees in full prior to the lead agency issuing a grading permit that would allow activity that would exceed Sac Metro Air District's threshold.
3. An alternative payment plan may be negotiated by the project applicant, or its designee, based on the timing of construction phases that are expected to exceed the Sac Metro Air District's threshold of significance. Any alternative payment plan must be acceptable to the Sac Metro Air District and agreed upon in writing prior to issuance of a grading permit by the lead agency.

4. In coordination with the lead agency and the Sac Metro Air District, the project applicant, or its designee, may reanalyze construction NO_x emissions from the project prior to starting construction to account for any changes to CARB's In-Use Off-Road Diesel Equipment Regulation and/or statewide equipment emissions factors that form the baseline assumptions in the Sac Metro Air District's construction mitigation program, or any changes to the assumptions in the construction analysis in the EIR.
 - a. The analysis must be conducted using Sac Metro Air District approved emissions model(s) and the fee rates published at the time of reanalysis.
 - b. The analysis may include on-site measures to reduce construction emissions if deemed feasible by the lead agency and project applicant. All on-site measures assumed in the analysis must be included in the construction contracts and be enforceable by the lead agency.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Submit proof to the Environmental Coordinator that the off-site air quality mitigation fee has been paid to SMAQMD, and that the construction air quality mitigation plan has been approved by SMAQMD and Sacramento County.

Verification (Action by the Environmental Coordinator):

1. Review and approve materials prior to the approval of improvement plans or the issuance of grading permits.

Comments:

Completion of Mitigation Verified:

Signature: _____ **Date:** _____

MITIGATION MEASURE AQ-3

Comply with the provisions of the updated Air Quality Management Plan dated July 2020 and incorporate the requirements of this plan into the NewBridge Specific Plan conditions.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Review projects for consistency with the AQMP (July 2020).
3. Monitor compliance during periodic site inspections of the construction work.
4. Participate in any Final Inspection(s) as necessary.

Comments:

Completion of Mitigation Verified:

Signature: _____ **Date:** _____

□ MITIGATION MEASURE AQ-4

Implement Mitigation Measure CC-1. The project developer shall incorporate the following mitigation measures into the project to reduce operational emissions of criteria air pollutants and precursors.

Transportation

- For each single-family residential unit, install a listed raceway, associated overcurrent protective device and the balance of a dedicated 208/240-volt branch circuit at 40 amperes (amp) minimum. The raceway shall not be less than the trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or unit subpanel and shall terminate into a listed cabinet, box, or other enclosure near the proposed location of an electric vehicle (EV) charger. Raceways are required to be continuous at enclosed, inaccessible, or concealed areas and spaces. The service panel and/or subpanel shall provide capacity for a 40-amp minimum dedicated branch circuit. All electrical circuit components and Electric Vehicle Service Equipment (EVSE), including a receptacle or box with a blank cover, related to Section A4.106.8 of the California Green Building Standards Code shall be installed in accordance with the California Electrical Code.
- Multifamily residential buildings shall design at least 10 percent of parking spaces to include EVSE, or a minimum of two spaces to be installed with EVSE for buildings with 2-10 parking spaces. EVSE includes EV charging equipment for each required space connected to a 208/240-volt, 40-amp panel with conduit, wiring, receptacle, and overprotection devices.
- Nonresidential buildings shall design at least 10 percent of parking spaces to include EVSE, or a minimum of two spaces to be installed with EVSE for buildings with 2-10 parking spaces. EVSE includes EV charging equipment for each required space connected to a 208/240-volt, 40-amp panel with conduit, wiring, receptacle, and overprotection devices.
- Nonresidential land uses with 20 or more on-site parking spaces shall dedicate preferential parking spaces to vehicles with more than one occupant and ZEVs (including battery electric vehicles and hydrogen fuel cell vehicles). The number of dedicated spaces should be no less than two spaces or 5 percent of the total parking spaces on the individual project site, whichever is greater. These dedicated spaces shall be in preferential locations such as near the main entrances to the buildings served by the parking lot and/or under the shade of structures or trees. These spaces shall be clearly marked with signs and pavement markings. This measure shall not be implemented in a way that prevents compliance with requirements in the California Vehicle Code regarding parking spaces for disabled persons or disabled veterans.

Building Energy

- All project buildings shall be designed to include Cool Roofs in accordance with the requirements set forth in Tier 2 of the California Green Building Energy Code, Sections A4.106.5 and A5.106.11.2.
- All project buildings shall comply with requirements for water efficiency and conservation as described in the California Green Building Standards Code, Divisions 4.3 and 5.3.
- Multiple electric receptacles shall be included on the exterior of all nonresidential buildings and accessible for purposes of charging or powering electric landscaping equipment and providing an alternative to using fossil-fuel-powered generators. The electrical receptacle shall have an electric potential of 100 volts. There should be a minimum of one electrical receptacle on each side of the building and one receptacle every 100 linear feet around the perimeter of the building.
- Ensure that all appliances and fixtures installed in buildings developed under the project are Energy Star®-certified if an Energy Star®-certified model of the appliance is available. Types of Energy Star®-certified appliances include boilers, ceiling fans, central and room air conditioners, clothes washers, compact fluorescent light bulbs, computer monitors, copiers, consumer electronics, dehumidifiers, dishwashers, external power adapters, furnaces, geothermal heat pumps, programmable thermostats, refrigerators and freezers, residential light fixtures, room air cleaners, transformers, televisions, vending machines, ventilating fans, and windows (EPA 2018). If EPA's Energy Star® program is discontinued and not replaced with a comparable certification program before appliances and fixtures are selected, then similar measure which exceed the 2016 California Green Building Standards Code may be used.
- Require all **residential and non-residential** space and water heating to be solar- or electric-powered.
- All cooking appliances shall be solar- or electric-powered. Natural gas usage for any household appliance shall be prohibited. **No gas lines will be extended to any part of the project.**
- Research incentives for future residents to purchase electric vehicles, such as monetary incentives or other compensatory programs, and either implement selected incentives or provide information and/or assistance to future residents on how to utilize other existing electric vehicle incentive programs.
- Install high-efficiency lighting (i.e., light emitting diodes) in all streetlights, security lighting, and all other exterior lighting applications.

Waste Generation

- **Prior to issuance of the first residential certificate of occupancy, the project developer shall submit evidence to the County that it has created Create** a local composting program for residents to achieve the statewide 75 percent waste diversion target.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE BR-1

To compensate for the permanent loss of wetlands, the applicant shall undertake compensatory mitigation sufficient to achieve no net loss of wetland resources, consistent with General Plan policy. This performance standard shall be achieved through one or a combination of the following prior to the approval of grading permit, civil improvement plans, or building permit, whichever occurs first:

- a. Where a Section 404 Permit has been issued by the Army Corps of Engineers, or an application has been made to obtain a Section 404 Permit, the Mitigation and Management Plan required by that permit or proposed to satisfy the requirements of the Corps for granting a permit may be submitted for purposes of achieving a no net-loss of wetlands. The required Plan shall be submitted to the Environmental Coordinator, U.S. Army Corps of Engineers, and U.S. Fish and Wildlife Service for approval prior to its implementation.
- b. If regulatory permitting processes result in less than a 1:1 compensation ratio for loss of wetlands, the Project applicant shall demonstrate that the wetlands which went unmitigated/uncompensated as a result of permitting have been mitigated through other means. Acceptable methods include payment into a mitigation bank or protection of off-site wetlands through the establishment of a permanent conservation easement, subject to the approval of the Environmental Coordinator.
- c. The Project applicant shall participate in the adopted South Sacramento Habitat Conservation Plan. The applicant shall prepare Project plans in accordance with that Plan and any and all fees or land dedications shall be completed prior to grading or construction, whichever occurs first.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Submit one copy of either the Mitigation and Management Plan required for the Section 404 permit or evidence of mitigation through other means to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).
3. Demonstrate participation in the South Sacramento Habitat Conservation Plan.

Verification (Action by the Environmental Coordinator):

1. Verify that the applicant has adequately compensated for the loss of wetlands and is participating in the South Sacramento Habitat Conservation Plan prior to the approval of grading permit, civil improvement plans, or building permit, whichever occurs first.

Comments:

Completion of Mitigation Verified:

Signature: _____ **Date:** _____

MITIGATION MEASURE BR-2

Prior to the approval of grading permit, civil improvement plans, or building permit, whichever occurs first, all areas designated within the NSP as Avoided shall be placed within a permanent conservation easement, which shall be reviewed and approved by the Office of Planning and Environmental Review. At a minimum, the permanent conservation easements must cover all areas which are required to be preserved as part of the Section 404 and Section 401 wetland permits or the South Sacramento Habitat Conservation Plan.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Apply for a permanent conservation easement for all areas designated within the NSP as Avoided and submit evidence to the Environmental Coordinator.

Verification (Action by the Environmental Coordinator):

1. Review and approve a permanent conservation easement for areas designated within the NSP as Avoided prior to the approval of grading permit, civil improvement plans, or building permit, whichever occurs first.
2. Verify that the easement includes all areas required to be preserved as part of the Section 404 and Section 401 wetland permits or the South Sacramento Habitat Conservation Plan.

Comments:

Completion of Mitigation Verified:

Signature: _____ **Date:** _____

MITIGATION MEASURE BR-3

Prior to the approval of civil improvement plans for the sewer force main and water supply infrastructure in Eagles Nest Road, a hardpan restoration plan shall be developed by a qualified hydrogeologist and geotechnical expert and approved by Sacramento County to ensure consistency with SSHCP Avoidance and Minimization Measure EDGE-7. The plan shall be implemented for sewer and water line construction adjacent to the proposed preserves on Parcels N-30 and W-30. The detailed plan shall include identification and documentation of the hardpan depths during excavation of the sewer and water line trenches, and appropriate backfill material to restore the hardpan functionality. The detailed hardpan restoration plan shall be included in the construction specifications for the proposed sewer and water supply lines. The Sacramento County Office of Planning and Environmental Review shall coordinate with the Sacramento County Water Agency to develop a feasible treatment plan that does not hinder access to infrastructure maintenance.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Prepare a hardpan restoration plan and submit to the Environmental Coordinator for review.
3. Include the detailed hardpan restoration plan in the construction specifications for the proposed sewer and water supply lines.

Verification (Action by the Environmental Coordinator):

1. Review the hardpan restoration plan for compliance with SSHCP Avoidance and Minimization Measure EDGE-7 prior to the approval of civil improvement plans for the sewer force main and water supply infrastructure in Eagles Nest Road.
2. Coordinate with the Sacramento County Water Agency regarding treatment plan feasibility.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE BR-4

Any land use entitlements proposed for the South Planning Area (APNs: 067-0120-059, -060, 066, and -067) or the lower West Planning Area (APNs: 067-0080-013 – 016, -025, -029, -030, -037, -047 and 067-0110-066) must obtain a wetland delineation and comply with Mitigation Measures BR-1 and BR-2.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Prepare a wetland delineation.
3. Submit one copy of either the Mitigation and Management Plan required for the Section 404 permit or evidence of mitigation through other means to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Verify that the applicant has adequately compensated for the loss of wetlands and is participating in the South Sacramento Habitat Conservation Plan prior to the approval of grading permit, civil improvement plans, or building permit, whichever occurs first.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE BR-5

If construction, grading, or project-related improvements are to commence between March 1 and September 15, a focused survey for Swainson's hawk nests on the site and within ¼ mile of the site shall be conducted by a qualified biologist no later than 30 days prior to the start of construction work (including clearing and grubbing). If active nests are found, the California Fish and Wildlife shall be contacted to determine appropriate protective measures, and these measures shall be implemented prior to the start of any ground-disturbing activities. At a minimum, such protective measures shall include the creation of buffers sufficient to keep construction activities far enough away from any occupied nest to avoid disruption of rearing activities. If no active nests are found during the focused survey, no further mitigation will be required.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Conduct a focused survey for Swainson's hawk nests if construction, grading, or project-related improvements are to commence between March 1 and September 1 and provide the Environmental Coordinator with a memorandum from the qualified biologist that summarizes the survey results.
3. If nests are found, consult with the California Department of fish and Wildlife and notify the Environmental Coordinator of the protective measures that will be employed during project activities.

Verification (Action by the Environmental Coordinator):

1. Review the survey results prior to the start of construction, grading, or project-related improvements. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE BR-6

North Planning Area (Land Owned by East Sacramento Ranch). Prior to issuance of a grading permit or building permits, whichever occurs first, implement one of the options below to mitigate for the loss of 295.6 acres of Swainson's hawk foraging habitat on the Project site.

1. Establish a permanent conservation easement over parcels N-30 N-36, N-37, N-38, N-39 and W-30. Foraging habitat preserved shall consist of grassland or similar habitat, not cropland, because this mitigation measure also offsets impacts to other species that do not use cropland habitat.
2. Comply with SSHCP intended to mitigate for the loss of Swainson's hawk foraging habitat to an extent sufficient to mitigate for the loss of 295.6 acres of such habitat, such as the dedication of the proposed open space preserve areas identified as hardline and linkage preserves.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Submit evidence that either a permanent conservation easement has been established over parcels N-30 N-36, N-37, N-38, N-39 and W-30 or mitigation for the loss of 295.6 acres of Swainson's hawk foraging habitat through the SSHCP to the Environmental Coordinator for review and approval prior to issuance of a grading permit or building permits, whichever occurs first.

Verification (Action by the Environmental Coordinator):

1. Review and approve written notification provided by the project applicant/owner prior to issuance of a grading permit or building permits, whichever occurs first.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE BR-7

South Planning Area. Prior to the issuance of a grading permit or building permits, whichever occurs first, implement one of the options below to mitigate for the loss of Swainson's hawk foraging habitat on the Project site; based on current Project designs this is 119.7 acres. Foraging habitat preserved shall consist of grassland or similar habitat open habitat, not cropland, because this mitigation measure also offsets impacts to other species that do not use cropland habitat.

- A. The project proponent shall utilize one or more of the mitigation options (land dedication and/or fee payment) established in Sacramento County's Swainson's Hawk Impact Mitigation Program (Chapter 16.130 of the Sacramento County Code).
- B. The Project proponent shall, to the satisfaction of the California Department of Fish and Wildlife, prepare and implement a Swainson's hawk mitigation plan that will include preservation of Swainson's hawk foraging habitat.
- C. Comply with SSHCP policies and requirements intended to mitigate for the loss of Swainson's hawk foraging habitat to an extent sufficient to mitigate for the loss of 119.7 acres of such habitat, such as the dedication of the proposed open space preserve areas identified as hardline and linkage preserves.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Prepare and implement a Swainson's hawk mitigation plan that includes preservation of Swainson's hawk foraging habitat and complies with the mitigation options (land dedication and/or fee payment) established in Sacramento County's Swainson's Hawk Impact Mitigation Program (Chapter 16.130 of the Sacramento County Code). Provide one copy to the Environmental Coordinator.
3. Submit evidence that mitigation for the loss of 119.7 acres of Swainson's hawk foraging habitat through the SSHCP to the Environmental Coordinator for review and approval prior to issuance of a grading permit or building permits, whichever occurs first.

Verification (Action by the Environmental Coordinator):

1. Review and approve written notification provided by the project applicant/owner prior to issuance of a grading permit or building permits, whichever occurs first.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE BR-8

If construction, grading, or Project-related improvements are to occur between March 1 and September 15, a focused tree survey for nesting raptors within 500 feet of the site shall be conducted by a qualified biologist within 14 days prior to the start of construction work (including clearing and grubbing). If active nests are found, the California Department of Fish and Wildlife shall be contacted to determine appropriate protective measures. At a minimum, such protective measures shall include the creation of buffers sufficient to keep construction activities far enough away from any occupied nest to avoid disruption of rearing activities. If no active nests are found during the focused survey, no further mitigation will be required.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Conduct a focused tree survey if construction, grading, or project-related improvements are to commence between March 1 and September 15 and provide the Environmental Coordinator with a memorandum from the qualified biologist that summarizes the survey results.
3. If nests are found, consult with the California Department of Fish and Wildlife and notify the Environmental Coordinator of the protective measures that will be employed during project activities.

Verification (Action by the Environmental Coordinator):

1. Review the survey results prior to the start of construction, grading, or project-related improvements. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE BR-9

Prior to the commencement of construction activities (which includes clearing, grubbing, or grading) within 500 feet of suitable burrow habitat, a survey for burrowing owl shall be conducted by a qualified biologist. The survey shall occur within 30 days of the date that construction will encroach within 500 feet of suitable habitat. Surveys shall be conducted in accordance with the following:

1. A survey for-burrows and owls shall be conducted by walking through suitable habitat over the entire project site and in areas within 150 meters (~500 feet) of the project impact zone.
2. Pedestrian survey transects shall be spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines shall be no more than 30 meters (~100 feet), and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility. To efficiently survey projects larger than 100 acres, it is recommended that two or more surveyors conduct concurrent surveys. Surveyors shall maintain a minimum distance of 50 meters (~160 feet) from any owls or occupied burrows. It is important to minimize disturbance near occupied burrows during all seasons.
3. If no occupied burrows or burrowing owls are found in the survey area, a letter report documenting survey methods and findings shall be submitted to the Environmental Coordinator and no further mitigation is necessary.
4. If occupied burrows or burrowing owls are found, then a complete burrowing owl survey is required. This consists of a minimum of four site visits conducted on four separate days, which must also be consistent with the Survey Method, Weather Conditions, and Time of Day sections of Appendix D of the California Department of Fish and Wildlife "Staff Report on Burrowing Owl Mitigation" (March 2012). Submit a survey report to the Environmental Coordinator which is consistent with the Survey Report section of Appendix D of the California Department of Fish and Wildlife "Staff Report on Burrowing Owl Mitigation" (March 2012).
5. If occupied burrows or burrowing owls are found the applicant shall contact the Environmental Coordinator and consult with California Department of Fish and Wildlife prior to construction, and will be required to submit a Burrowing Owl Monitoring and Mitigation Plan (subject to the approval of the Environmental Coordinator and in consultation with California Department of Fish and Wildlife). This plan shall include measures sufficient to avoid the destruction of occupied nests and mortality to individual owls, shall document all proposed measures, including avoidance, minimization, exclusion, relocation, or other measures, and shall include a plan to monitor mitigation success. The California Department of Fish and Wildlife "Staff Report on Burrowing Owl Mitigation" (March 2012) should be used in the development of the mitigation plan.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Conduct a pedestrian survey for burrowing owl. If no occupied burrows or burrowing owls are found in the survey area, submit a letter report documenting survey methods and findings to the Environmental Coordinator.
3. If occupied burrows or burrowing owls are found, conduct a complete burrowing owl survey and submit a survey report to the Environmental Coordinator. Consult with the California Department of Fish and Wildlife prior to construction and submit a Burrowing Owl Monitoring and Mitigation Plan to the Environmental Coordinator.

Verification (Action by the Environmental Coordinator):

1. Review and approve survey results. Consult with the California Department of Fish and Wildlife on any Burrowing Owl Monitoring and Mitigation Plan.
2. Monitor compliance during periodic site inspections of the construction work.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE BR-10

If construction occurs between March 1 and July 31 pre-construction surveys for nesting tricolored blackbirds shall be performed by a qualified biologist. Surveys shall include the project site and areas of appropriate habitat within 300 feet of the site. The survey shall occur no longer than 14 days prior to the start of construction work (including clearing, grubbing or grading). The biologist shall supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity. If no tricolored blackbird were found during the pre-construction survey, no further mitigation would be required. If an active tricolored blackbird colony is found on-site or within 300 feet of the project site the project proponent shall do both of the following:

- A. Consult with the California Department of Fish and Wildlife to determine if project activity will impact the tricolored blackbird colony(s), and implement appropriate avoidance and impact minimization measures if so directed. At a minimum, such measures shall include the creation of buffers sufficient to keep construction activities far enough away from the colony to avoid disrupting the normal biological functioning of the colony. Provide the Environmental Coordinator with written evidence of the consultation or a contact name and number from the California Department of Fish and Wildlife.
- B. The applicant may avoid impacts to tricolored blackbird by establishing a 300-foot temporary setback with fencing that prevents any project activity within 300 feet of the colony. A qualified biologist shall verify that setbacks and fencing are adequate and will determine when the colonies are no longer dependent on the nesting habitat (i.e. nestling have fledged and are no longer using habitat), which will determine when the fencing may be removed. The breeding season typically ends in July.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Conduct pre-construction surveys for nesting tricolored blackbirds if construction occurs between March 1 and July 31. Supply a written report to the Environmental Coordinator prior to ground disturbing activity.
3. If an active tricolored blackbird colony is found on-site or within 300 feet of the project site, consult with the California Department of Fish and Wildlife and implement appropriate avoidance and impact minimization measures (if so directed); and establish temporary setbacks. Provide the Environmental Coordinator with written evidence of the consultation and biologist verification of setback adequacy.

Verification (Action by the Environmental Coordinator):

1. Review and approve survey results. Confirm consultation and implementation of appropriate avoidance and impact minimization measures.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE BR-11

Prior to the commencement of ground-disturbing activity within 1,650 feet of aquatic habitat, the developer shall consult with California Department of Fish and Wildlife to establish appropriate avoidance procedures, and to establish procedures which would apply in the event that a western pond turtle is found within the construction area. Such procedures shall ensure the avoidance of mortality to individual turtles. The developer shall submit written evidence of the consultation and its conclusions to the Environmental Coordinator. If California Fish and Wildlife recommends obtaining a permit, the applicant shall obtain the permit prior to the commencement of ground-disturbing activities. Unless California Fish and Wildlife recommends other mitigation that is equally or more protective, the following shall also apply:

1. Twenty four hours prior to the commencement of ground-disturbing activity (i.e. clearing, grubbing, or grading) within 1,650 feet of aquatic habitat, a qualified biologist shall perform a survey for western pond turtle. The survey shall include all suitable upland and aquatic habitat which is within 1,650 feet of all proposed construction areas. The biologist shall supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity.
2. If western pond turtles are found during the survey, activities shall not commence until the animal has moved out of the construction area on its own. If the animal is injured or trapped, a qualified biologist shall move the animal out of the construction area and into a suitable habitat area.
3. If a western pond turtle is encountered during active construction, all construction shall cease until the animal has moved out of the construction area on its own. If the animal is injured or trapped, a qualified biologist shall move the animal out of the construction area and into a suitable habitat area. California Fish and Wildlife and the Environmental Coordinator shall be notified within 24-hours that a turtle was encountered.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Prior to the commencement of ground-disturbing activity within 1,650 feet of aquatic habitat, consult with California Department of Fish and Wildlife and establish procedures protective of western pond turtle.
3. Submit written evidence of the consultation and its conclusions to the Environmental Coordinator.
4. Obtain a permit if recommended by the California Fish and Wildlife.

5. Unless California Fish and Wildlife recommends other mitigation that is equally or more protective, conduct a survey within 24 hours of construction. supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity.
6. Include a Construction Note indicating that all construction shall cease if a western pond turtle is encountered and the California Fish and Wildlife and the Environmental Coordinator shall be notified within 24-hours.

Verification (Action by the Environmental Coordinator):

1. Review and approve survey results. Confirm consultation and implementation of appropriate avoidance and impact minimization measures.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE BR-12

Individual Permit Process. Presence of California linderiella, midvalley fairy shrimp, vernal pool fairy shrimp and vernal pool tadpole shrimp shall be assumed unless determinate surveys that comply with U.S. Fish and Wildlife protocol conclude that the species are absent. If the protocol surveys are performed and all listed crustacean species are absent, Ricksecker's water scavenger beetle may also be presumed absent, and no further mitigation shall be required for listed vernal pool invertebrates. If species are assumed or found during determinant surveys, one or a combination of the following shall apply:

- A. *Total Avoidance: Species are present or assumed to be present.* Unless a smaller buffer is approved through formal consultation with the USFWS, construction fencing shall be installed a minimum of 250 feet from all delineated vernal pool margins. All construction activities are prohibited within this buffer area. For all vernal pools where total avoidance is achieved, no further action is required.
- B. *Compensate for habitat removed.* Obtain all applicable permits from the U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, California Department of Fish and Wildlife, and the Central Valley Regional Water Quality Control Board (e.g., incidental take authorization, streambed alteration agreement, waste discharge requirements) for any proposed modifications to vernal pools and mitigate for habitat loss in accordance with the Biological Opinion and Section 404 permits obtained for the Project. At a minimum, mitigation ratios shall be consistent with County General Plan Policy, which requires no net loss of wetland resources. Any vernal pool loss not mitigated through the relevant permitting process shall be mitigated for by payment into a mitigation bank or protection of off-site wetlands through the establishment of a permanent conservation easement, subject to the approval of the Environmental Coordinator.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Provide the Environmental Coordinator with evidence of compliance with County General Plan Policy, which requires no net loss of wetland resources.

Verification (Action by the Environmental Coordinator):

1. Review the wetland mitigation plan prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE BR-13

SSHCP Process. The Project is subject to the SSHCP. The project proponent shall follow all avoidance and minimization measures outlined the in the SSHCP and compensate for the loss of habitat pursuant to the plan. Evidence of compliance with the SSHCP shall be submitted to the Environmental Coordinator prior to approval of grading permit, civil improvement plans or building permits.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Submit evidence of compliance with the SSHCP to the Environmental Coordinator.

Verification (Action by the Environmental Coordinator):

1. Confirm compliance with the SSHCP prior to approval of any grading permit, civil improvement plans, or building permit.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE BR-14

Prior to any grading, grubbing, or excavation within 250 feet of a vernal pool or other suitable habitat, rare plant surveys shall be performed. The surveys shall be floristic in nature, meaning that all plant species found in the survey area shall be identified to the taxonomic level necessary to determine rarity and listing status. The rare plant surveyor shall have experience as a botanical field investigator and familiarity with the local flora and potential rare plants in the habitats to be surveyed. The surveys shall be conducted when the rare plants at the site will be easiest to identify (i.e. flowering stage), and when the plants reach that stage of maturity. A minimum of three site visits shall be required during the plants flowering period in order to determine absence. Each site visit must be no less than 7 days apart.

Submit a written report to the Environmental Coordinator which describes the survey. The survey report shall include a brief description of the vegetation, survey results (which includes a list of all species observed), photographs, time spent surveying, date of surveys, a map showing the location of the survey route and any rare plant populations and copies of any rare plant occurrence forms. If no rare plants are found, no further mitigation for plant species is required. If a special status plant or natural community is located, complete and submit to the CNDDDB a California Native Species (or Community) Field Survey Form or equivalent written report, accompanied by a copy of the relevant portion of a 7.5-minute topographic map with the occurrence mapped. Total avoidance of habitats which contain rare plants shall be required unless deemed infeasible by the Environmental Coordinator. If avoidance is infeasible, then compensatory mitigation shall be required. Compensation measures may include transplanting perennial species, seed collection and dispersal for annual species, and other conservation strategies that shall restore and protect the viability of the local population, and shall replace any individual plants at a 1:1 ratio so as to achieve no net reduction in the numbers of individual plants. The performance standard for the compensatory mitigation shall be no net reduction in the size and viability of the local plant population. Prior to construction within 250 feet of the vernal pool(s) which contain the rare plant occurrences, notify California Department of Fish and Wildlife and U.S. Fish and Wildlife and comply with any permit or mitigation requirements stipulated by those agencies. Submit copies of all such correspondence, including a copy of any required permits, to the Environmental Coordinator.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Conduct a rare plant survey prior to any grading, grubbing, or excavation within 250 feet of a vernal pool or other suitable habitat. Submit a written report to the Environmental Coordinator.
3. Prior to construction within 250 feet of the vernal pool(s) which contain the rare plant occurrences, notify California Department of Fish and Wildlife and U.S. Fish and Wildlife and comply with any permit or mitigation requirements stipulated by

those agencies. Submit copies of all such correspondence, including a copy of any required permits, to the Environmental Coordinator.

Verification (Action by the Environmental Coordinator):

1. Review the rare plant survey. If rare plants are found, determine if avoidance is feasible.
2. Confirm coordination with regulatory agencies where construction would occur within 250 feet of vernal pool(s) that contain the rare plants.
3. Monitor compliance during periodic site inspections of the construction work.
4. Participate in any Final Inspection(s) as necessary.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE BR-15

Surveys shall be performed by a qualified botanist during the species non-dormant, flowering period (June – July) prior to work within suitable habitat. If the species is not found during the survey, no further mitigation would be required. If plant(s) are found the botanist shall establish distribution of the colony(s) and estimate the number of individuals in the population. Unless deemed infeasible by the Environmental Coordinator, all plants or tuber/rhizomes shall be removed from the area of impact and transplanted to a new or existing preserve or, if the impact is temporary, replanted in the same location after the disturbance. Surveys shall be performed annually at the transplant location for a period of five years, to ensure success. If survival is not meeting a minimum 60% survivorship, transplantation will be deemed failed. In cases where transplanting is deemed infeasible, or where transplanting has failed, compensatory mitigation shall be provided. Compensatory mitigation shall ensure that there is no net reduction in the size and viability of the local plant population and may consist of placement of a conservation easement over a known, unprotected population of the species.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Conduct floristic surveys for *Legenere* in June or July prior to work within suitable habitat. Provide results to the Environmental Coordinator.
3. If plant(s) are found, transplant and monitor success annually for a 5-year period. Provide monitoring reports to the Environmental Coordinator.

Verification (Action by the Environmental Coordinator):

1. Review survey results. Determine if transplant is feasible or compensatory mitigation is appropriate. If transplant occurs, review survivorship studies.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE BR-16

Removed due to SSHCP adoption.

Implementation and Notification (Action by Project Applicant):

none

Verification (Action by the Environmental Coordinator):

none

Comments:

Signature: _____ **Date:** _____

□ MITIGATION MEASURE BR-17

Project proponents of subsequent development projects within the NSP area, shall submit to the County prior to issuance of a grading permit or building permit, whichever occurs first, an arborist report for the project impact areas when appropriate habitat exists. The report shall include the species, diameter, dripline, and health of the trees, and shall be prepared by an ISA certified arborist. The report shall include an exhibit that shows the trees and their driplines in proximity to the project improvements. The report shall identify any tree proposed for removal and shall quantify any encroachment from project equipment or facilities within driplines of native oaks.

- A. With the exception of the oak trees removed and compensated for through Part B below, all healthy native oak trees that are 6 inches dbh or larger on the project site, all portions of adjacent off-site healthy native oak trees that are 6 inches dbh or larger which have driplines that extend onto the project site, and all off-site healthy native oak trees that are 6 inches dbh or larger which may be impacted by utility installation and/or improvements associated with this project, shall be preserved and protected as follows:
1. A circle with a radius measurement from the trunk of the tree to the tip of its longest limb shall constitute the dripline protection area of the tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of the tree. Removing limbs which make up the dripline does not change the protected area.
 2. Chain link fencing or a similar protective barrier shall be installed one foot outside the driplines of the oak trees prior to initiating project construction, in order to avoid damage to the trees and their root systems.
 3. Any removal of paving or structures (i.e. demolition) that occurs within the dripline of a protected oak tree shall be done under the direct supervision of a certified arborist. To the maximum extent feasible, demolition work within the dripline protection area of the oak tree shall be performed by hand. If the certified arborist determines that it is not feasible to perform some portion(s) of this work by hand, then the smallest/lightest weight equipment that will adequately perform the demolition work shall be used.
 4. No signs, ropes, cables (except cables which may be installed by a certified arborist to provide limb support) or any other items shall be attached to the oak trees.
 5. No vehicles, construction equipment, mobile home/office, supplies, materials or facilities shall be driven, parked, stockpiled or located within the dripline of the oak trees.

6. Any soil disturbance (scraping, grading, trenching, and excavation) is to be avoided within the dripline of the oak trees. Where this is necessary, an ISA Certified Arborist will provide specifications for this work, including methods for root pruning, backfill specifications and irrigation management guidelines.
 7. Before grading, excavation or trenching within five feet outside the driplines of protected oak trees, root pruning shall be required at the limits of grading or excavation to cut roots cleanly to a depth of the excavation or 36 inches (whichever is less). Roots shall be cut by manually digging a trench and cutting exposed roots with a saw, vibrating knife, rock saw, narrow trencher with sharp blades or other approved root-pruning equipment under the supervision of an ISA Certified Arborist.
 8. All underground utilities and drain or irrigation lines shall be routed outside the driplines of oak trees. If lines must encroach upon the dripline, they shall be tunneled or bored under the tree under the supervision of a certified arborist.
 9. Any herbicides placed under paving materials must be safe for use around trees and labeled for that use. Any pesticides used on site must be tree-safe and not easily transported by water.
 10. Drainage patterns on the site shall not be modified so that water collects or stands within, or is diverted across, the dripline of the oak tree.
 11. No sprinkler or irrigation system shall be installed in such a manner that it sprays water within the dripline of the oak tree.
 12. Tree pruning required for clearance during construction must be performed by an ISA Certified Arborist or Tree Worker.
 13. Landscaping beneath the oak tree may include non-plant materials such as boulders, decorative rock, wood chips, organic mulch, non-compacted decomposed granite, etc. Landscape materials shall be kept two (2) feet away from the base of the trunk. The only plant species which shall be planted within the dripline of the oak tree are those which are tolerant of the natural semi-arid environs of the trees. Limited drip irrigation approximately twice per summer is recommended for the understory plants.
- B. To the maximum extent feasible, all on-site healthy native oak trees shall be protected and preserved. Any substantial (>20%) encroachment and/or removal of native oak trees shall be compensated by planting native trees (valley oak/*Quercus lobata*, interior live oak/*Quercus wislizenii*, blue oak/*Quercus douglasii*), equivalent to the dbh inches lost, based on the ratios listed below, at locations that are authorized by the Environmental Coordinator. Encroachment of

over 20 percent within the dripline radius of native trees will require compensatory mitigation as part of a Replacement Oak Tree Planting Plan based on the percentage of encroachment multiplied by the dbh. Encroachment over 50 percent will require compensation for the entire tree.

Equivalent compensation based on the following ratio is required:

- one D-pot seedling (40 cubic inches or larger) = 1 inch dbh
- one 15-gallon tree = 1 inch dbh
- one 24-inch box tree = 2 inches dbh
- one 36-inch box tree = 3 inches dbh

Replacement tree planting shall be completed prior to the issuance of building permits or a bond shall be posted by the applicant in order to provide funding for purchase, planting, irrigation, and 3-year maintenance period, should the applicant default on replacement tree mitigation. The bond shall be in an amount equal to the prevailing rate of the County Tree Preservation Fund.

Prior to the approval of Improvement Plans or building permits, a Replacement Oak Tree Planting Plan shall be prepared by a certified arborist or licensed landscape architect and shall be submitted to the Environmental Coordinator for approval. The Replacement Oak Tree Planting Plan(s) shall include the following minimum elements:

1. Species, size and locations of all replacement plantings;
2. Method of irrigation;
3. The Sacramento County Standard Tree Planting Detail L-1, including the 10-foot deep boring hole to provide for adequate drainage;
4. Planting, irrigation, and maintenance schedules;
5. Identification of the maintenance entity and a written agreement with that entity to provide care and irrigation of the trees for a 3-year establishment period, and to replace any of the replacement oak trees which do not survive during that period.

No replacement tree shall be planted within 15 feet of the driplines of existing oak trees or landmark size trees that are retained on-site, or within 15 feet of a building foundation or swimming pool excavation. The minimum spacing for replacement oak trees shall be 20 feet on-center. Examples of acceptable planting locations are publicly owned lands, common areas, and landscaped frontages (with adequate spacing). Generally unacceptable locations are utility easements (PUE, sewer, storm drains), under overhead utility lines, private yards of single family lots (including front yards), and roadway medians.

If oak tree replacement plantings are demonstrated to the satisfaction of the Environmental Coordinator to be infeasible for any or all trees removed, then compensation shall be through payment into the County Tree Preservation Fund. Payment shall be made at a rate of \$325.00 per dbh inch removed but not otherwise compensated, or at the prevailing rate at the time payment into the fund is made.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Prepare an arborist report that identifies trees proposed for removal to the Environmental Coordinator prior to issuance of a grading permit or building permit, whichever occurs first. Pay appropriate fees and submit evidence to the Environmental Coordinator.
3. For native trees proposed to be preserved, shall be shown on all grading, improvement and building plans. Measure shall be added as a note on all plans.
4. For native trees proposed to be removed, the replacement planting plan shall be submitted to the Environmental Coordinator for review and approval in accordance with B. above.

Verification (Action by the Environmental Coordinator):

1. Review and approve the arborist report prior to issuance of a grading permit or building permit, whichever occurs first.
2. Review grading/improvement/building plans for consistency with measure.
3. Review and approve the replacement planting plan as necessary.
4. Monitor compliance during periodic site inspections of the construction work.
5. Participate in any Final Inspection(s) as necessary.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE BR-18

Implement Applicable SSHCP Avoidance and Minimization Measures. The Project Applicant shall implement SSHCP AMMs EDGE-8 (Outdoor Lighting), EDGE-10 (Prevent Invasive Species Spread), and BMP-2 (Erosion Control). If equivalent or more effect mitigation is required as part of the Project's State and federal permits, those mitigation measures may be implemented subject to the final determination of the Sacramento County Environmental Coordinator.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

Comments:

Signature: _____ **Date:** _____

□ MITIGATION MEASURE CC-1

Reduce greenhouse gas emissions onsite. The project applicant and/or future developers shall incorporate the following mitigation measures into the project to reduce operational GHG emissions.

Transportation

The project developer shall incorporate the following Tier 1 and/or Tier 2 California Green Building Standards mitigation measures into the project. Future developments for residential (tentative maps) and non-residential projects (Design Review), shall demonstrate inclusion of electric vehicle charging infrastructure in compliance, at a minimum, with the Tier 2 requirements of the 2019 CalGreen Code, except that all EV capable spaces shall instead be EV Ready. EV Ready is defined by the California Air Resources Board as, "Installation of dedicated branch circuit(s), circuit breakers, and other electrical components, including a receptacle or blank cover needed to support future installation of one or more charging stations"¹ As such, each residential or non-residential project shall comply with the following standards, as applicable:

- For each single-family residential unit, install a listed raceway, associated overcurrent protective device and the balance of a dedicated 208/240-volt branch circuit at 40 amperes (amp) minimum, to pre-wire the home for electric vehicle charging. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or unit subpanel and shall terminate into a listed cabinet, box, or other enclosure near the proposed location of an Electric Vehicle (EV) charger. Raceways are required to be continuous at enclosed, inaccessible, or concealed areas and spaces. The service panel and/or subpanel shall provide capacity for a 40-amp minimum dedicated branch circuit. All electrical circuit components and Electric Vehicle Service Equipment (EVSE), including a receptacle or box with a blank cover, related to Section A4.106.8 of the California Green Building Standards Code shall be installed in accordance with the California Electrical Code.
- Multifamily residential buildings shall design at least 10 percent of parking spaces to include EVSE, or a minimum of two spaces to be installed with EVSE for buildings with 2-10 parking spaces. EVSE includes EV charging equipment for each required space connected to a 208/240-volt, 40-amp panel with conduit, wiring, receptacle, and overprotection devices.
- Nonresidential buildings shall design at least 10 percent of parking spaces to include EVSE, or a minimum of two spaces to be installed with EVSE for buildings with 2-10 parking spaces. EVSE includes EV charging equipment for

¹ California Air Resources Board. *Electric Vehicle (EV) Charging Infrastructure: Multifamily Building Standards*. Available at: <https://arb.ca.gov/cc/greenbuildings/pdf/tcac2018.pdf>. Accessed April 2020.

each required space connected to a 208/240-volt, 40-amp panel with conduit, wiring, receptacle, and overprotection devices.

- Nonresidential land uses with 20 or more on-site parking spaces shall dedicate preferential parking spaces to vehicles with more than one occupant and zero emission vehicles (ZEVs) (including battery electric vehicles and hydrogen fuel cell vehicles). The number of dedicated spaces should be no less than two spaces or 5 percent of the total parking spaces on the individual project site, whichever is greater. These dedicated spaces shall be in preferential locations such as near the main entrances to the buildings served by the parking lot and/or under the shade of structures or trees. These spaces shall be clearly marked with signs and pavement markings. This measure shall not be implemented in a way that prevents compliance with requirements in the California Vehicle Code regarding parking spaces for disabled persons or disabled veterans.
- Research incentives for future residents to purchase electric vehicles, such as monetary incentives or other compensatory programs, and either implement selected incentives or provide information and/or assistance to future residents on how to utilize other existing electric vehicle incentive programs.

Building Energy

The project developers shall incorporate the following Tier 1 and/or Tier 2 California Green Building Standards mitigation measures into the project:

- All project buildings shall be designed to include Cool Roofs in accordance with the requirements set forth in Tier 2 of the California Green Building Energy Code, Sections A4.106.5 and A5.106.11.2.
- All project buildings shall comply with requirements for water efficiency and conservation as described in the California Green Building Standards Code, Divisions 4.3 and 5.3.
- Multiple electric receptacles shall be included on the exterior of all nonresidential buildings and accessible for purposes of charging or powering electric landscaping equipment and providing an alternative to using fossil fuel-powered generators. The electrical receptacle shall have an electric potential of 100 volts. There should be a minimum of one electrical receptacle on each side of the building and one receptacle every 100 linear feet around the perimeter of the building.
- Ensure that all appliances and fixtures installed in buildings developed under the project are Energy Star®-certified if an Energy Star®-certified model of the appliance is available. Types of Energy Star®-certified appliances include boilers, ceiling fans, central and room air conditioners, clothes washers, compact fluorescent light bulbs, computer monitors, copiers, consumer electronics, dehumidifiers, dishwashers, external power adapters, furnaces, geothermal heat

pumps, programmable thermostats, refrigerators and freezers, residential light fixtures, room air cleaners, transformers, televisions, vending machines, ventilating fans, and windows (EPA 2018). If EPA's Energy Star® program is discontinued and not replaced with a comparable certification program before appliances and fixtures are selected, then similar measures which exceed the most current California Green Building Standards Code may be used.

- All residential appliances, including all space and water heating and cooking appliances, shall be solar- or electric-powered. Use of natural gas for heating, ~~or cooking~~ **in residences and other uses** shall be prohibited. **No gas lines will be extended to any part of the project.**
- Install high efficiency lighting (i.e., light emitting diodes) in all streetlights, security lighting, and all other exterior lighting applications.

Waste Generation

Prior to issuance of the first residential certificate of occupancy, the project developer shall submit evidence to the County that it has created a local composting program for residents to achieve the statewide 75-percent waste diversion target.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Incorporate Tier 1 and/or Tier 2 California Green Building Standards mitigation measures into the project.
3. Submit evidence to the Environmental Coordinator that a local composting program for residents to achieve the statewide 75-percent waste diversion target has been established.

Verification (Action by the Environmental Coordinator):

1. Confirm inclusion of Tier 1 and/or Tier 2 California Green Building Standards mitigation measures into the project when prior to approval of tentative maps and during design review. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Confirm that a local composting program has been established prior to issuance of the first residential certificate of occupancy.

Comments:

Signature: _____ **Date:** _____

□ MITIGATION MEASURE CC-2

A. Future developments for residential (tentative maps) and non-residential projects (Design Review) shall demonstrate a fair-share reduction towards reducing project-wide GHG emissions by 29.82 MTCO₂e/yr (i.e., 0.004 MTCO₂e/yr/capita and 0.06 MTCO₂e/yr/acre). A fair-share contribution is to be made based on the total acreage proposed for development in any given Tentative Map or Design Review area compared to the entire area of development proposed within the project as a whole. For the purposes of this mitigation measure, areas not anticipated for development such as parks, open spaces, and agricultural land as well as areas previously developed, such as the existing electrical facility, are not included in the total development acreage. Therefore, the total development area is considered to be 474.5 acres. Considering the total development area, a hypothetical ten-acre project would represent 2.1 percent of the total development area and would be required to show a GHG emissions reduction or savings of 17.9 MTCO₂e/yr, which would represent 2.1 percent of the 0.63 MTCO₂e/yr reduction required for the project area as a whole. Examples of measures that may be used by future development projects include, but are not limited to, the following:

- Exceedance of Title 24 Energy Efficiency requirements;
- **Multifamily residential buildings, non-residential buildings, and non-residential land uses shall design at least to Tier 2 charging space requirements (20 percent of parking spaces). These spaces shall be “EV Ready” instead of “EV Capable.” Such spaces shall be evenly distributed throughout the parking area provided.**
- Electrifying loading docks to reduce emission from engine idling of Transport Refrigeration Units;
- All-electric building envelope systems, including water heaters and HVAC systems, or appliances, including clothes dryers and cooking equipment, in commercial developments;
- Inclusion of on-site carbon-zero renewable energy systems capable of serving energy needs of any urban development within the Project, including energy needed for street lights, sewer pumps, drainage pumps, traffic signals, water pumps, and commercial developments;
- Residential photovoltaic systems designed to be scalable over time to accommodate varying energy demands;
- **Nonresidential buildings, and residential buildings of more than three stories, shall include photovoltaic or other on-site renewable energy to**

provide at least one percent of their electrical power demand, in compliance with technical standards specified in CalGreen Appendix 5, section A5.211.1, “On-site renewable energy”.

- Cool pavement, as defined by the Capital Region Climate Readiness Collaborative and Sacramento Metropolitan Air Quality Management District (SMAQMD), shall be used for all hard-surfaced roadways, parking areas, walkways, and bicycle paths. High albedo materials shall have reflectance values at a minimum in compliance with requirements of CalGreen Appendix 4, Section A4.106.7. Other cool pavement technologies of equivalent or greater effectiveness may be substituted with approval of Sacramento County and SMAQMD.
- Indoor water use efficiency;
- Institution of a composting and recycling program in excess of local standards;
- Construction Standards. All project construction shall conform to the requirements of CalGreen, Tier 1 as set forth in CalGreen Appendices A4, “Residential Voluntary Measures”, and A5, “Nonresidential Voluntary Measures”.
- Implementation of an Urban Forestry Management Plan to reduce the urban heat island effect;
- Green Streets and Urban Forestry. As part of the Tentative Map/Design Review processes, applicants shall submit to the County for approval a Green Streets and Urban Forestry Plan (Plan) which shall demonstrate how the project will (a) use landscape features to maximize onsite stormwater retention, and (b) will provide tree canopy shading to minimize urban heat island effects and encourage year-round active transportation. Regarding Green Streets, the Plan will at least comply with the Low Impact Development standards set forth in CalGreen Section A5.106.3, and shall exceed the shade cover requirements of CalGreen Subchapter Section 5.106.12, “Shade Trees”.
- Use of energy efficient street lighting fixtures;
- Purchase of off-site mitigation credits consistent with the requirements of paragraph (b) below; and/or
- Energy efficiency retrofits in existing residential and commercial buildings.

Thus, as development progresses within the project area, each individual development would be required to show GHG emissions reductions in keeping with the project wide reduction requirement.

- B. Purchase of off-site mitigation credits shall be negotiated with the County and SMAQMD at the time that credits are sought by future construction within the project areas. Off-site mitigation credits purchased under paragraph (a) shall be real, quantifiable, permanent, verifiable, enforceable, and additional, consistent with the standards set forth in Health and Safety Code section 38562, subdivisions (d)(1) and (d)(2). Such credits shall be based on protocols that are consistent with the criteria set forth in subdivision (a) of Section 95972 of Title 17 of the California Code of Regulations, and shall not allow the use of offset projects originating outside of California, except to the extent that the quality of the offsets, and their sufficiency under the standards set forth herein, can be verified by Sacramento County and/or the SMAQMD. Such credits must be purchased through one of the following: (i) a CARB-approved registry, such as the Climate Action Reserve, the American Carbon Registry, and the Verified Carbon Standard; (ii) any registry approved by CARB to act as a registry under the California Cap and Trade program; or (iii) through the CAPCOA GHG Rx and the SMAQMD.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Demonstrate a fair-share reduction towards reducing project-wide GHG emissions. Provide written verification to the Environmental Coordinator.

Verification (Action by the Environmental Coordinator):

1. Confirm that each individual development contributes appropriately to the project-wide reduction requirement.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE CC-3

If the County adopts a Communitywide Climate Action Plan, future development projects within the NewBridge Specific Plan ~~may~~ **shall** comply with the GHG emissions reductions measures contained therein. Such participation shall be subject to a demonstration that the emissions reductions measures selected are equivalent or more effective to Mitigation Measures CC-1 and CC-2 above.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure, if applicable.
2. Demonstrate that the emissions reductions measures selected are equivalent or more effective to Mitigation Measures CC-1 and CC-2.

Verification (Action by the Environmental Coordinator):

1. Confirm that the emissions reductions measures selected are equivalent or more effective to Mitigation Measures CC-1 and CC-2.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE CR-1

Unanticipated Discoveries of Cultural Resources

If subsurface deposits believed to be cultural or human in origin are discovered during construction, then all work must halt within a 200-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall be retained at the Applicant's expense to evaluate the significance of the find. If it is determined due to the types of deposits discovered that a Native American monitor is required, the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites as established by the Native American Heritage Commission shall be followed, and the monitor shall be retained at the Applicant's expense.

Work cannot continue within the 200-foot radius of the discovery site until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially eligible for listing on the National Register of Historic Places or California Register of Historical Resources.

If a potentially eligible resource is encountered, then the archaeologist and project proponent shall arrange for either 1) total avoidance of the resource, if possible; or 2) test excavations or total data recovery as mitigation. The determination shall be formally documented in writing and submitted to the North Central Information Center (NCIC) as verification that the provisions of CEQA for managing unanticipated discoveries have been met.

In addition, pursuant to Section 5097.97 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, all work is to stop and the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).
3. If cultural resources are encountered, contact the Environmental Coordinator so that the appropriate coordination efforts can be made.

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Coordinate as necessary if cultural resources are encountered.
4. Participate in any Final Inspection(s) as necessary.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE CR-2

Cultural Resources Inventory Report for the South and Lower West Planning Areas (APNs 067-0120-059, 060, 067; 067-0080-013 – 016, 025, 029, 030, 037, and 047). Upon submittal of an application for General Plan Amendment, Specific Plan Amendment, Tentative Large Lot Map, Tentative Subdivision Map, or Rezone, cultural resources surveys will be required in areas not previously subject to intensive investigation. If ground disturbing activities are planned within or adjacent to the boundaries of any identified archaeological site, the following shall be required:

1. The site area will be inspected by a qualified professional archaeologist to assess the condition of the property and determine the current status of the deposit.
2. Based on this review and, as appropriate, a subsurface testing program will be developed and implemented to determine if the property meets criteria to be listed on the California Register of Historic Resources or the national Register of Historical Places. The course of the testing program shall be clearly delineated in a research design which outlines prehistory of the area; research domains, questions, and data requirements; research methods inclusive of field and laboratory studies; report preparation; and significance criteria.
3. Following field investigations, a technical report describing the evaluation program shall be prepared. At a minimum this report shall include the elements discussed in the research design, as well as a description of the recovered site assemblage and a significance evaluation. If, based on the results of the testing program, a site is not determined to be an important archaeological resource, then effects to it would have been reduced to less than significant.
4. If, based on the results of field investigations, resources were identified as being significant the following mitigation would apply:
 - a. Total Avoidance: Redesign the proposed project as to preserve and protect all significant cultural resources. This would reduce impacts to less than significant levels.
 - b. OR, if a redesign is determined infeasible by the Environmental Coordinator, then,
 - c. Data Recovery: After all design options have been exhausted that would result in the preservation of significant resources, institute a data recovery program to the satisfaction of the Environmental Coordinator.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.

2. Conduct cultural resources surveys in areas not previously subject to intensive investigation.
3. Conduct field investigation if ground disturbing activities are planned within or adjacent to the boundaries of any identified archaeological site. If resources are identified as being significant, avoid or institute a data recovery program.

Verification (Action by the Environmental Coordinator):

1. Review cultural resources surveys prior to approval of an application for General Plan Amendment, Specific Plan Amendment, Tentative Large Lot Map, Tentative Subdivision Map, or Rezone in areas not previously subject to intensive investigation.
2. Review field investigation, if required. If resources are identified as being significant, determine if they can be avoided or approve a data recovery program.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE HM-1

Rendering Plant Site Remediation

Prior to grading permit, site improvement plan or building permit approval for development on the Rendering Plant site, or whichever occurs first, submit evidence to the Sacramento County Environmental Coordinator that all remediation requirements associated with the closure and demolition of the Rendering Plant, including but not limited to the floor sumps, settling ponds and surrounding ditches, have been completed to the satisfaction of the Central Valley Regional Water Quality Control Board and the Sacramento County Environmental Management Department.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Submit evidence to the Environmental Coordinator that all remediation requirements associated with the closure and demolition of the Rendering Plant have been completed to the satisfaction of the Central Valley Regional Water Quality Control Board and the Sacramento County Environmental Management Department.

Verification (Action by the Environmental Coordinator):

1. Review evidence of Rendering Plant demolition and closure prior to site improvement plan or building permit approval.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE HY-1

Subsequent applications for future rezoning or tentative subdivision maps within the project area shall include a hydrology analysis that incorporates assumptions for changes in precipitation due to climate change. Development of these assumptions shall be coordinated with the County's Department of Water Resources and the Office of Planning and Environmental Review.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Prepare a hydrology analysis that incorporates assumptions for changes in precipitation due to climate change and submit to the Environmental Coordinator with subsequent applications for future rezoning or tentative subdivision maps.

Verification (Action by the Environmental Coordinator):

1. Review the hydrology analysis with subsequent applications for future rezoning or tentative subdivision maps.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE HY-2

The Project shall mitigate its downstream impacts by either of the following options:

- a. Payment of the Beach Stone Lakes Mitigation Fee (Sacramento County Water Agency Zone 11A).
- b. Ensuring no net Project-related increase in volume in Beach Stone Lakes by metering outflow from the project site, increasing storage capacity of onsite facilities, directing drainage into downstream facilities offsite, or other regional drainage solutions as determined by the County Department of Water Resources.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Provide the Environmental Coordinator with evidence that either the Beach Stone Lakes Mitigation Fee has been paid or the project would result no net Project-related increase in volume in Beach Stone Lakes.

Verification (Action by the Environmental Coordinator):

1. Review the evidence provided by the Project Applicant to confirm that the Beach Stone Lakes Mitigation Fee has been paid or the project would result no net Project-related increase in volume in Beach Stone Lakes. Approve Project Plans that are determined to be in compliance with all required mitigation.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE HY-3

At the time of submittal of backbone infrastructure plans, the project applicant shall submit a hydrologic analysis that is based upon adopted County guidance regarding a reasonably foreseeable climate change scenario. Based on the results of the hydrologic analysis and if impacts are identified, the project applicant shall implement design measures within the project's drainage system that can be shown to adequately maintain pre-project flows with consideration of climate change effects and are reasonably achievable, such as deepening the existing basin(s) within the Plan Area that would be subject to over-topping. Basin deepening would require minimal construction-related impacts including excavation and hauling of an additional increment of soil from the site. These construction-related impacts have been evaluated throughout this EIR.

Alternatively, if the County has adopted a regional solution for flooding related to climate-change, the project applicant shall contribute its fair share towards funding the construction of the regional solution.

If the County has not developed a regional solution or has not adopted guidance for evaluating hydrologic climate-related impacts, the project applicant shall prepare submit a hydrologic analysis that is based on the best available technical information at that time, in consultation with the County's Department of Water Resources and the Office of Planning and Environmental Review.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Prepare a hydrology analysis based upon adopted County guidance regarding a reasonably foreseeable climate change scenario (or based on the best available technical information at that time if no such guidance exists) and submit to the Environmental Coordinator with backbone infrastructure plans.
3. If impacts are identified, implement all feasible design measures within the project's drainage system to adequately maintain pre-project flows with consideration of climate change effects or contribute its fair share towards funding the construction of the regional solution (if available).

Verification (Action by the Environmental Coordinator):

1. Review the hydrology analysis prior approval of backbone infrastructure plans. Approve Project Plans that are determined to be in compliance with all required mitigation.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE NO-1

All residential development projects exposed to greater than 65 dB L_{dn} at the property line adjacent to Jackson Road, Eagles Nest Road or Kiefer Boulevard, shall be designed and constructed to reduce noise levels to within General Plan Noise Element standards for exterior activity areas. Potential options for achieving compliance with noise standards include, but are not limited to, noise barriers, increased setbacks, and/or strategic placement of structures. An acoustical analysis substantiating the required noise level reduction, prepared by a qualified acoustical consultant shall be submitted to and verified by the Environmental Coordinator prior to the issuance of any building permits for affected sites.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Design and construct residential development projects exposed to greater than 65 dB L_{dn} at the property line adjacent to Jackson Road, Eagles Nest Road or Kiefer Boulevard to reduce noise levels to within General Plan Noise Element standards for exterior activity areas.
3. Submit an acoustical analysis to the Environmental Coordinator.

Verification (Action by the Environmental Coordinator):

1. Review and verify the acoustical analysis prior to the issuance of any building permits for affected sites.
2. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
3. Monitor compliance during periodic site inspections of the construction work.
4. Participate in any Final Inspection(s) as necessary.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE NO-2

All non-residential development projects located adjacent to residentially designated properties shall be designed and constructed to ensure that noise levels generated by the uses do not result in General Plan Noise Element standards being exceeded on adjacent properties. An acoustical analysis substantiating the required noise level reduction, prepared by a qualified acoustical consultant shall be submitted to and verified by the Environmental Coordinator prior to the issuance of any building permits for the non-residential projects with the potential to generate substantial noise (e.g. car wash, auto repair, or buildings with heavy-duty truck loading docks) if those uses are adjacent to residentially designated properties. The acoustical analysis shall include, but not be limited to, consideration of potential noise conflicts due to operation of the following items:

- Mechanical building equipment, including HVAC systems;
- Loading docks and associated truck routes;
- Refuse pick up locations; and
- Refuse or recycling compactor units.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Design and construct non-residential projects located adjacent to residentially designated properties to reduce noise levels on adjacent properties to within General Plan Noise Element standards.
3. Submit an acoustical analysis to the Environmental Coordinator.

Verification (Action by the Environmental Coordinator):

1. Review and verify the acoustical analysis prior to the issuance of any building permits for affected sites.
2. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
3. Monitor compliance during periodic site inspections of the construction work.
4. Participate in any Final Inspection(s) as necessary.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE NO-3

Use rubberized hot-mix asphalt for the road widening project along Eagles Nest Road. The RHMA overlay shall be designed with appropriate thickness and rubber component quantity (typically 15 percent by weight of the total blend), such that traffic noise levels are reduced by an average of 4 to 6 dB (noise levels vary depending on travel speeds, meteorological conditions, and pavement quality) as compared to noise levels generated by vehicle traffic traveling on standard asphalt.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE NO-4

Use rubberized hot-mix asphalt for all off-site road widening projects implemented as part of the Mather South, NewBridge, Jackson Township or West Jackson plans. The RHMA overlay shall be designed with appropriate thickness and rubber component quantity (typically 15 percent by weight of the total blend), such that traffic noise levels are reduced by an average of 4 to 6 dB (noise levels vary depending on travel speeds, meteorological conditions, and pavement quality) as compared to noise levels generated by vehicle traffic traveling on standard asphalt.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE NO-5

The following conditions will be required to ensure adequate disclosure of Mather Airport operations and have been included into the NewBridge Specific Plan Development Standards:

1. Notification in the Public Report prepared by the California Department of Real Estate shall be provided disclosing to prospective buyers that the parcel is located within the applicable Airport Planning Policy Area and that aircraft operations can be expected to overfly that area at varying altitudes less than 3,000 feet above ground level.
2. Avigation Easements prepared by the Sacramento County Counsel's Office shall be executed and recorded with the Sacramento County Recorder on each individual residential parcel contemplated in the development in favor of the County of Sacramento. All Avigation Easements recorded pursuant to this policy shall, once recorded, be copied to the director of Airports and shall acknowledge the property location within the appropriate Airport Planning Policy Area and shall grant the right of flight and obstructed passage of all aircraft into and out of the appropriate airport.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Disclose location within an Airport Planning Policy Area to prospective buyers that the parcel.
3. Execute and record avigation easements.

Verification (Action by the Environmental Coordinator):

1. Verify appropriate notification and easements. Approve Project Plans that are determined to be in compliance with all required mitigation.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE PU-1

This mitigation measure only applies if Mather East Trunk HAS NOT been built by others. Comply fully with adopted mitigation measures for Mather Field Specific Plan/Special Planning Area (Control Number PLNP2013-00044): AQ-3, BR-1, BR-3, BR-4, BR-5, BR-6, BR-7, BR-10, BR-11, BR-12, BR-13, BR-14, BR-15, BR-16, BR-18, BR-22, CR-1, HM-1, HM-2, PS-1, and PS-2.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE TC-1

Jackson Corridor Transportation Mitigation Strategy Participation. The Project shall participate in the implementation of the Jackson Corridor Transportation Mitigation Strategy as adopted by the Board of Supervisors on July 23, 2019 by constructing or providing funding for its fair share of transportation improvements identified in the master list of cumulative improvements (see [Draft EIR] Appendix TR-1). The applicants shall enter into an agreement at the time of project approval to use the Dynamic Implementation Tool (Tool) to identify improvements for each phase of the project. The applicant shall also agree that required improvements will be constructed concurrent with each development increment.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Constructing or provide funding for transportation improvements identified in the master list of cumulative improvements in the Jackson Corridor Transportation Mitigation Strategy.

Verification (Action by the Environmental Coordinator):

1. Confirm construction of, or receipt of funding for transportation improvements identified in the master list of cumulative improvements in the Jackson Corridor Transportation Mitigation Strategy.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE TC-2

The applicant at the time of project approval shall acknowledge that the project-specific list of improvements specified in Mitigation Measure TC-1 may be modified over time through the use of the Dynamic Implementation Tool at each phase of project development, subject to the approval of the Department of Transportation. As development proceeds, the Dynamic Implementation Tool will be used to select which improvements the project would be required to fair-share fund and/or construct as described in the Jackson Corridor Transportation Mitigation Strategy adopted by the Board of Supervisors on July 23, 2019.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Acknowledge that the project-specific list of improvements specified in Mitigation Measure TC-1 may be modified over time through the use of the Dynamic Implementation Tool at each phase of project development.

Verification (Action by the Environmental Coordinator):

1. Verify receipt of acknowledgement at the time of Project approval.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE TC-3

Bicycle and Pedestrian System Implementation. Future development within the NewBridge Specific Plan shall implement the proposed bicycle and pedestrian path/trail system as described in the NewBridge Specific Plan and Design Guidelines. Before approval of any tentative map, future projects with NSP shall be coordinated with Sacramento County to identify the design-level details of necessary on- and off-site pedestrian and bicycle facilities to serve the proposed development and which would ensure bicycle and pedestrian safety. These facilities shall be incorporated into subsequent projects and could include sidewalks, stop signs, standard pedestrian and school crossing warning signs, lane striping to provide a bicycle lane, bicycle parking, signs to identify pedestrian and bicycle paths, raised crosswalks, pedestrian signal heads, and all appropriate traffic calming measures as defined in the County's Neighborhood Traffic Management Program (NTMP). Sidewalks would be required as part of the frontage improvements along all new roadway construction in the Project vicinity in conformance with County design standards. Circulation and access to all proposed public spaces shall include sidewalks that meet Americans with Disabilities Act standards.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Identify the design-level details of necessary on- and off-site pedestrian and bicycle facilities to serve the proposed development and ensure bicycle and pedestrian safety on all tentative maps.

Verification (Action by the Environmental Coordinator):

1. Verify that the design-level details of necessary on- and off-site pedestrian and bicycle facilities to serve the proposed development and ensure bicycle and pedestrian safety have been identified prior to approval of any tentative map.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE TC-4

Transit System. The Project applicant shall coordinate with Sacramento County and Sacramento Regional Transit District (or other transit operators) to provide the additional transit facilities and services assumed in the transportation analysis, or a cost-effective equivalent level of transit facilities and services. Ultimate transit service consists of 15-minute headways during peak hours and 30-minute headways during non-peak hours on weekdays. The implementation of the transit routes and service frequency must be phased with development of the Project and the ultimate service will be required at full buildout of the Project. This shall be accomplished through the annexation to County Service Area 10 or formation of a transportation services district. Such annexation or formation shall occur prior to recordation of any final small lot subdivision map for the project.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Provide additional transit services through annexation to County Service Area 10 or formation of a transportation services district.

Verification (Action by the Environmental Coordinator):

1. Verify annexation to County Service Area 10 or formation of a transportation services district prior to recordation of any final small lot subdivision map.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE TC-5

US 50 Corridor. The Project will participate in one or more of these alternative improvements that could directly reduce the severity of the project's impact and/or provide operational benefits to the US-50 corridor in general. These improvements would be subject to Caltrans approval; therefore, the timing and implementation of the improvements are not guaranteed.

To alleviate the impacts of the Jackson Corridor Developments, the Sacramento County Department of Transportation has consulted with Caltrans and they have identified the following improvements. The applicant shall provide a fair share contribution toward Caltrans' freeway facilities to the satisfaction of the Sacramento County Department of Transportation and Caltrans:

- Pay fair share toward the future conversion of HOV lanes to Toll Lanes or a Reversible Lane along U.S. Highway 50 from I-5 to Watt Avenue.
- Pay fair share toward the U.S. Highway 50 Integrated Corridor Management for the deployment of various Intelligent Transportation System improvements along U.S. Highway 50 and the City of Rancho Cordova, and regionally significant corridors in Sacramento County and the City of Folsom for incident management (non-capacity increasing) [Caltrans ID SAC25113].

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Provide a fair share contribution toward Caltrans' freeway facilities. Provide evidence to the Environmental Coordinator.

Verification (Action by the Environmental Coordinator):

1. Review the fair share contribution.

Comments:

Signature: _____ **Date:** _____

MITIGATION MEASURE CU-1

Coordination with SMUD. The project applicant of each of the following Specific and Community Master Plans: Newbridge Specific Plan, the West Jackson Highway Master Plan, the Jackson Township Specific Plan, and the Mather South Community Master Plan shall coordinate with SMUD to identify the timing of construction of the Jackson Bulk Substation and seek to facilitate efficiencies in grading and pre-construction activities as feasible, as a condition of this project.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Coordinate with SMUD to identify the timing of construction of the Jackson Bulk Substation and seek to facilitate efficiencies in grading and pre-construction activities as feasible

Verification (Action by the Environmental Coordinator):

1. Condition development on evidence of coordination with SMUD.

Comments:

Signature: _____ **Date:** _____