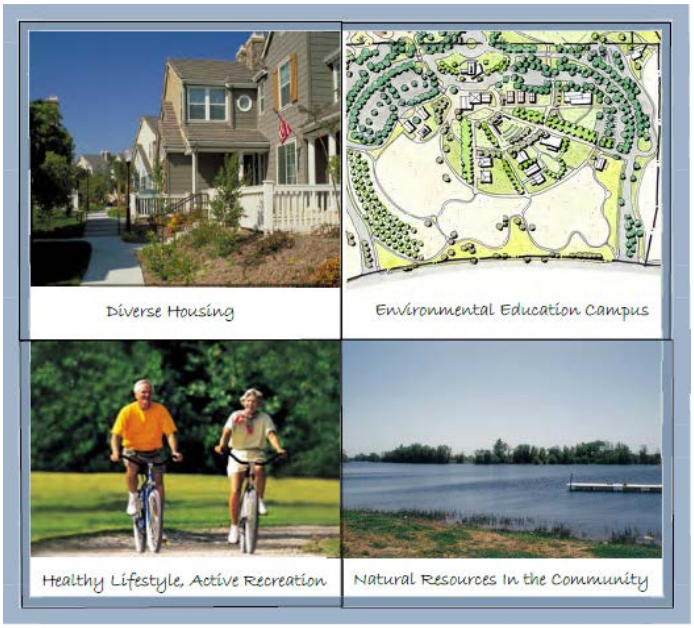
FINAL ENVIRONMENTAL IMPACT REPORT

MATHER SOUTH COMMUNITY MASTER PLAN PROJECT



Control Number: PLNP2013-00065
State Clearinghouse Number: #2014062087
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COUNTY OF SACRAMENTO
OFFICE OF PLANNING AND
ENVIRONMENTAL REVIEW
827 7TH STREET, ROOM 225
SACRAMENTO, CALIFORNIA 95814

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This Environmental Impact Report has been prepared pursuant to the California Environmental Quality Act of 1970 (Public Resources Code Division 13). An Environmental Impact Report is an informational document which, when this Department requires its preparation shall be considered by every public agency prior to its approval or disapproval of a project. The purpose of an Environmental Impact Report is to provide public agencies with detailed information about the effect that a proposed project is likely to have on the environment; to list ways in which any adverse effects of such a project might be minimized; and to suggest alternatives to such a project.

Prepared by the
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Table of Contents

List of Plates

List of Tables

List of Appendices

PREFACE

The Sacramento County Board of Supervisors adopted the 2030 General Plan on November 9, 2011. The County adopted the Phase 1 Climate Action Plan concurrently with the adoption of the 2030 General Plan, and the General Plan Update EIR included the 2020 greenhouse gas emissions significance thresholds. The 2020 significance thresholds were adopted for general use through certification of the General Plan Update FEIR. The Phase 1 CAP is a strategy and framework document. The County adopted the Phase 2A CAP (Government Operations) on September 11, 2012. The Communitywide CAP (Phase 2B) has been in progress for some time (https://planning.saccounty.net/PlansandProjectsIn-Progress/Pages/CAP.aspx) but is currently on hold pending in-depth review of CAP-related litigation in other jurisdictions. The commitment to a Communitywide CAP is identified in General Plan Policy LU-115 and associated Implementation Measures F through J on page 117 of the General Plan Land Use Element. This commitment was made in part due to the County's General Plan Update process and potential expansion of the Urban Policy Area to accommodate new growth areas. General Plan Policies LU-119 and LU-120 were developed with SACOG to be consistent with smart growth policies in the SACOG Blueprint, which are intended to reduce VMT and GHG emissions. The Mather South project is located inside the existing Urban Policy Area. Nevertheless, Sacramento County has applied a consistent methodology for climate change impact analysis across the entire Jackson Highway corridor planning area for the four proposed individual master plans.

As allowed under CEQA Guidelines Section 15183.5(b), lead agencies may choose to analyze and mitigate significant greenhouse gas emissions in a plan for the reduction of greenhouse gas emissions or similar document. The analysis contained in this EIR is based on the project-specific Greenhouse Gas Reduction Plan prepared for the project consistent with CEQA Guidelines Sections 15183.5(b) and 15064.

On May 21, 2013, the County Board of Supervisors initiated the Master Plan process for the Mather South Community Master Plan project. At that time, the South Sacramento Habitat Conservation Plan (SSHCP) was still in administrative draft form and was not publicly available for review. The County was also engaged in a parallel federal permitting process for Mather Field at the same time. The Mather South land use plan was developed based on the anticipated Mather Preserve boundaries to the west of the project. On June 27, 2014, the County released the Notice of Preparation for the MSCMP Environmental Impact Report (EIR).

On January 5, 2017, the County released a Revised Notice of Preparation for the MSCMP EIR due to substantial changes in the Project's land use plan as a result of a collaborative stakeholder process with the Mather Stakeholder Group.

The Draft Environmental Impact Report (DEIR) was released on January 8, 2019 and had a 45-day public review period that closed on February 21, 2019. A total of 22 individual letters were received during the written comment period. Public hearings on the Project were held by the Vineyard Community Planning Advisory Council on February 5, 2019 and by the Cordova Community Planning Advisory Council on February 21, 2019. A public hearing on the Draft EIR was held by the County Planning Commission on February 25, 2019. After receiving oral comments, the Commission closed the comment period on the MSCMP Draft EIR and directed staff to prepare the Final EIR.

The South Sacramento Habitat Conservation Plan was adopted in late 2018. The Mather Preserve is identified as a component of the hard-line preserve strategy in the SSHCP. Therefore, the SSHCP's Avoidance and Minimization Measures are applicable to certain activities adjacent to the Mather Preserve.

At the time the Draft EIR was published, the Jackson Highway Corridor Transportation Mitigation Strategy was in draft form, and the Draft EIR included the best available information at the time. Following the Planning Commission's hearing on the Draft EIR, the Transportation Mitigation Strategy was finalized, presented to the Cordova and Vineyard CPACs, the Planning Commission, and the Board of Supervisors. The Board of Supervisors approved the Transportation Mitigation Strategy during a public meeting on July 23, 2019.

Section 15088.5 of the CEQA Guidelines describes the circumstances in which recirculation of a Draft EIR is required:

> 15088.5. RECIRCULATION OF AN EIR PRIOR TO CERTIFICATION
> (a) A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification. As used in this section, the term "information" can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. "Significant new information" requiring recirculation includes, for example, a disclosure showing that:
>
> > (1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
> >
> > (2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.

(3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.

(4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. (Mountain Lion Coalition v. Fish and Game Com. (1989) 214 Cal.App.3d 1043)

(b) Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR.

This Final EIR contains revisions to the text and mitigation measures to reflect the final Jackson Highway Corridor Transportation Mitigation Strategy, the current status of the SSHCP, and other minor revisions in response to the comments on the Draft EIR. These revisions do not constitute new information that is "significant" as defined in CEQA Guidelines Section 15088.5. Based on the number and scope of public comments received and the public hearings conducted at the Vineyard CPAC, Cordova CPAC, and County Planning Commission, it is clear that meaningful opportunities have been provided for the public to comment upon the substantial adverse environmental effects of the project or feasible ways to mitigate or avoid such an effect. Furthermore, the Project Proponents have not declined to implement the feasible mitigation measures included in this Final EIR. None of the triggers requiring recirculation identified in CEQA Guidelines Section 15088.5 have been met.

ES - EXECUTIVE SUMMARY

This environmental impact report (EIR) describes the potential environmental impacts of developing the Mather South Project. The purpose of an EIR is to evaluate the project's effects on environmental resources, both singularly and in a cumulative context, to examine alternatives to the project as proposed, and identify mitigation measures to reduce or avoid potentially significant effects. This document has been prepared in compliance with the California Environmental Quality Act (CEQA; Sections 21000-21189 of the Public Resources Code [PRC]) and the State CEQA Guidelines (Title 14, Sections 15000-15387 of the California Code of Regulations).

SUMMARY OF THE PROPOSED PROJECT

The Mather South Project is located along the Jackson Road corridor in the Cordova community of Sacramento County. It is approximately 10 miles east of downtown Sacramento and would result in up to 3,522 residential dwelling units of various densities (multi-family, detached, and attached single-family), a 28-acre environmental education campus including 200 multi-family dwelling units, a 21-acre research and development park, two elementary schools, a 6-acre community center, 21 acres of commercial-retail with up to 225,000 square feet (sf) of retail space, 44 acres of parkland including 26 acres of neighborhood parks and a 17-acre community park, and 157 acres of open space areas that include natural preserves and drainage corridors, stormwater quality and detention basins, landscape buffers, and public utility corridors all connected by multi-use pedestrian and bicycle trails.

The project would convert 848-acres of vernal pool grassland to mixed-use residential, commercial, and educational development, and set aside 53-acres as a part of the Mather Preserve. The project includes requests to change the General Plan to accommodate the proposed land uses, adopt the Mather South Community Master Plan, and modify the Mather Field Special Planning Area Ordinance to incorporate design guidelines and development standards. The project is described in detail in Chapter 1, Project Description, of this EIR.

LEAD AND RESPONSIBLE AGENCIES

The lead agency is the public agency with the principal responsibility for carrying out or disapproving a project. The lead agency is also responsible for scoping the environmental analysis, preparing the EIR, and responding to comments received on the Draft EIR. Prior to deciding to approve a project, the lead agency is required to certify that the EIR has been completed in compliance with CEQA, that the decision-making body reviewed and considered the information in the EIR, and that the EIR reflects its independent judgment. Sacramento County is the lead agency for the evaluation of the Mather South Project.

Responsible agencies are public agencies that have discretionary approval power over the project. Based on the potential effects known at this time, responsible agencies may include (but may not be limited to) U.S. Army Corps of Engineers (USACE), U.S. Fish & Wildlife Service (USFWS), California Department of Fish & Wildlife (CDFW), the California Regional Water Quality Control Board, West Coast Gas Company, Sacramento Municipal Utility District (SMUD), Sacramento County Water Authority (SCWA), Cordova Recreation and Park District, and the Elk Grove Unified School District (EGUSD).

FEATURES OF THE FINAL EIR

PURPOSE OF THE FINAL EIR

In accordance with CEQA, public agencies must prepare an EIR to evaluate the potential consequences of development and operation of projects that could significantly affect the environment. The EIR process is specifically designed to objectively evaluate and disclose potentially significant direct, indirect, and cumulative impacts of a project; to identify alternatives that reduce or eliminate a project's significant effects; and to identify feasible measures that mitigate significant environmental effects. In addition, CEQA requires that an EIR identify those adverse impacts that remain significant after mitigation. The purpose of an EIR is not to recommend approval or denial of a project, but to provide decision-makers, public agencies, and the general public with information about the project.

TYPE OF EIR

This document is a Project EIR. As described in Section 15161 of the CEQA Guidelines, this type of EIR is used to evaluate the physical changes that would result from all phases (including planning, construction, and operation) of a project.

SCOPE OF THE FINAL EIR

Pursuant to CEQA and the State CEQA Guidelines, a lead agency shall focus the EIR's discussion on significant environmental effects and may limit discussion of other effects to brief explanations about why they are not significant (PRC Section 21002.1, State CEQA Guidelines Section 15143). Furthermore, the EIR must also discuss the way significant impacts can be feasibly mitigated or avoided.

This EIR addresses the following technical issue areas:

- Aesthetics
- Air Quality
- Airport Compatibility
- Biological Resources
- Climate Change
- Cultural Resources

- Energy
- Geology and Soils
- Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Public Services
- Public Utilities
- Traffic and Circulation
- Water Supply

ORGANIZATION OF THE FINAL EIR

The remainder of this document includes a detailed description of the project, analysis of potential environmental impacts that could result from project implementation, discussion of cumulative and growth-inducing impacts, and evaluation of potential alternatives to the project. This information is organized as detailed below.

Chapter 1: Describes the location of the project, project background, existing conditions on the project site, and the nature and location of specific elements of the project.

Chapter 2: Describes feasible alternatives to the project, including the no project alternative, describing the consequences of taking no action.

Chapters 3 through 18: Includes a topic-by-topic analysis of impacts that would or could result from project implementation. Each chapter includes a discussion of the environmental and regulatory setting, impact analysis, and mitigation measures.

Chapter 19: Provides an overview of the environmental evaluation, including impact conclusions and recommended mitigation measures. This chapter also includes a discussion of cumulative impacts and growth inducement.

Chapter 20: Lists all resources used to prepare the EIR.

Chapter 21: Provides definitions for acronyms and abbreviations used throughout the draft EIR.

Chapter 22: Identifies preparers of the EIR.

Chapter 23: Provides excerpts from comments received on the Draft EIR and the County's responses to those comments.

The Appendices contain several reference items providing support and documentation of the analyses performed for this report.

IMPACT AND MITIGATION SUMMARY TABLE

The following environmental impact and mitigation summary table briefly describes the project impacts and the mitigation measures recommended to eliminate or reduce the impacts. The residual impact after mitigation is also identified. Immediately following the summary table is a list of recommendations/requirements of various agencies pertaining to the project, and a description of mandated mitigation monitoring requirements. Detailed discussions of each of the identified impacts and mitigation measures, including pertinent support data, can be found in the specific topic chapters in the remainder of this report.

Table ES-1: Executive Summary of Impacts and Mitigation

Impacts	Level of Significance Before Mitigation [1]	Mitigation Measure	Level of Significance After Mitigation
Aesthetics			
IMPACT: DEGRADATION OF EXISTING VIEW AND VISUAL QUALITY The project would result in conversion of grassland to urban development and would result in permanent alteration of views and visual quality of the Plan Area and surroundings.	PS	No feasible mitigation.	SU
IMPACT: NEW SOURCES OF LIGHT OR GLARE The project would result in new sources of lighting such as porch lights, parking lot lights, street lights, and similar safety lighting with the type and intensity of lighting consistent with suburban residential neighborhoods. When viewed from more distant areas, the lighting associated with the residential development could increase skyglow in the area because the existing project site is currently dark.	PS	AE-1. The Community Master Plan shall be amended to require all lighting applications to use fixtures approved by the International Dark Sky Association.	LTS
Air Quality			
IMPACT: CONSTRUCTION EMISSIONS OF CRITERIA AIR POLLUTANTS AND PRECURSORS (NO_X, ROG, PM_{10}, AND $PM_{2.5}$) The project would result in construction emissions from site preparation (e.g., excavation, clearing), off-road equipment, material delivery, and worker commute trips, and other miscellaneous activities (e.g., building construction, asphalt paving, application of architectural coatings), and fugitive dust emissions of PM_{10} and $PM_{2.5}$ associated primarily with site	PS	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. Measures include**:** BASIC CONSTRUCTION ~~FUGITIVE DUST~~ EMISSIONS CONTROL PRACTICES **(BEST MANAGEMENT PRACTICES)** and ENHANCED EXHAUST CONTROL	LTS

[1] PS = Potentially Significant S = Significant SU = Significant and Unavoidable LS = Less Than Significant

preparation.		PRACTICES **and OFF-SITE CONSTRUCTION MITIGATION FEES**. Full text provided in Chapter 4, Air Quality.	
IMPACT: LONG-TERM OPERATIONAL EMISSIONS OF NO_X, ROG, PM_{10}, AND $PM_{2.5}$ Development of the Mather South Project would result in the generation of long-term operational emissions of ROG, NO_X, and particulate matter (PM_{10} and $PM_{2.5}$) because of mobile, stationary, and area-wide sources. Mobile-source emissions of criteria air pollutants and precursors would result from vehicle trips generated by residents, users of the parks, students at the schools, employee commute trips, and other associated vehicle trips (e.g., delivery of supplies, maintenance vehicles for commercial and retail land uses). Stationary and area-wide sources would include the combustion of natural gas for space and water heating (i.e., energy use), the use of landscaping equipment and other small equipment, the periodic application of architectural coatings, and ROG from the use of consumer products.	PS	AQ-2. Implement provisions of the Air Quality Mitigation Plan to reduce operational emissions. Implementation of the following measures requires compliance with the project's AQMP, which would reduce the project's mobile-source operational ozone precursors by 15 percent in comparison to the unmitigated project. **The Mather South Community Master Plan shall include the following reduction measures, which are detailed within the AQMP (Appendix AQ-2 of the EIR), as conditions of approval:** • **Incorporate traffic calming measures.** • **Design project roads to reduce motor vehicle speed through the use of on street parking, planter strips, rumble strips, and other available methods.** • **Reduce speeds at project intersections by including marked intersections, count-down signal timers, median islands, curb extensions, traffic circles, and other available methods.** • **Implement neighborhood electric vehicle (NEV) network.** • **Create a local "light" vehicle network with necessary infrastructure such as NEV parking, charging facilities, striping, signage, and educational tools.** AQ-3. Implement Mitigation Measure CC-2. The project developer shall incorporate the following mitigation measures into the project to reduce operational emissions of criteria air pollutants and precursors to the extent feasible. Measures include TRANSPORTATION and BUILDING ENERGY mitigation. Full text provided in Chapter 4, Air Quality.	SU

IMPACT: MOBILE-SOURCE CO CONCENTRATIONS Local mobile-source CO emissions near roadway intersections are a direct function of traffic volume, speed, and delay. Transport of CO is extremely limited because it disperses rapidly with distance from the source under normal meteorological conditions. However, under certain specific meteorological conditions, CO concentrations near roadways and/or intersections may reach unhealthy levels at nearby sensitive land uses, such as residential units, hospitals, schools, and childcare facilities. The Mather South Project would generate a maximum of 2,715 trips during the a.m. peak hour and up to 2,640 during the p.m. peak hour. The total daily trip generation of the project is 29,134, which is below the criteria for a single intersection. None of the intersections would be anticipated to accommodate traffic volumes that would exceed 31,600 vehicles per hour, even assuming all trips occurred at the same intersection.	LTS	No mitigation required	N/A
IMPACT: EXPOSURE OF SENSITIVE RECEPTORS TO TACs Construction-related activities would result in temporary, intermittent emissions of diesel PM from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., demolition, clearing, grading); paving; application of architectural coatings; on-road truck travel; and other miscellaneous activities. For construction activity, diesel PM is the primary TAC of concern. However, considering the relatively low mass of diesel PM emissions that would be generated by construction, the relatively short duration of diesel PM-emitting construction activity at any one location of the plan area, the distance to the nearest off-site sensitive receptors, and the highly dispersive properties of diesel PM, construction-related TAC emissions would not expose sensitive receptors to an incremental increase in cancer risk greater than 10 in 1 million or a hazard index greater than 1.0. Operation of some land uses developed under the Mather South Project would result in new sources of TACs associated with new vehicular trips on existing and new roadways, as well as new sources of diesel PM associated with commercial loading docks visited by diesel-powered delivery trucks and	PS	AQ-4. Incorporation of design features for retail center to address TACs. To reduce exposure of existing or future receptors to diesel PM exhaust emissions at commercial and educational loading docks, the following design measures shall be incorporated into the MSCMP. • Proposed commercial and educational, land uses that have the potential to emit TACs or host TAC-generating activity (e.g., loading docks) shall be located as far away from existing and proposed on-site sensitive receptors as possible such that they do not expose sensitive receptors to TAC emissions that exceed an incremental increase of 10 in 1 million for the cancer risk and/or a noncarcinogenic Hazard Index of 1.0. • Loading dock design may incorporate the use of buildings or walls to shield commercial activity from nearby residences or other sensitive land uses. • Signs shall be posted at all loading docks and truck loading areas which indicate that diesel-powered delivery trucks must be shut off when not in use for longer than 5	LTS

backup diesel generators. New TAC sources could expose existing and future sensitive receptors to TAC emissions. The project would also locate new sensitive land uses in proximity to existing TAC sources associated with surrounding roadways. Traffic volumes of Sunset Boulevard do not exceed 100,000 vehicles per day, thus new sensitive receptors because of the project would not be exposed to excessive health risk from Sunset Boulevard. No other roadways in the project vicinity experience volumes that exceed 100,000 vehicles per day. However, the placement of new sources of diesel PM associated with commercial delivery trucks could expose new or existing sensitive receptors to increased TAC emissions.		minutes on the premises to reduce idling emissions. • Sensitive receptors, such as residential units and daycare centers, shall not be located in the same building as dry-cleaning operations that use perchloroethylene. Dry-cleaning operations that use perchloroethylene shall not be located within 300 feet of any sensitive receptor. A setback of 500 feet shall be provided for operations with two or more machines.	
IMPACT: EXPOSURE OF SENSITIVE RECEPTORS TO ODORS Minor odors from the use of heavy-duty diesel equipment and the laying of asphalt during project construction activities would be intermittent and temporary and would dissipate rapidly from the source with an increase in distance.	PS	AQ-5. Incorporation of design features for retail establishments to address potential odor sources. The project developer shall implement the following measures to reduce exposure of sensitive receptors to odorous emissions. These measures shall be incorporated into the Mather South Community Master Plan Design Guidelines. • Land uses have that the potential to emit objectionable odorous emissions (e.g., dry cleaning establishments and gasoline stations) shall be located as far away as possible from existing and proposed sensitive receptors or downwind of nearby receptors. • If an odor-emitting facility is to occupy a retail space, odor control devices shall be installed to reduce the exposure of receptors to objectionable odorous emissions. SMAQMD shall be consulted to determine applicable/feasible control devices to be installed. Use of setbacks, site design considerations, and emission controls are typically sufficient to ensure that receptors located near retail uses would not be exposed to odorous emissions on a frequent basis.	LTS
Airport Compatibility			
IMPACT: SAFETY HAZARD TO PEOPLE LIVING AND WORKING IN THE VICINITY OF AN AIRPORT/AIRSTRIP	PS	AC-1. In accordance with the Mather Field Project Development Standards, the project would be required to be reviewed by the Airport Land Use Commission prior to	LTS

Approximately 18 percent of the Mather South Plan Area is within the Overflight Zone. The Mather South Community Master Plan proposed land uses within the Overflight Zone include drainage basins, open space drainage, parks, a public use (water tank), a community center, and residential uses with densities varying from 5 to 10 dwelling units per an acre. No restricted uses are proposed within the Overflight Zone.		approval or issuance of building permits to ensure that it is compatible with the Mather Airport safety zones. AC-2. Development applications that result from the Mather South Project that are located within Mather Airport safety zones shall be reviewed by the Airport Land Use Commission prior to approval or issuance of building permits in order to ensure that proposed projects are compatible with the safety zones.	
IMPACT: EXPOSURE TO EXCESSIVE NOISE LEVELS ASSOCIATED WITH AIRPORT OPERATIONS The Mather South Plan Area is approximately one mile from the Mather Airport and would be subjected to noise generated from existing and projected future airport operations. The entire Plan Area is within the Mather APPA, which requires a condition be placed on all residential development outside of the 60 CNEL noise contour but within the APPA to include noise insulation that reduces interior noise levels to 45 dB CNEL or less.	PS	AC-3. Development related to the Mather South Project shall comply with the uses and standards included in Table 4: Land Use Compatibility for Airport Noise found within the Noise Element of the Sacramento County General Plan prior to approval or issuance of building permits.	LTS
IMPACT: EFFECTS ON SAFE AND EFFICIENT USE OF NAVIGABLE AIRSPACE The CLUP includes height standards for buildings surrounding the airport and are most restrictive adjacent to the runway and become less restrictive further away. Navigable airspace could be adversely affected if building heights in the Mather South Plan Area exceed these designated height standards. Buildings within the Plan Area would need to be less than 74.5 feet tall.	LTS	No Mitigation Required	N/A
Biological Resources			
IMPACT: LOSS OF VERNAL POOL SPECIES Vernal pool tadpole shrimp, a species listed as endangered under ESA, is known to occur in the Plan Area. Three other special-status vernal pool invertebrate species, vernal pool fairy shrimp, midvalley fairy shrimp, and Ricksecker's scavenger beetle, have high potential to occur in the Plan Area because suitable habitat is present, and they have been documented within the Mather Field Specific Plan area, west of the Plan	PS	BR-1. Open Space Preserve and Open Space Drain Conservation Easements Before issuance of grading permits, approval of improvement plans, or building permits, whichever occurs first, the Open Space Mather Preserve~~,~~ **and** Nature Preserve~~, and Open Space Drain~~ land use areas identified on the proposed land use plan shall be placed within a permanent conservation easement granted to a registered	LTS

Area. All the designated critical habitat is outside of the Plan Area and the project would not adversely modify this critical habitat, however, the project would result in the loss of 14.53 acres of vernal pool areas. Additional indirect impacts could occur as a result of changes in hydrology and water quality in the Plan Area.		501 (c)(3) conservation organization and incorporated into the existing Mather Preserve network as approved by the County, USACE, and USFWS. (refer to Ch. 6 Biological Resources for full text of mitigation measure). BR-1a. Prepare a Hardpan Restoration Plan. Prior to the start of construction activity for the sewer trunk line **and the water transmission main line** (within Zinfandel Drive), a hardpan restoration plan shall be developed by a qualified hydrogeologist and geotechnical expert and implemented for sewer trunk line **and water transmission mail line** construction adjacent to the Mather Preserve. The detailed plan shall include identification and documentation of the hardpan depths during excavation of the sewer **and water line** trench, 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 trunk line. BR-2. Compensate for Loss of Vernal Pool Invertebrate Habitat and Take of Federally Listed Vernal Pool Invertebrates Before any groundbreaking activity within 250 feet (or lesser distance deemed sufficiently protective through site-specific watershed analysis with approval from USFWS) of vernal pool invertebrate habitat, project applicants for each distinct project phase shall purchase habitat creation credits at a USACE and USFWS approved mitigation bank, record a conservation easement over lands that include created/restored/rehabilitated vernal pool habitat and implement a final preserve management plan approved by the County, USACE, and USFWS, and or restore vernal pool habitat within the designated preserve areas, upon USFWS approval, to fully compensate for the project's direct and indirect impacts to habitat for federally listed vernal pool species. (Refer to Ch. 6 Biological Resources for full text of mitigation measure) BR-3. Secure Take Authorization for Federally Listed	

		Vernal Pool Invertebrates and Implement All Conditions in the Biological Opinion Before any groundbreaking activity within 250 feet (or lesser distance deemed sufficiently protective through site-specific watershed analysis with approval from USFWS) of vernal pool invertebrate habitat, project applicants for each distinct project phase shall secure take authorization from USFWS through ESA section 7 consultation between USACE and USFWS as part of the CWA Section 404 permit process. (Refer to Ch. 6 Biological Resources for full text of mitigation measure) BR-4. Implement Worker Environmental Awareness Program Project applicants shall retain a qualified biologist to conduct a worker environmental awareness program (WEAP) for construction crews before each phase of project construction. (Refer to Ch. 6 Biological Resources for full text of mitigation measure) BR-5. Protect Habitat in Preserve Areas and Avoided Habitats During Construction Avoided and protected habitat in the Mather Preserve, Nature Preserves, and Open Space Drain areas shall be protected during construction activities through implementation of the following measures: • A biological monitor approved by USFWS and CDFW shall be onsite during construction within 250 feet of vernal pool invertebrate habitat to be preserved to ensure no unauthorized take of listed species or destruction of habitat to be preserved occurs. The biologist shall have the authority to stop any activities that may result in such take or destruction until appropriate corrective measures have been completed. The biologist also shall be required to report immediately any unauthorized impacts to the USFWS or CDFW, as appropriate depending on agency jurisdiction over the affected resource.	

		• The project applicant shall install fencing, stakes/flagging, or other appropriate barrier between the active construction work area and adjacent sensitive biological resource areas outside the work area, including in the Mather Preserve area and any sensitive resources that are to be retained onsite, to prevent inadvertent encroachment into these sensitive areas. The location of barrier installation shall be directed by the onsite biological monitor.	
IMPACT: SPECIAL STATUS PLANTS **Seven** ~~Five~~ special-status plant species are known or have potential to occur in the Mather South Plan Area: slender orcutt grass, Sacramento orcutt grass, Ahart's dwarf rush, Bogg's Lake hedge-hyssop, **dwarf downingia, pincushion navarretia** and legenere. Slender orcutt grass and Sacramento Orcutt grass (vernal pool grasses) are formally protected under ESA and CESA. Protocol level botanical surveys were last conducted in the Plan Area from July through September 2002 and from April to June 2003, however, because of the age of the surveys they cannot be used to make an absence determination for special-status plants.	PS	BR-6. Implement Mitigation Measures BR-1 through BR-5 BR-7. Conduct Floristic Surveys and Compensate for Loss of Special-Status Plants The County shall require project applicants, as a condition of project approval, before any groundbreaking activity within 250 feet of vernal pools, swales, and seasonal wetlands, to retain a qualified biologist familiar with the vernal pool flora of the region to conduct floristic surveys of wetland habitats **on the entire Mather South project site** with potential to support slender orcutt grass, Sacramento orcutt grass, Ahart's dwarf rush, Bogg's Lake hedge-hyssop, **dwarf downingia, pincushion navarretia** and legenere. (Refer to Ch. 6 Biological Resources for full text of mitigation measure)	LTS
IMPACT: LOSS OF WESTERN SPADEFOOT HABITAT Western spadefoot has been previously documented in an onsite vernal pool and vernal pools, seasonal wetlands, and vernal swales throughout the Plan Area represent potentially suitable breeding habitat for this species. Project implementation would result in permanent removal of approximately 13.93 acres of suitable breeding habitat and approximately 691 acres of upland habitat for western spadefoot, which could result in direct take of western spadefoot and would result in loss of habitat for this species. In addition to the direct removal of habitat, implementing the project could result in indirect impacts on western spadefoot, including mortality related to an increase in vehicular traffic, mortality from landscaping maintenance activities including	PS	BR-8. Implement Mitigation Measures BR-1 through BR-5 BR-9. Minimize Take of Western Spadefoot As a condition of project approval and before ground disturbing activities, the County shall require future project proponents to retain a qualified biologist to conduct surveys for western spadefoot in areas of potential habitat that would be eliminated by the project. (Refer to Ch. 6 Biological Resources for full text of mitigation measure)	LTS

mowing, raking, weed whacking, noise and vibration disturbance causing toads to break dormancy, and exposure to herbicides, pesticides, and other toxins.			
IMPACT: LOSS OF VALLEY ELDERBERRY LONGHORN BEETLE HABITAT Elderberry shrubs have been identified in the Plan Area during previous surveys, but extensive mapping has not been conducted. Therefore, the extent of elderberry is not known. Project development would result in removal of all, or nearly all, elderberry shrubs existing in the Plan Area and these shrubs could contain larvae of valley elderberry longhorn beetle. Indirect impacts from ground-disturbing activities or use of herbicides near shrubs could also result if the health of elderberry shrubs containing valley elderberry longhorn beetle larvae is adversely affected.	PS	BR-10. Compensate for Loss of Valley Elderberry Longhorn Beetle Habitat • As a condition of project approval, a qualified biologist shall determine whether future project sites contain valley elderberry longhorn beetle habitat (i.e., elderberry shrubs). If so, a preconstruction survey shall be conducted by a qualified biologist within 165 feet of project disturbance areas before any construction activity. The surveys shall be conducted according to the protocol outlined in USFWS Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (USFWS 2017b) (Framework). (Refer to Ch. 6 Biological Resources for full text of mitigation measure)	LTS
IMPACT: LOSS OF WESTERN POND TURTLE No suitable aquatic habitat is present in the Plan Area for western pond turtle, but the species has been documented at Mather Lake and there is potential for western pond turtle to nest, bask, or overwinter in those portions of the Plan Area that are within 1,650 feet of the lake. Therefore, project implementation has potential to result in take of western pond turtle adults, eggs, and hatchlings.	PS	BR-11. Conduct Preconstruction Surveys For Western Pond Turtle and Avoid Individuals and Nests Before any ground disturbing activities within 1,650 feet of Mather Lake, the project applicant shall consult with CDFW to establish appropriate avoidance procedures and procedures to apply if a western pond turtle, or active nest, is found within the construction area. The developer shall submit written evidence of the consultation and its conclusions to the County Environmental Coordinator. (Refer to Ch. 6 Biological Resources for full text of mitigation measure)	LTS
IMPACT: LOSS OF SWAINSON'S HAWK AND HABITAT There are numerous trees in the Plan Area that provide potential nest sites for Swainson's hawk. Project implementation would result in removal of these ~~trees and removal of approximately 592 acres of annual grassland foraging habitat~~, which could result in mortality of individuals	PS	BR-12. Avoid Swainson's Hawk Nests • Implement Mitigation Measure BR-4: Worker Environmental Awareness Program • Tree removal shall be conducted during the non-breeding season for Swainson's hawk (generally between	SU

and nest abandonment. A pair of Swainson's hawks were observed visiting a nest and defending territory in the Plan Area from April 29 to June 13, 2014 (Mather Stewardship Network 2014). Although eggs and young were not confirmed at the nest, nesting is probable in the Plan Area and has been documented nearby along White Rock Road. The CNDDB (2018) contains 14 nesting records between 1 and 5 miles of the Plan Area and 27 nesting records between 5 and 10 miles of the Plan Area. According to the Sacramento County methodology for determining impacts to foraging areas, development of the Plan Area would result in a total loss of habitat suitable for Swainson's Hawk.		September 1 and February 28) • Before initiating any construction activities during the Swainson's hawk breeding season (March 1 through August 31), project proponents shall retain a qualified wildlife biologist with knowledge of Swainson's hawk to conduct nesting surveys to identify active nests on and within 0.5 mile of the Plan Area. • Surveys shall be conducted in accordance with the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000) or according to updated methodologies issued by CDFW. According to current guidelines, the biologist will use binoculars during the survey to inspect all large trees and document any Swainson's hawk nests that occur in the Plan Area or within 0.5 mile. (Refer to Ch. 6 Biological Resources for full text of mitigation measure)	
IMPACT: LOSS OF TRICOLORED BLACKBIRD NESTING COLONIES There is no suitable nesting habitat for tricolored blackbird in the Plan Area, so the project would have no direct impacts on this species; however, the species has been observed nearby at Mather Lake and may nest there. Large flocks of tricolored blackbirds were observed foraging in the Plan Area by the Mather Stewardship Network from May to June 2014 and the Plan Area is within 1.5 miles of potential nesting habitat at Mather Lake. Increased noise and human activity during construction that occurs during the breeding season (generally March through August) could disturb nesting tricolored blackbirds if an active colony is located near (within 0.25 mile) the construction area. These activities could result in nest abandonment and the incidental loss of fertile eggs or nestlings.	PS	BR-13. Avoid Tricolored Blackbird Nesting Colonies • Implement Mitigation Measure BR-4: Worker Environmental Awareness Program • For any construction activities proposed within 0.25 mile of Mather Lake during the tricolored blackbird nesting season (March 15 to August 31), a qualified biologist shall survey Mather Lake and a 0.25-mile buffer no more than 48 hours before the onset of activities for signs of tricolored blackbird individuals or nesting/colonial activity. • If construction activities are delayed or suspended for more than 15 days, an additional preconstruction tricolored blackbird survey will be conducted. If active tricolored blackbird nests are found within 0.25 mile of the project footprint during the nesting season (March 15 to August 31), then no construction activities shall proceed within 0.25 mile of the nest site until the end of the breeding season or until a qualified biologist, in consultation with CDFW, has determined that the young have fledged and moved out of the disturbance area. The	LTS

		buffer distance may be reduced if a qualified biologist, in consultation with CDFW, determines that such an adjustment would not be likely to affect the nesting colony. • Monitoring of the nesting colony by a qualified biologist during construction activities shall be required if the biologist determines a particular activity has the potential to adversely affect the nest, particularly if the buffer has been reduced below 0.25 mile. If construction activities cause nesting birds to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then the no-disturbance buffer shall be increased until the agitated behavior ceases. (Refer to Ch. 6 Biological Resources for full text of mitigation measure)	
IMPACT: LOSS OF BURROWING OWL Project implementation would destroy potential nesting and wintering habitat for burrowing owl. This species has not been reported in the Plan Area, but nesting has been documented on the Mather Preserve west of the Plan Area. Adults, eggs, and juveniles could be killed during site grading and other ground disturbance that destroys occupied burrows or nest sites. Construction disturbances could also cause pairs nesting nearby to abandon their nests resulting in mortality of chicks and eggs.	PS	BR-14. Conduct Burrowing Owl Surveys and Develop an Exclusion and Relocation Plan Before any ground disturbing activities within 500 feet of potential burrowing owl habitat (i.e., annual grassland containing ground squirrels or debris piles, banks of streams/creeks) the project proponent shall hire a qualified biologist to conduct surveys in accordance with Appendix D of CDFW's Staff Report on Burrowing Owl Mitigation (2012). (Refer to Ch. 6 Biological Resources for full text of mitigation measure) BR-15. Compensate for Loss of Occupied Burrowing Owl Habitat If active burrowing owl burrows, or burrow surrogates (e.g., debris piles, culvert pipes) are found on the site and are destroyed by project implementation, the project proponent shall mitigate the loss of occupied habitat in accordance with guidance provided in the CDFW 2012 Staff Report or the most recent CDFW protocols, which states that permanent impacts to nesting, occupied and satellite burrows, and burrowing owl habitat shall be mitigated such that habitat acreage, number of burrows, and burrowing owls impacted are replaced through permanent conservation of comparable or better habitat with similar	LTS

		vegetation communities and burrowing mammals (e.g., ground squirrels) present to provide for nesting, foraging, wintering, and dispersal. The project proponent shall retain a qualified biologist to develop a burrowing owl mitigation and management plan. (Refer to Ch. 6 Biological Resources for full text of mitigation measure)	
IMPACT: DISTURBANCE OR LOSS OF GRASSHOPPER SPARROW, SHORT-EARED OWL, NORTHERN HARRIER, WHITE-TAILED KITE, **COOPER'S HAWK** AND LOGGERHEAD SHRIKE NESTS Northern harrier, white-tailed kite, and loggerhead shrike have been documented foraging and perching in the Plan Area and are likely nesting in the Plan Area based on behaviors observed by the Mather Stewardship Network in 2014. Short-eared owl **and Cooper's hawk** has been documented at Mather Field historically (1997) and grasshopper sparrow could potentially nest in the Plan Area. Project construction could remove or disturb active nests of grasshopper sparrow, short-eared owl, northern harrier, white-tailed kite, or loggerhead shrike potentially resulting in nest abandonment by the adults and mortality of chicks and eggs. Loss of chicks and eggs of these California species of special concern could reduce population levels and contribute to a trend toward these species becoming threatened or endangered in the future.	PS	BR-16. Conduct Preconstruction Surveys for Nesting Birds • Implement Mitigation Measure BR-4: Worker Environmental Awareness Program • Vegetation removal shall be carried out during the non-breeding season for birds and raptors (February 1 to August 31) to the extent feasible. • Before initiating any ground disturbing during the nesting season for these species in the Sacramento area (generally February 1 to August 31), the project applicant shall retain a qualified wildlife biologist with knowledge of the relevant species to conduct nesting surveys within 14 days before the start of construction or vegetation removal. • Surveys shall include a search of all trees, shrubs, wetlands, and grassland vegetation that provide suitable nesting habitat in the construction area and within 500 feet of the construction area. • If an active nest is found in the survey area, a buffer shall be established around the nest site to avoid disturbance or destruction of the nest until the end of the breeding season (August 31) or until after a qualified wildlife biologist determines that the young have fledged and moved out of the project site (this date varies by species). The extent of these buffers shall be determined by the biologist and shall depend on the bird species, level of construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. Suitable buffer distances may vary between species. No project activity shall commence within the buffer areas	LTS

		until a qualified biologist has determined, in coordination with CDFW, the young have fledged, the nest is no longer active, or reducing the buffer would not result in nest abandonment. • Monitoring of active nests by a qualified biologist during construction activities shall be required if the biologist determines a particular activity has the potential to adversely affect the nest. If construction activities cause the nesting bird to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then the no-disturbance buffer shall be increased until the agitated behavior ceases.	
IMPACT: LOSS OF AMERICAN BADGER HABITAT Annual grassland and scrub, as well as open portions of cottonwood woodland throughout the Plan Area represents suitable habitat for American badger and two potential badger dens have been observed in the Plan Area and one in the adjacent Mather Preserve. Therefore, there is high potential for this species to den and forage in the Plan Area and project development could result in direct mortality of individuals or loss of natal dens resulting in death of young either directly through destruction of the den or indirectly through disturbance that causes the mother to abandon her kits. Loss of individuals within the project site could diminish the local population of this species and lower reproductive potential, which could contribute to further declines.	PS	BR-17. Protect Active American Badger Den Sites • Implement Mitigation Measure BR-4: Worker Environmental Awareness Program • Before construction activities within suitable habitat for American badger, a qualified biologist shall conduct surveys to identify any American badger burrows/dens. These surveys shall be conducted not more than 15 days before the start of construction. If occupied burrows are not found, further mitigation will be not required. If occupied burrows are found, CDFW shall be notified and impacts to active badger dens shall be avoided by establishing exclusion zones around all active badger dens, within which construction-related activities shall be prohibited until denning activities are complete or the den is abandoned. A qualified biologist shall monitor each den once per week to track the status of the den and to determine when a den area has been cleared for construction.	LTS
IMPACT: HAVE SUBSTANTIAL ADVERSE EFFECT ON RIPARIAN HABITAT OR SENSITIVE NATURAL COMMUNITIES The Plan Area does not contain designated sensitive natural communities other than vernal pool communities, which are	LTS	No mitigation required.	N/A

addressed under impacts to vernal pool invertebrate habitat and impacts to wetlands. Additionally, while cottonwood woodland is traditionally a riparian community, the cottonwood woodland in the Plan Area is not associated with the bed and bank of a river, stream, or other water body and is not connected to the active floodplain of the American River.			
IMPACT: LOSS OF WETLANDS AND WATERS Project implementation would result in direct loss of a total of approximately 15.09 acres of waters of the United States consisting of 14.72 acres of wetlands and 0.37 acre of other waters (stream/creek). The majority of stream/creek habitat in the Plan Area would be ~~preserved~~**avoided** within the Open Space Drain land use and 4.29 acres of the wetland habitat would be preserved in the Open Space preserves. There is a total of 24.92 acres of potential waters of the United States in the Plan Area, of which approximately 9.83 acres would be preserved onsite.	PS	BR-18. Implement BR-1 through BR-5 BR-19. Compensate for Loss of Wetlands/Waters not Compensated under BR-2 All necessary permits under Section 1602 of the California Fish and Game Code (Lake and Streambed Alteration Agreement) and Sections 401 and 404 of the CWA or the state's Porter-Cologne Act shall be obtained and all permit conditions implemented as will the conditions and requirements of all other state and federal permits obtained for the project. The project applicant of any project that would result in removal of drainage ditches shall compensate for the permanent fill of waters of the United States and waters of the state. The minimum compensation ratio to achieve no net loss of functions and values for will be 1:1 (1 acre of wetland credit for every 1 acre of permanent impact). (Refer to Ch. 6 Biological Resources for full text of mitigation measure)	LTS
IMPACT: INTERFERE WITH THE MOVEMENT OF ANY NATIVE RESIDENT OR MIGRATORY FISH OR WILDLIFE SPECIES OR IMPEDE USE OF WILDLIFE NURSERY SITES Although the project would convert approximately 706 acres of undeveloped habitat to developed land uses, the Plan Area does not include areas mapped as important to wildlife movement. However, the Plan Area contains habitat for common nesting birds protected under California Fish and Game Code Section 3503 and the Migratory Bird Treaty Act.	PS	BR-20. Implement BR-16	LTS

IMPACT: CONFLICT WITH SACRAMENTO TREE ORDINANCE A comprehensive tree inventory was conducted in the Plan Area in 2014 and identified 455 native trees with a DBH of 4 inches or greater (assumed to be 6 inches or greater now) of which 453 are Fremont cottonwood and two are Pacific willow. The Plan Area also contains 22 nonnative trees with a DBH of 6 inches or greater.	PS	BR-21. Compensate for Native Tree Removal Before initiating development projects, project applicants shall submit an arborist report for the project impact areas when appropriate habitat exists. The report shall include the species, diameter, dripline, and health of all trees 6 inches in diameter at breast height or larger 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 trees. (Refer to Ch. 6 Biological Resources for full text of mitigation measure) BR-22. Replace Nonnative Tree Canopy The removal of nonnative tree canopy shall be mitigated for with the creation of new tree canopy equivalent to the acreage of non-native tree canopy removed. New tree canopy acreage shall be calculated using the Sacramento County Department of Transportation 15-year shade cover values for tree species. Preference is given to on-site mitigation, but if this is infeasible, then funding shall be contributed to the Sacramento Tree Foundation's Greenprint program in an amount proportional to the tree canopy lost (as determined by the 15-year shade cover calculations for the tree species to be planted through the funding, with the cost to be determined by the Sacramento County Tree Foundation).	LTS
IMPACT: SPECIAL STATUS BATS **Although the potential for occurrence of pallid bat and western red bat in the Plan Area is low, suitable foraging and roosting habitat is present and these species may roost onsite. Given the wide range of habitats suitable for foraging within the County, the loss of foraging habitat within the Plan Area is not likely to be substantial. If roosts and maternity colonies are present in mature trees and structures within the Plan Area, the removal of these trees and structures could result in the loss of bats and**	**PS**	**BR-23. Bat Roost and Colony Impact Minimization** **The Applicant shall implement the following measures to minimize bat mortality due to roost disturbance or destruction.** • **If suitable roosting habitat for special-status bats will be affected by Project construction (e.g., removal of trees or buildings, modification of bridges/box culverts), a qualified wildlife biologist will conduct surveys for special-status bats during**	**LTS**

reproductive capacity which could further reduce the population of bats in the region. Therefore, the loss of roosts or disruption of maternity colonies in the Plan Area would be a potentially significant impact. Implementation of Mitigation Measure BR-23 would reduce potentially significant impacts on special-status bats to less than significant with mitigation because this measure requires conducting surveys for roost sites, identifying any roosts in the Plan Area, implementing procedures to reduce mortality, and compensation for lost roosts.		**the appropriate time of year to maximize detectability to determine if bat species are roosting near the work area no less than 7 days and no more than 14 days before beginning vegetation removal, ground disturbance, and/or construction. Survey methodology may include visual surveys of bats (e.g., observation of bats during foraging period), inspection for suitable habitat, bat sign (e.g., guano), or use of ultrasonic detectors (e.g., Anabat, etc.). Visual surveys will include trees within 0.25 mile of Project construction activities if the potential roost could be disturbed by construction activity. If the potential roost is separated from the construction site by topographic, vegetation, structural, or other visual barriers or by areas of routine human disturbances that are greater than the project construction disturbances, surveys of those potential roosts will not be necessary. The type of survey will depend on the condition of the potential roosting habitat. If no bat roosts are found, then no further study is required.** • **If evidence of bat use is observed, the number and species of bats using the roost will be determined. Bat detectors may be used to supplement survey efforts.** • **If roosts are determined to be present and must be removed, the bats will be excluded from the roosting site before the facility is removed. A mitigation program addressing compensation, exclusion methods, and roost removal procedures will be developed and submitted to CDFW for approval, before implementation. Exclusion methods may include use of one-way doors at roost entrances (bats may leave, but not reenter), or sealing roost entrances when the site can be confirmed to contain no bats. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young). Loss of roosting habitat may be compensated with**	

		permanent, elevated bat houses or condos installed outside of, but near the construction area. Placement and height shall be determined based on species evicted or as determined by a qualified biologist in consultation with CDFW. Bat houses will be multi-chambered and be purchased or constructed in accordance with CDFW standards. The number of bat houses required will be dependent upon the size and number of colonies found, but at least one bat house will be installed for each pair of bats (if occurring individually), or of sufficient number to accommodate each colony of bats to be relocated	
IMPACT: SOUTH SACRAMENTO HABITAT CONSERVATION PLAN The SSHCP identifies the Plan Area as an urban development area and does not provide incidental take coverage to the Mather South Project. However, project development would not interfere with implementation of the SSHCP or prevent attainment of the SSHCP Biological Goals and Measurable Objectives.	LTS	**BR-24. 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.**.	LTS
IMPACT: BIOLOGICAL IMPACTS RELATED TO OFFSITE IMPROVEMENTS The project would be required to make offsite road improvements which may include intersection improvements and/or road widening. The project would also require offsite energy infrastructure to be implemented. A project specific CEQA analysis would be required once improvements are identified and project-level designs are prepared. Biological resources that could be affected by the offsite improvements are expected to be the same as those existing in the Plan Area, however, it is possible that improvements could affect habitat types or resources not found in the Plan Area, such as riparian or emergent marsh habitat at stream crossings or native oak trees. Specific impact amounts cannot be determined at this time for each biological resource type potentially affected by	PS	No feasible mitigation.	SU

offsite infrastructure.			
Climate Change and Greenhouse Gas Emissions			
IMPACT: PROJECT GHG EMISSIONS Development of the Mather South Project would result in GHG emissions from energy consumption (e.g., electricity use, natural gas use, water use), mobile sources (i.e., project-generated VMT), and from waste generation at offsite landfills. Energy-related emissions associated with the proposed residential land uses would result in 0.57 $MTCO_2e$ per capita, which is below the 0.73 $MTCO_2e$ per-capita threshold. Energy-related missions from nonresidential land uses would result in 2.97 $MTCO_2e$ per 1,000 square feet, which is below the 4.28 $MTCO_2e$ per 1,000 square feet threshold. There would be a surplus in emissions reductions needed for both the residential and nonresidential sectors, by 1,444 and 1,214 $MTCO_2e$/year, respectively. Emissions from project-generated VMT in 2032 would result in 2.46 $MTCO_2e$ per capita, which is above the 1.47 $MTCO_2e$ per-capita threshold. The surplus of emissions reductions from the residential and nonresidential sectors can be applied to GHG emissions reductions needed for the mobile sector. The additional reduction of 2,659 $MTCO_2e$/year would reduce the mobile sector's per capita emissions to 2.17 $MTCO_2e$. However, even with these additional reductions in GHG emissions, project-generated GHG emissions would exceed applicable Sacramento County thresholds of significance for transportation and result in a cumulatively considerable contribution to climate change.	PS	CC-1. Implement Mitigation Measure AQ-2. Emissions estimates account for all incorporated design measures (as indicated in the Air Quality Mitigation Plan [AQMP] in Appendix AQ-2 of this EIR). These include traffic calming measures and a neighborhood electric vehicle (NEV) network. The measures of the AQMP would reduce GHG emissions through reduced vehicle idling and fuel consumption, and switching to cleaner fuels (i.e., electricity). CC-2. Reduce greenhouse gas emissions on-site. The project applicant shall incorporate the following mitigation measures into the project to reduce operational emissions of GHGs to the extent feasible. (Refer to Ch. 7 Climate Change for full text of mitigation measure) CC-3. Purchase carbon offsets. In addition to Mitigation Measures CC-1 and CC-2, the project developer shall offset the remaining GHG emissions that exceed the transportation mass emission threshold of 301 MTCO2e/year for the lifetime of the project (i.e., 25 years) (SMAQMD 2018) by funding activities that directly reduce or sequester GHG emissions or, if necessary, obtaining carbon credits. This mitigation measure is consistent with guidance recommended by SMAQMD and CARB (SMAQMD 2018:6-12 and CARB 2017:152). This measure is also consistent with the State CEQA Guidelines, which recommend several options for mitigating GHG emissions. State CEQA Guidelines Section 15126.4(C)(3) states that measures to mitigate the significant effect of GHG emissions may include "off-site measures, including offsets that are not otherwise required…" Mitigation Measure CC-3 requires the project developer to implement an off-site GHG emissions reduction program or to pay GHG offset fees to compensate for the project's transportation-related emissions in excess of 301 $MTCO_2e$/year. Based on the results shown in Table CC-11,	LTS

		the total GHG emissions that would need to be offset by the project would be 7,519 $MTCO_2e$. (Refer to Ch. 7 Climate Change for full text of mitigation measure)	
IMPACT: CLIMATE CHANGE EFFECTS ON THE PROJECT Scientists have identified several ways in which global climate change could alter the physical environment in California. Several of these changes may translate into a variety of issues and concerns that may affect the project area, including: • increased frequency and intensity of wildfire as a result of changing precipitation patterns and temperatures; • reliability in water supply associated with changes to precipitation and snowmelt patterns; and • increased risk of flood associated with sea level rise. However, the project is not located in an area that is anticipated to experience higher than average wildfire, or floods. Additionally, the project water supply assessment ensures the availability of water.	LTS	No mitigation required.	N/A
Cultural Resources			
IMPACT: CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A HISTORIC RESOURCE A total of 23 cultural resources (archaeological and built environment resources) were identified adjacent to or within the Mather South Plan Area. None of these resources meet the criteria for listing in the NRHP and/or the CRHR. There does not appear to be the potential for a historic district or a historic landscape for which these resources might be considered as contributing elements. Consequently, none of the 23 buildings, structures or objects are considered historic resources for the purposes of CEQA. However, unknown historic resources may be uncovered during construction activities.	PS	CR-1. For any unexpected historic or cultural resources discovered during project construction, work shall be halted until a qualified archaeologist evaluates the resource encountered. 1. In the event of an inadvertent discovery of historic or cultural resources, 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	LTS

		American Heritage Commission shall be followed, and the monitor shall be retained at the Applicant's expense. a. Work cannot continue within the 200-foot radius of the discovery site until the archaeologist and/or tribal monitor conducts sufficient research and data collection to determine 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. b. If a potentially-eligible resource is encountered, then the archaeologist and/or tribal monitor, Office of Planning and Environmental Review staff, 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 County Environmental Coordinator as verification that the provisions of CEQA for managing unanticipated discoveries have been met. 2. Pursuant to Sections 5097.97 and 5097.98 of the State Public Resources Code, and Section 7050.5 of the State Health and Safety Code, if a human bone or bone of unknown origin is found during construction, all work is to stop and the County Coroner and Office of Planning and Environmental Review (PER) shall be immediately notified. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission within 24 hours, and the Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent from the deceased Native American. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposition of, with appropriate dignity, the human remains and any associated grave goods.	
IMPACT: CAUSE SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A UNIQUE ARCHAEOLOGICAL	PS	Implement Mitigation Measure CR-1	LTS

RESOURCE No archaeological resources were identified as a result of previous studies conducted; however, it is still possible that significant buried archaeological materials are present within the Mather South Plan Area. Disturbance or destruction of previously unknown resources may result from ground-disturbing construction activities.			
IMPACT: DISTURB ANY HUMAN REMAINS, INCLUDING THOSE INTERRED OUTSIDE OF FORMAL CEMETERIES There are no known human burial sites within the Mather South Plan Area; however, it is possible that buried human remains are present and have not been identified because of a lack of surficial evidence. It is possible that previously unknown human remains may be encountered during ground-disturbing construction activities associated with the project.	PS	Implement Mitigation Measure CR-1	LTS
IMPACT: CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A TRIBAL CULTURAL RESOURCE The Ione Band of Miwok, the UAIC, and Wilton Rancheria. None of these tribes have indicated that tribal cultural resources are known within the Mather South Plan Area. Because no tribal cultural resources have been identified within the Plan Area to date, potential impacts would likely be less than significant. Nonetheless, the potential exists to uncover previously undiscovered tribal cultural resources during construction activities.	PS	CR-2. If the lead agency determines that a project may cause a substantial adverse change to a tribal cultural resource, and measures are not otherwise identified in the consultation process provided in Section 21080.3.2 of the Public Resources Code, one of the following measures would be implemented to avoid and/or minimize the impact to tribal cultural resources: 1. Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks or other open space, to incorporate the resources with culturally appropriate protection and management criteria. 2. Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following: a. Protecting the cultural character and integrity of the	LTS

		resource. b. Protecting the traditional use of the resource. c. Protecting the confidentiality of the resource. 3. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places. 4. Protecting the resource.	
Energy			
IMPACT: RESULT IN WASTEFUL, INEFFICIENT, OR UNNECESSARY CONSUMPTION OF ENERGY Project implementation would result in the development of new land uses including low- to high-density residential, commercial, public facilities, a research and development campus, an environmental education campus, parks, recreation, and open space areas. Construction activity associated with the development of these land uses would result in energy use during each phase of project construction. New land uses would also require energy during operation of the project such as heating, cooling, lighting, transportation and other similar demands. The project would be constructed in compliance with CA Building Code Title 24 energy efficiency standards and would support active transportation and alternative transportation modes.	LTS	No mitigation required.	N/A
IMPACT: EXCEED THE AVAILABLE CAPACITIES OF ENERGY SUPPLIES THAT REQUIRE THE CONSTRUCTION OF FACILITIES Development of the project would result in an increased demand for gas and electricity in the project region. However, adequate gas and electricity regional infrastructure and supplies are available, and the project would construct project specific connections as part of the utilities and service provision phase. Natural gas lines would be extended to the project site	LTS	No mitigation required.	N/A

as part of the sewer trunk extension project along Zinfandel Drive. Similarly, the project would require one new electric substation and transmission lines which would connect to the existing nearby Jackson Bulk Substation.			
Cumulative Energy			
IMPACT: SMUD BULK SUBSTATION 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).	N/A	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.	N/A
Geology and Soils			
IMPACT: SEISMIC RELATED ISSUES The Mather South Plan Area is not located within an Alquist-Priolo Earthquake Fault Zone or within the vicinity of a known fault. In addition, Sacramento County is in one of the areas least prone to earthquake shaking potential. The Plan Area does not contain bluffs or topography that would make it susceptible to landslides. The project would also be required to comply with the California Building Code.	LTS	No mitigation required.	N/A
IMPACT: SOIL EROSION OR LOSS OF TOPSOIL The soil types mapped within the Plan Area have water erosion potential ranging from low to moderate. The most likely potential for erosion to occur would be during construction when soils would be graded and excavated and may be exposed to the effects of wind and/or water for some length of time. The project would be subject to the County Land Grading and Erosion Control Ordinance and the State Water Resources	LTS	No mitigation required.	N/A

Control Board stormwater permitting requirements, any development related to the project would be subject to erosion and sediment control measures as a matter of standard policy.			
IMPACT: EXPOSURE TO EXPANSIVE SOILS The soils within the Plan Area exhibit shrink-swell potential in the low to high range. Development related to the Mather South Project would result in new structures and roadways located in areas potentially containing expansive soils, which have the ability to cause structural damage to both foundations and roads. However, the construction permitting process within Sacramento County requires completed geotechnical reports for developments located within areas known to contain expansive soils and subsequent project conditioning to eliminate the hazardous soil conditions.	LTS	No mitigation required.	N/A
IMPACT: RESULT IN A SUBSTANTIAL LOSS OF A MINERAL RESOURCE Development of the Mather South Project would result in new residential and commercial development in the Plan Area, which would create a permanent loss of access to mineral resources. However, the Plan Area was previously designated for urban development and has not been designated as an ARRA for minerals.	LTS	No mitigation required.	N/A
IMPACT: POTENTIAL DESTRUCTION OF BURIED PALEONTOLOGICAL RESOURCES Construction of the Mather South Project would involve shallow grading activities and some trenching for infrastructure development. The Laguna Formation, which underlies the Plan Area, is considered to have high paleontological sensitivity.	PS	GS-1. In the event that paleontological resources are unearthed during ground-disturbing activities during site preparation and/or construction, ground-disturbing work shall immediately cease in the vicinity of the discovery. The project applicant shall immediately notify the Environmental Coordinator of the discovery and contact the Geology Department of the University of California at Davis or other qualified institution. A qualified paleontologist or paleoresources consultant shall prepare a mitigation program for the discovery and monitor the area of the discovery and the vicinity and identify, curate, and store the specimen as appropriate. All phases of mitigation shall be supervised by a professional paleontologist who maintains the necessary paleontological collecting permits and	LTS

		repository agreements. If any additional paleontological remains are encountered during the project, the paleontologist has the authority to stop work in the immediate vicinity of the find to evaluate the find, record, and remove the find if significant. The paleontologist shall also prepare a report of the find(s) and their significance after operations are complete.	
IMPACT: RESULT IN LOSS OF IMPORTANT AGRICULTURAL SOILS The Plan Area has been designated a part of the Urban Services Boundary, which indicates the County's intent for development of the site. The project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on the current Sacramento County Important Farmland Map published by the California Department of Conservation	NI	No mitigation required.	N/A
Hazards and Hazardous Materials			
IMPACT: ACCIDENTAL RELEASE DUE TO ROUTINE TRANSPORT, USE OR DISPOSAL OF HAZARDOUS MATERIALS Construction activities would occur within the Mather South Plan Area and would require the use of standard hazardous materials such as fuels, oils, lubricants, glues, paints, paint thinners, soaps, bleach, and solvents. The materials would only pose a hazard if they are improperly used, stored, or transported either through upset conditions (e.g., a large spill or an explosion) or mishandling. All persons involved in the handling of these hazardous materials are required to use, store, and transport hazardous materials in compliance with local, state, and federal regulations during project construction and operational activities.	LTS	No mitigation required.	N/A
IMPACT: CREATE A SIGNIFICANT HAZARD THROUGH THE REASONABLY FORESEEABLE UPSET AND ACCIDENT CONDITIONS INVOLVING THE RELEASE OF HAZARDOUS	PS	HM-1. Worker Health and Safety. Each contractor whose employees may be potentially exposed to contaminants known to be present in site soil, soil gas, or groundwater shall develop and implement their own contractor-specific	LTS

MATERIALS INTO THE ENVIRONMENT Construction associated with the Mather South Project would involve site grading, excavation, trenching, and demolition and construction of buildings. All activities have the potential to release hazardous materials into the environment because of the routine use of hazardous materials during these activities including fuel, lubricants, and solvents. The Mather South Project site contains bunker buildings associated with a former weapons storage area that were constructed in the early part of the century and that would be demolished during the construction phase. The Plan Area contains remediated areas of contaminants in the underlying soils and groundwater. Excavation and construction activities at or near these areas could potentially expose construction workers and the general public to previously unidentified soil contamination.		and site-specific Health and Safety Plan (HASP). The HASP shall establish the minimum requirements, policies, and procedures adequate to protect site workers, the public, and the environment from identified site environmental hazards. The HASP shall be prepared in accordance with 29 CFR 1910.120 Occupational Safety and Health Administration (OSHA), Hazardous Waste Operations and Emergency Response (HAZWOPER), and California Code of Regulations (CCR), Title 8, Section 5192. (Refer to Ch. 11 Hazardous Materials for full text of mitigation measure) HM-2. Soil Sampling Before Ground Disturbing Activities. Before construction activities begin within the Mather South Plan Area, targeted surface soil sampling shall be conducted to evaluate concentrations of chemicals of concern in surface soil. (Refer to Ch. 11 Hazardous Materials for full text of mitigation measure) HM-3. Contaminated Soil Contingency Plan. Before construction, the applicant shall submit a Contaminated Soil Contingency Plan to the County for review and approval. The plan shall include practices that are consistent with the California Title 8 and Occupational Safety and Health Administration (Cal-OSHA) regulations and shall outline steps that would be implemented if contaminated soils are encountered. The objective of the plan shall be to minimize risk to the public and to the environment resulting from exposure to and disturbance of contaminated soils. (Refer to Ch. 11 Hazardous Materials for full text of mitigation measure) HM-4. Hazardous Materials Notification. Within the Mather South Plan Area, there is the potential for MEC or munitions debris to be encountered on the surface or subsurface of the investigation area, particularly during ground-disturbing activities at greater depths. The Sacramento County Office of Economic Development shall notify future landowners of the following: the former military use of the Mather South Plan Area, the completed munitions response actions at the site, and the appropriate steps to take in the event that suspected munitions-related items are discovered. This information shall be provided to future landowners through	

		environmental disclosure reports before final sale. (Refer to Ch. 11 Hazardous Materials for full text of mitigation measure)	
IMPACT: RESULT IN HAZARDOUS EMISSIONS OR HANDLE HAZARDOUS OR ACUTELY HAZARDOUS MATERIALS, SUBSTANCES, OR WASTE WITHIN ONE-QUARTER MILE OF A PROPOSED OR EXISTING SCHOOL There are no existing schools within one-quarter mile of the Mather South Plan Area. However, two new schools are included within the Mather South Project. Both school sites would be located within one-quarter mile of identified hazardous waste cleanup sites within the Plan Area. A qualified consultant would be hired to complete a PEA under DTSC oversight and review. Once operational, no additional ground disturbing activities would occur at either of the school sites. The project would comply with the Education Code and construction-period mitigation measures that include sampling and remediation should hazardous materials be encountered.	PS	Implement Mitigation Measures HM-1 through HM-4 and Mather Field SPA Ordinance Performance Standards	LTS
IMPACT: BE LOCATED ON A SITE WHICH IS INCLUDED ON A LIST OF HAZARDOUS MATERIALS SITES COMPILED PURSUANT TO GOVERNMENT CODE SECTION 65962.5 AND, AS A RESULT, WOULD CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT Mather AFB, including the Mather South Plan Area, is a federal superfund site. However, the Phase I conducted for the Mather South Plan Area reported RECs based on review of historic record, property records, and environment records, including the Cortese List. As previously discussed, these previously recorded sites have been remediated. However, excavation and construction activities at or near these areas could potentially expose construction workers and the general public to previously unidentified soil and/or groundwater contamination.	PS	Implement Mitigation Measures HM-1 through HM- 4 and Mather Field SPA Ordinance Performance Standards	LTS
IMPACT: IMPAIR IMPLEMENTATION OF AN EMERGENCY RESPONSE PLAN OR INTERFERE WITH AN ADOPTED	NI	No mitigation required.	N/A

EMERGENCY RESPONSE PLAN The Sacramento County Office of Emergency Services (SacOES) has the primary responsibility for preparedness and response activities and addresses disasters and emergency situations within Sacramento County. The Mather South Project would not interfere with any of the county-wide emergency plans, including the Emergency Operations Plan or the Local Hazard Mitigation Plan because both plans develop goals and objectives for SacOES related to emergency planning and large-scale natural or man-made disasters.			
IMPACT: EXPOSE PEOPLE OR STRUCTURES TO A SIGNIFICANT RISK OF LOSS, INJURY OR DEATH INVOLVING WILDLAND FIRES, INCLUDING WHERE WILDLANDS ARE ADJACENT TO URBANIZED AREAS OR WHERE RESIDENCES ARE INTERMIXED WITH WILDLANDS The project site is in a non-very high fire hazard severity zone (FHSZ) within Sacramento County, as mapped by Metro Fire and CalFire. As required by Policy SA-23 in the Sacramento County General Plan, plans for the facility would be provided to Metro Fire Department for review and comment regarding: adequacy of water supply; site design for fire department access into and around structures; ability for a safe and efficient fire department response; traffic flow and ingress/egress for residents and emergency vehicles; site-specific built-in fire protection; and potential impacts to emergency services and fire department response.	LTS	No mitigation required.	N/A
Hydrology and Water Quality			
IMPACT: CONTRIBUTION TO POLLUTED RUNOFF OR VIOLATION OF A WATER QUALITY STANDARD Water quality impacts could occur during construction from increased soil erosion and sedimentation because of clearing of vegetation, alteration of drainages, and grading. Construction also involves solvents, paints, concrete, and other materials that have the potential to contact and affect runoff from construction sites. The project would be required to comply with	LTS	No mitigation required.	N/A

County ordinances, and the State's General Stormwater Permit for Construction Activities and County Stormwater Ordinance, as well as implement Low Impact Development Standards. The project must also have BMPs in place to keep other construction-related wastes and pollutants out of the storm drains.			
IMPACT: HYDROMODIFICATION The project would result in an alteration to the existing hydromodification of the site but would construct 10 multi-purpose detention basins and water quality features to prevent offsite flows and water quality impacts.	PS	HY-1. Before Improvement Plan approval, applicants shall submit a drainage study in accordance with the requirements outlined in the "Drainage Study Requirements" document dated June 12, 2008 (or subsequent updates). The study shall describe permanent stormwater quality treatment facilities capable of treating stormwater to the satisfaction of the State Water Board for injection into the Mehrten formation in the infiltration trenches in the basins. Alternate solutions to percolations trenches shall be discussed in the study such as reuse of the collected summer nuisance flows for irrigation of public spaces, or rigorous LID measures, etc.	LTS
IMPACT: FLOODING On-site flooding: The project Storm Drainage Plan analyzes at a plan-level the drainage requirements for buildout of the Mather South Project and evaluates the proposed drainage facilities to maintain downstream drainage impacts at or below existing conditions. The study establishes a conceptual backbone drainage system, tributary watersheds, the location of drainage facilities, pre-development and post-development flows, required flood detention and post-project water quality conditions. Since the Storm Drainage Plan is conceptual and prepared for a plan-level analysis, additional detailed design calculations would need to be prepared for subdivision map improvement plans. Off-site flooding: The Mather South 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 Beach Stone Lakes Area Impact Analysis Memorandum indicates that while detention basins are designed to capture and keep peak runoff and not exceed existing conditions, an incremental amount of runoff may occur	PS	HY-2. The Mather South 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). a. Ensuring no net project-related increase in volume in Beach Stone Lakes by metering outflow from the Plan Area, 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.	~~LTS~~**SU**

and contribute to the existing flooding condition downstream at the Beach Stone Lakes area.			
IMPACT: DAM FAILURE/LEVEE The closest dam to the Plan Area is Mather Dam which provides flood control to the Mather Lake. A 1996 USACE study determined that in the event of a dam failure at Mather Lake, a failure time of four (4) hours would result. The "dam breach" scenario in the study shows that Zinfandel Drive would be overtopped and the flows from the breach were shown to generally follow the existing path of Morrison Creek to the southwest toward and through the existing Independence at Mather subdivision. The Plan Area is also located over 10 miles south and downslope of Folsom Reservoir.	LTS	No mitigation required.	N/A
IMPACT: EFFECTS OF CLIMATE CHANGE ON PROJECT The hydrology analysis contained in the Drainage Master Plan demonstrates that the proposed land uses on-site would not be exposed to flooding, there remains some uncertainty regarding future precipitation frequency and intensity because of climate change. The County has not adopted any policies or guidance with regard to the evaluation of hydrologic climate-related impacts. Because of the uncertainty associated with the physical effects of climate change that would be experienced in the Plan Area, it is too speculative to determine with certainty the actual impacts that would occur and render an impact conclusion. The modeling performed for the project is based on a range of potential climate assumptions (scenarios) that could occur based upon the science as it currently stands. However, climate change science is a rapidly evolving area that is continually subjected to new legislation, policy, and scientific advancement. Concurrently, the County is considering regional policies and solutions to address climate-related impacts, but as of the date of this document, no such solution has been developed.	N/A	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 all feasible design measures within the project's drainage system to adequately maintain pre-project flows with consideration of climate change effects. Potential improvements could include 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 and submit a hydrologic analysis that is based on the best available technical information at that time, in consultation	N/A

		with the County's Department of Water Resources and the Office of Planning and Environmental Review.	
Land Use and Planning			
IMPACT: PHYSICALLY DIVIDE AN ESTABLISHED COMMUNITY The Mather South Project would result in the development of a master planned community which would establish a new comprehensive set of land uses that are designed to operate and function together in a cohesive manner. The land upon which the project would be developed is currently vacant and is adjacent to some residential uses but would not result in the physical division or disruption of those uses.	LTS	No mitigation required.	N/A
IMPACT: CONFLICT WITH LAND USE PLANS, POLICIES, OR REGULATIONS The project would require the amendment of the General Plan from the existing Urban Development Area (795 acres) land use designation to a combination of the following: Low Density Residential (622 acres), Medium Density Residential (17 acres), Natural Preserve (86 acres), and Commercial and Offices (70 acres). The project would also require GPAs to the Transportation Plan to reflect proposed roadway alignments and transit systems and amend the County's Bicycle Master Plan to add internal and external bicycle facilities within and through the project area as shown in the Bicycle Master Plan Amendment Diagram. The project would also be consistent with the Cordova Community Plan, the Mather Field Specific Plan, and the Mather Airport CLUP and APPA.	LTS	No mitigation required.	N/A
IMPACT: RESULT IN LAND USE CONFLICTS OR ADJACENCY ISSUES The Mather Field Project, which was approved in 2016, resulted in the redesignation of the Mather South Plan Area as an Urban Development Area which signaled the intent of the County to pursue a development plan for the area. The Plan Area is also within the Urban Services Boundary and Urban Policy Area which indicates the intent to provide public services	PS	LU-1. Require implementation of Mather Field Specific Plan Ordinance Section 603-19 for all properties located within the R-22 and R-23 land use designation along the southern portion of the Plan Area prior to occupancy or sale. LU-2. At the time of site plan approval, require the implementation of standard conditions to minimize the potential for noise and odor issues resulting from adjacency to the rendering facility including fencing or walls, screening,	LTS

to the Plan Area. The project is consistent with the land uses currently designated. However, adjacency issues have the potential to arise as the Sacramento Rendering Plant is located just south of the Plan Area and may produce odors occasionally.		building orientation, double paned windows, etc.).	
Noise			
IMPACT: CONSTRUCTION NOISE Construction activity associated with the development of land uses included in the Mather South Project as well as project related infrastructure would result in construction noise, although construction noise would be temporary in nature depending on the characteristics of the construction activity and land uses being developed. Noise associated with the construction of buildings, facilities, and infrastructure for land uses in the Mather South Project would be associated with the operation of off-road construction equipment including demolition and excavation equipment, material handlers, and portable generators. In addition to new noise sensitive land uses developed as part of the project, there is an existing residential neighborhood within the City of Rancho Cordova located approximately 500 feet to the east of the project site. Based on construction noise modeling results, noise levels would exceed both the Sacramento County exterior noise thresholds for both the daytime and nighttime standards. Offsite traffic improvements would also result in construction-related noise.	PS	NOI-1. Reduce sensitive receptor exposure to construction noise during noise-sensitive time periods. Consistent with County Noise Control Ordinance Section 6.68.090 Exemptions, when an unforeseen or unavoidable condition occurs during a construction project and the nature of the project necessitates that work in process be continued until a specific phase is completed, the contractor or owner shall be allowed to continue work after 8 p.m. and to operate machinery and equipment necessary until completion of the specific work in progress can be brought to conclusion under conditions which will not jeopardize inspection acceptance or create undue financial hardships for the contractor or owner. For all outdoor construction/decommissioning activity that is to take place outside of the Sacramento County construction noise exception timeframes (i.e., between 6:00 a.m. and 8:00 p.m., Monday through Friday, and between 7:00 a.m. and 8:00 p.m. on Saturdays and Sunday), the contractor shall ensure that a noise monitoring plan is prepared by a qualified acoustical engineer and approved by the project applicant. The noise monitoring plan shall, at a minimum, include the following components: • detailed description of the proposed nighttime construction/decommissioning activities, • list of equipment used during all nighttime construction/decommissioning activities, • projected noise levels generated during the nighttime construction/decommissioning activities at surrounding	LTS

		noise-sensitive land uses, • location of sensitive receptors in relation to the proposed nighttime construction/decommissioning activities, and • detailed description of the location and times that noise monitors would be deployed. Subsequently, during any nighttime construction, noise shall be monitored and documented for the nearest sensitive land use to ensure that the County's exterior noise standards for non-transportation noise sources are not exceeded. In the event that monitored noise levels exceed applicable noise standards, onsite construction activities shall cease operations immediately. Before resuming nighttime construction activities, noise-control measures shall be implemented to reduce operational noise levels to below acceptable levels. Noise control measures could include, but are not limited to, the following: • All equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds shall be closed during equipment operation. • Where available and feasible, equipment with back-up alarms shall be equipped with either audible self-adjusting backup alarms or alarms that only sound when an object is detected. Self-adjusting backup alarms shall automatically adjust to 5 dBA over the surrounding background levels. All non-self-adjusting backup alarms shall be set to the lowest setting required to be audible above the surrounding noise levels. • To the extent that noise-generating outdoor construction activity needs to occur at night as part of a continuous construction activity, the activity shall be planned such that the portion that needs to take place closest to residential receptors takes place during less noise-	

		sensitive daytime hours. • Noise-reducing enclosures and techniques shall be used around stationary noise-generating equipment (e.g., concrete mixers, generators, compressors). • Heavy-duty equipment shall be operated at the lowest operating power possible. • Temporary noise curtains shall be installed as close as possible to the noise-generating activity such that the curtains obstruct the direct line of sight between the noise-generating construction/decommissioning activity and the nearby sensitive receptors. Temporary noise curtains shall consist of durable, flexible composite material featuring a noise barrier layer bounded to sound-absorptive material on one side. The noise barrier layer shall consist of rugged, impervious, material with a surface weight of at least one pound per square foot.	
IMPACT: CONSTRUCTION VIBRATION The use of off-road heavy-duty construction equipment as well as other construction equipment (e.g., impact pile driver) can result in temporary ground vibration, depending on the type of equipment used and the type of construction activities occurring. At the lowest levels, vibration from construction activity can result in a detectable low rumbling sounds and, at its loudest levels, can result in annoyance and sleep disturbance. Typically, during construction activity, the highest vibration levels are generated from the use of pile drivers.	PS	NOI-2. Develop and implement a vibration control plan. This mitigation measure would apply to construction activity involving pile-driving activities located within 100 feet of any building, to reduce the potential for structural damage, and within 550 feet of an occupied residence/building, to minimize disturbance from pile-driving activities. A vibration control plan shall be developed by the project applicant and his/her construction contractors to be submitted to and approved by Sacramento County before issuance of any Improvement Plans or Grading Permits for the project. The plan shall consider all potential vibration-inducing activities that would occur within the distance parameters described above and include various measures, setback distances, precautions, monitoring programs, and alternative methods to traditional pile-driving activities with the potential to result in structural damage or excessive noise. The following vibration control measures (or other equally effective measures approved by the County) shall be included in the plan:	LTS

		• To prevent structural damage, minimum setback requirements for different types of ground vibration-producing activities (e.g., pile driving) for the purpose of preventing damage to nearby structures shall be established based on the proposed pile-driving activities and locations, once determined. Factors to be considered include the specific nature of the vibration producing activity (e.g., type and duration of pile driving), local soil conditions, and the fragility/resiliency of the nearby structures. Established setback requirements (i.e., 100 feet) can be breached if a project-specific, site specific analysis is conducted by a qualified geotechnical engineer or ground vibration specialist that indicates that no structural damage would occur at nearby buildings or structures. • To prevent disturbance to sensitive land uses, minimum setback requirements for different types of ground vibration producing activities (e.g., pile driving) shall be established based on the proposed pile-driving activities and locations, once determined. Established setback requirements (i.e., 550 feet) can be breached only if a project-specific, site-specific, technically adequate ground vibration study indicates that the buildings would not be exposed to ground vibration levels in excess of 72 VdB, and ground vibration measurements performed during the construction activity confirm that the buildings are not being exposed to levels in excess of 72 VdB. • All vibration-inducing activity within the distance parameters described above shall be monitored and documented for ground vibration noise and vibration noise levels at the nearest sensitive land use and associated recorded data submitted to Sacramento County so as not to exceed the recommended FTA and Caltrans levels. • Alternatives to traditional pile driving (e.g., sonic pile driving, jetting, cast-in-place or auger cast piles, non-displacement piles, pile cushioning, torque or hydraulic piles) shall be considered and implemented where	

		feasible to reduce vibration levels. • Limit pile-driving activities to the daytime hours between 6:00 a.m. and 8:00 p.m. Monday through Friday and between 8:00 a.m. and 8:00 p.m. Saturday and Sunday. • Predrill pile holes to the maximum feasible depth to reduce the number of blows required to seat a pile. • Operate all vibration inducing impact equipment as far away from vibration-sensitive sites as reasonably possible from nearby structures. • Phase pile-driving and high-impact activities so as not to occur simultaneously with other construction activities, to the extent feasible. The total vibration level produced could be significantly less when each vibration source is operated at separate times.	
IMPACT: OPERATIONAL TRAFFIC NOISE Project generated traffic volume increases would generate noise levels above the Sacramento County's transportation noise threshold of 65 dB along several roadway segments. Land uses along Jackson Road segments in Sacramento County that would experience increases in traffic noise are designated Agricultural and are not considered noise sensitive uses. Land uses along Zinfandel Drive segments in the City of Rancho Cordova are zoned as Office Professional Mixed Use (OPMU), Commercial/Main Street District (CM-S), Retail Commercial (RC), Business Professional (BP0), and Low-Density Residential (LD) zoning designations. Only LD is considered a noise sensitive land use, and the presence of a 10-foot high sound wall would alleviate any increases in traffic noise generated by the Mather South Project.	LTS	No mitigation required.	N/A
IMPACT: EXPOSURE OF EXISTING SENSITIVE RECEPTORS TO NEW STATIONARY NOISE SOURCES This issue area evaluates non-transportation noise sources that would occur because of project operation, such as noise	LTS	No mitigation required.	N/A

generated from mechanical equipment. The Mather South Project land uses that would be located adjacent to the existing Anatolia Village neighborhood within the City of Rancho Cordova would include residential, public, and a park. Typically, noise sources associated with residential land uses include heating, cooling, and air conditioning (HVAC) units, lawn mowers and landscaping maintenance equipment. These types of mechanical equipment are typical of residential neighborhoods and would be compatible with Anatolia Village.			
IMPACT: EXPOSURE OF NEW SENSITIVE RECEPTORS TO EXISTING AND NEW STATIONARY NOISE SOURCES Implementation of the Mather South Project would result in the development of new land uses which would include new stationary noise sources and which may affect new sensitive receptors. Stationary mechanical equipment such as emergency generators, heating, cooling, and air conditioning (HVAC) units would be included in various land uses within the project site (e.g. commercial, residential). Vehicular and human activity in parking lots, commercial activity at loading docks at retail locations and utility infrastructure, particularly electrical transmission lines and substations would generate noise with the potential to cause disturbance to new sensitive receptors. The Mather South Project's land use plan has the potential for new sensitive receptors to be located adjacent to the above mentioned stationary noise sources and has the potential to cause disturbance to new sensitive receptors, resulting in exceedance of Sacramento County Non-Transportation Noise Standards.	PS	NOI-3. Conduct site-specific noise study and implement recommendations. To prevent future sensitive receptors from disturbance during the sensitive times of the day, project applicants of a residential land use or a structure containing residential units shall, before the issuance of building permits, provide to the County a site-specific noise study prepared by a qualified acoustical engineer addressing interior noise levels in residential units. The noise study shall consider the types of land uses being proposed in the same building or in the vicinity as the residential units in a mixed-use structure and existing noise sources adjacent to the proposed structure. The noise study shall confirm, using approved calculation methodologies, that building design and materials are sufficient to maintain exterior noise levels of 55 L50 and 75 L_{max} during the daytime and 50 L50 and 70 Lmax during the nighttime and an interior noise level of (L50) of 35 and maximum (Lmax) of 55 dB L_{dn} /CNEL, with windows closed, in residential units given the reasonably foreseeable noise generation sources within the building, and existing noise sources adjacent to the building. If the study shows such standards would not be met with the design as proposed, the project applicants shall implement recommendations of the study that are shown to achieve the standards. NOI-4. Reduce noise exposure to existing sensitive receptors from proposed stationary noise sources in non-residential land uses. The siting of new stationary sources in non-residential land uses shall first consider providing adequate distance	SU

		between the noise source and residential land uses. Siting distance recommendations for each source type are provided below. • New loading dock or commercial delivery sources shall be located a minimum of 1,600 feet from existing residential land uses. • New HVAC units shall be located a minimum of 500 feet from existing residential land uses. • New mechanical generators shall be located a minimum of 640 feet from existing residential land uses. • New overhead transmissions lines and substations shall be located a minimum of 16 feet from existing residential land uses. If the above siting requirements cannot be achieved because of specific building locations or other site-specific constraints, the following measures shall be required for future development applications including stationary sources. • Routine testing and preventive maintenance of emergency electrical generators shall be conducted during the less sensitive daytime hours (i.e., 6:00 a.m. to 8:00 p.m.), per the Sacramento County Noise Ordinance. All electrical generators shall be equipped with noise control (e.g., muffler) devices in accordance with manufacturers' specifications. • External mechanical equipment, including HVAC units, associated with buildings shall incorporate features designed to reduce noise emissions below the stationary noise source criteria. These features may include, but are not limited to, locating equipment within equipment rooms or enclosures that incorporate noise reduction features, such as acoustical louvers, and exhaust and intake silencers. Equipment enclosures shall be oriented so that major openings (i.e., intake louvers, exhaust) are directed away from nearby noise-sensitive receptors. In addition,	

		when locating HVAC units on buildings adjacent to residential land uses, HVAC units shall not be located directly adjacent to windows of residential units. HVAC locations shall be chosen to minimize noise at nearby residential land uses. • Loading docks shall be located and designed so that noise emissions do not exceed the stationary noise source criteria established in this analysis (i.e., exterior daytime [6:00 a.m. to 8:00 p.m.] standards of 55 dB L_{eq}/70 dB Lmax and the exterior nighttime [8:00 p.m. to 6:00 a.m.] standards of 50 dB L_{eq} /70 dB Lmax) at any existing sensitive receptor. At the time of conformity review application submittal for discretionary entitlement, the project applicant shall provide to the County a specialized noise study to evaluate specific design and ensure compliance with Sacramento County noise standards. Reduction of loading dock noise can be achieved by locating loading docks as far away as possible from noise sensitive land uses, constructing noise barriers between loading docks and noise-sensitive land uses, or using buildings and topographic features to provide acoustic shielding for noise-sensitive land uses. Final design, location, and orientation shall be dictated by findings in the noise study, if applicable. • Parking lots and structures shall be located and designed so that noise emissions do not exceed the stationary noise source criteria identified in this analysis (i.e., exterior daytime [6:00 a.m. to 8:00 p.m.] standards of 55 dB L_{eq}/70 dB Lmax and the exterior nighttime [8:00 p.m. to 6:00 a.m.] standards of 50 dB L_{eq} /70 dB Lmax) at any existing sensitive receptor. At the time of conformity review application submittal for discretionary entitlement, the project applicant shall provide to the County a specialized noise study to evaluate specific design and ensure compliance with Sacramento County noise standards. Reduction of parking lot noise can be achieved by locating parking lots away from noise sensitive land uses, constructing noise barriers between parking lots/structures and noise-sensitive land uses, incorporating noise barriers into parking structure designs	

		(e.g., providing solid walls around the top levels of parking structures), or using buildings and topographic features to provide acoustic shielding for noise-sensitive land uses. Final design, location, and orientation shall be dictated by findings in the noise study, if applicable.	
IMPACT: SUBSTANTIAL INCREASE IN THE EXISTING AMBIENT NOISE LEVELS New land uses to be developed as part of the Mather South Project, specifically commercial/retail land uses, would result in the siting of new noise sources associated with stationary equipment as part of building operations as well as new commercial activities areas (i.e. loading docks). Project land uses which result in new vehicle trip generation would contribute to traffic volume increases along roadways in and around the Plan Area and increase traffic related noise levels in the surrounding area. Based on the traffic noise modeling conducted, several affected roadway segments and their adjacent land uses outside of the Plan Area would experience substantial increases in ambient noise levels, including portions of Eagles Nest Road, Kiefer Boulevard, and Zinfandel Drive. Generally, land uses along the affected roadway segments are not designated as noise sensitive uses, however, there are several existing single-family homes along Eagles Nest Road that would likely experience a perceptible increase in traffic noise.	PS	NOI-5. Install Outdoor Sound Barriers at residential land uses along Eagles Nest Road between Kiefer Boulevard and Jackson Road to reduce increases in Traffic Noise Levels. • To offset the increase in noise levels from traffic volume increase along Eagles Nest Road, the project applicant shall offer the owners of residences along Eagles Nest Road the construction of a sound barrier (e.g., sound wall, berm) to reduce exterior traffic noise levels on the property. The project applicant shall offer the owners of all the residences with addresses along this roadway segment the installation of a sound barrier along the property line of their affected residential properties. The sound barriers must be constructed of solid material (e.g., wood, brick, adobe, an earthen berm, or combination thereof) and designed to ensure that the incremental increase in traffic noise is less than 5 dB L_{dn}. All barriers shall blend into the overall landscape and have an aesthetically pleasing appearance that agrees with the color and rural character of the houses and the general area, and not become the dominant visual element of the community. Relocation of the driveway at each residence may be necessary to preclude having gaps in the sound barrier. Relocation of landscaping may also be necessary to achieve an aesthetically pleasing appearance. The owners of the affected properties may choose to refuse this offer; however, the offer shall be made available to subsequent owners of the property if change of ownership occurs before project construction is complete. If an existing owner refuses these measures, a deed notice must be included with any future sale of the property to comply with California state real estate law, which requires that sellers of real property disclose “any fact materially affecting the value and desirability of the property” (California Civil Code, Section 1102.1[a]) and	SU

		shall indicate that the project applicant agrees to install a sound barrier, as described above. To ensure compliance with applicable noise standards, a site-specific noise study shall be conducted by the project applicant or one of its approved consultants to determine specific noise barrier design. The project applicant shall also be responsible for removal of these sound barriers at the end of project construction. NOI-6. Use rubberized hot-mix asphalt for the road widening project along Eagles Nest Road. • Paving the nearby segment of roadway with rubberized hot-mix asphalt (RHMA) or equivalent surface treatment with known noise-reducing properties on top of the roadway surface. 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. RHMA has been found to achieve this level of noise reduction in other parts of California (Sacramento County 1999). Pavement will require more frequent than normal maintenance and repair to maintain its noise attenuation effectiveness.	
CUMULATIVE NOISE IMPACT: TRAFFIC NOISE The projects listed in the Cumulative Settings section above are anticipated to contribute to cumulative traffic volume increases within Sacramento County and would result in subsequent increases in traffic noise levels along affected roadways. Specifically, the New Bridge, Jackson Township and Jackson Highway master and specific plans are anticipated to be developed near the Plan Area. Because of the buildout of these plans as well as other cumulative development in the County, vehicular traffic volumes would increase and result in a cumulative increase in traffic noise levels along affected	PS	CU-NOI-1 Use rubberized hot-mix asphalt for all offsite road widening projects implemented as part of the Mather South, NewBridge, Jackson Township or West Jackson plans. • Projects are required to pave offsite segments of roadway with rubberized hot-mix asphalt (RHMA) or equivalent surface treatment with known noise-reducing properties on top of the roadway surface. 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	SU

roadways. For a scenario in which all cumulative projects aside from the Mather South Project were developed and noise sensitive land uses were built along Kiefer Boulevard between Douglas Road and Sunrise Boulevard as part of the New Bridge Specific Plan and Jackson Highway Specific Plan, development of the Mather South Project's cumulative contribution to traffic volumes would increase traffic noise levels above applicable incremental increase threshold of 1.5 dB established in Table NO-2. Thus, a cumulative impact regarding long-term traffic exists and the cumulative plus project would result in additional substantial (i.e., 1.5 dB) increases in traffic 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. RHMA has been found to achieve this level of noise reduction in other parts of California (Sacramento County 1999). Pavement will require more frequent than normal maintenance and repair to maintain its noise attenuation effectiveness.	
Public Services			
IMPACT: FIRE PROTECTION AND EMERGENCY SERVICES The Mather South Project would increase the demand for fire protection and emergency services provided by Metro Fire. The project includes 3,522 new dwelling units, commercial, retail, and civic uses. Utilizing the County's estimate of 2.64 persons per dwelling unit, the Mather South Project would increase the population of the Jackson Road corridor area by approximately 9,298 residents (i.e., 3,522 du x 2.64 persons). This increase in demand would require additional staff and fire facilities to maintain service levels and to ensure that adequate fire protection is provided. Metro Fire has indicated that the Mather South Project would trigger the need for a new fire station within the Plan Area. As a result, the project has included a new fire station site within the site plan, which is located along Gateway North Drive near Zinfandel Drive within a residential parcel (R1). The exact location and size of the parcel will be finalized when the land is dedicated; however, it would be required to meet Metro Fire location requirements for new fire stations and be approved by the agency.	LTS	No mitigation required.	N/A
IMPACT: LAW ENFORCEMENT SERVICES The Mather South Project includes a maximum of 3,522 residential units which would provide housing for a residential population of approximately 9,298 residents, as well as	LTS	No mitigation required.	N/A

associated non-residential uses, including commercial, retail, and civic uses which would increase the demand for law enforcement services to be provided by SSD. SSD has substations located throughout the unincorporated county, including the closest one, Kilgore Station East Division located approximately 3.5 miles north in Rancho Cordova at 2897 Kilgore Road. SSD has indicated that the existing substation can accommodate new staffing and equipment that may be needed to serve the growth associated with the Mather South Project. The project would provide funding in the form of development impact fees and ongoing property taxes that would provide funding for additional staffing and equipment needed to maintain and improve service levels for law enforcement within the Mather South Plan Area and the surrounding areas.			
IMPACT: SCHOOL SERVICES The Mather South Project is within the service area of the EGUSD. Development of the project would result in increases to the local student population. The project includes two elementary school sites within the Plan Area, each 10-12 acres in size, which would accommodate all of the potential elementary school students generated by the project, as well as students from other nearby areas. However, the project would increase demand for middle and high school capacity in a school district that is already considered over capacity. California Government Code 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. The Mather South Project would pay all fees related to school facilities consistent with SB50 and Government Code.	LTS	No mitigation required.	N/A
IMPACT: PARKS AND RECREATION SERVICES The County Land Development Ordinance (Title 22 of Sacramento County Code) requires new residential developments to dedicate land, pay a fee in lieu thereof, or	LTS	No mitigation required.	N/A

provide a combination of dedication and in-lieu fees for park facilities consistent with Quimby Act requirements. The Quimby Act and the Sacramento County General Plan require 3-5 acres of parkland per 1,000 residents. The Mather South Project includes four neighborhood parks and one community park which are distributed throughout the Plan Area. The total proposed acreage of neighborhood parks would be 21.55 acres, with each ranging in size from 4.55 acres to 7.03 acres. The project also includes the construction of a 22.28-acre community park. Therefore, the total proposed park acreage within the Plan Area would be 44.03 acres. This would result in a shortfall of 1.43 acres of active parkland which is addressed in the Mather South Community Master Plan policy 5-7 and would be made up by adjusting Park 1 in Phase 1 or by dedicating in-lieu fees consistent with Title 22 of the Sacramento County Code.			
IMPACT: LIBRARY SERVICES Residents of the Mather South Project would increase the demand for library services provided by the Sacramento Public Library Authority. The Mather South Plan Area is located within the Rancho Cordova/Sunrise Douglas Service Area. The Sacramento Public Library Authority Facility Master Plan 2007 – 2025 (Library Master Plan) addresses future library needs based upon an evaluation of anticipated growth by service area. The Library Plan calls for three to four new libraries within the vicinity of the Plan Area to accommodate projected growth, including the Mather South Project, by 2025.	LTS	No mitigation required.	N/A
Public Utilities			
IMPACT: WASTEWATER TREATMENT AND DISPOSAL The project would require new infrastructure in order to provide wastewater service to the new land uses within the Plan Area. The project would connect to the planned sewer line extension along Zinfandel Drive and extend lines to Kiefer Boulevard. The backbone collection system within the Plan Area would include the construction of 8-inch, 10-inch, 12-inch, and 15-inch sanitary sewer collection lines within proposed street right-of-way. No offsite collection lines are proposed. Wastewater	LTS	No mitigation required.	N/A

would be routed to the SRWTP which has capacity to treat the estimated 1.23 mgd that the project would produce. A Level 1 sewer study for the Mather South project has been approved by Sacramento Area Sewer District, and a more detailed sewer study for the Plan Area would be prepared when subsequent tentative map applications are submitted for the project.			
IMPACT: SOLID WASTE SERVICES AND CAPACITY The Mather South Project would allow for the construction of 3,522 residential units, approximately 800,000 square feet of commercial and office uses, and two elementary schools. Development of the project would result in an increased demand for solid waste services. The Mather South Plan area would be served by the Sacramento County Department of Waste Management and Recycling, which provides solid waste services to unincorporated areas of Sacramento County. Sacramento County owns and operates the Kiefer Landfill, located at Kiefer Boulevard and Grant Line Road, which is the primary municipal solid waste disposal facility in Sacramento County. The Kiefer Landfill facility would receive an estimated 9,855 tons of annual waste from the project's buildout. Cal Recycle's website indicates that the landfill's permitted capacity is approximately 117 million cubic yards and has a remaining capacity of approximately 113 million cubic yards.	LTS	No mitigation required.	N/A
Traffic and Transportation			
IMPACT: IMPACTS TO ROADWAY SEGMENT OPERATIONS The traffic analysis assumed that the Mather South Project would construct travel lanes on roadway segments that are internal to or on the boundary of the Mather South project, which would be greater than the number of lanes in the existing condition. This is a required condition of approval for all the Jackson Corridor projects. The construction of the additional traffic lanes on these internal or boundary roadway segments would affect whether impacts would exist at some point before full build out of the Mather South Project. To provide consistency in the assumptions of development and the analysis of impacts, the County has required all Jackson Corridor projects to construct additional travel lanes on internal	~~P~~S	TR-1. Jackson Corridor Transportation Mitigation Strategy Participation The project applicants shall participate in the implementation of the Jackson Corridor Transportation Mitigation Strategy **as approved 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 applicants shall enter into an agreement at the time of project approval to use 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	SU

and border travel roads. Considering this consistent development assumption, as shown in Table TR-18, the addition of vehicle trips generated by project buildout would result in the exceedance of applicable LOS and V/C thresholds along six roadway segments.		with each ~~phase~~**development increment**. ~~For projects or phases with less than 50 dwelling unit equivalents (DUEs), at the discretion of the Director of the SacDOT, specific improvements may not be required to be constructed, but instead collected fair-share mitigation revenue shall be allowed to accrue in the mitigation budget that the County would manage to address unforeseen capacity and operations issues. For projects or phases with 50 DUEs or more, the project applicant may have the option to advance fund mitigation improvements for each phase of development or portions thereof, as identified by the Tool. Advanced funding could be provided through the creation of a Community Facilities District (CFD) or similar financial mechanism, through a cash contribution upfront, and/or through the construction of the required improvements.~~ TR-2. Use of Dynamic Implementation Tool The applicant shall at the time of project approval s~~hall enter into an agreement acknowledging~~**acknowledge** that the project-specific list of improvements specified in Mitigation Measure TR-1 may be modified over time through the use of the Tool at each phase of project development, subject to the approval of the SacDOT. As development proceeds, the 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 by another project~~ **as described in the Jackson Corridor Transportation Mitigation Strategy adopted by the Board of Supervisors on July 23, 2019**. ~~TR-3~~. Roadway Segment Mitigation **The project applicant shall implement Mitigation Measures TR-1 and TR-2.** ~~The project applicant shall implement the set of improvements assigned to the project by the Tool (Mitigation Measure TR-1) as identified in Table TR-19. Detailed intersection operations calculations and the full list of study area intersection operating conditions are included in~~	

		~~Appendix TR-1. Where feasible, the number of roadway lanes was increased to mitigate the impact. However, the roadways cannot be widened such that they exceed the maximum General Plan standards and designations of the appropriate jurisdictions. The shaded table cells under the "Travel Lanes" and "Facility Type" headings illustrate roadways widened as part of mitigation, which would be the responsibility of the Mather South project to implement. The shaded table cells under the "Level of Service" heading indicate those locations that would continue exceed applicable LOS standards after mitigation. The "LOS Impact with Mitigation" column shows whether a mitigation measure successfully mitigates the impact or not. However, it cannot be guaranteed that all of these improvements would be implemented concurrent with the phasing of development proposed for the Mather South Project because of the dynamic and interrelated nature of mitigation improvements that would serve multiple development projects. If all improvements were implemented in a timely way, all impacts would be reduced to a less-than-significant level. However, because the timing of implementation of all required improvements cannot be guaranteed and is not subject to the sole responsibility of just Mather South applicants and the County, it cannot be guaranteed that significant impacts will be reduced to less than significant at the time of phased development.~~	
IMPACT: IMPACTS TO INTERSECTION OPERATIONS Signal warrant analysis was also conducted for all unsignalized intersections along Jackson Road, and other unsignalized intersections near the project. Detailed signal warrant calculation sheets are included in Appendix TR-1. With implementation of the Mather South Project, the following unsignalized intersections would experience traffic volumes resulting in one or more traffic signal warrants being met: • Woodring Drive and Zinfandel Drive • Happy Lane and Old Placerville Road	~~P~~S	~~TR-4.~~ Intersection Operations Impacts • The project applicant shall implement Mitigation Measures TR-1 and TR-2. • ~~The project applicant shall implement the set of improvements assigned to the project by the Tool (Mitigation Measure TR-1) as identified in Table TR-21 and TR-22. Detailed intersection operations calculations and the full list of study area intersection operating conditions are included in Appendix TR-1. Where feasible, the number of roadway lanes was increased to mitigate 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~~	SU

• Eagles Nest Road and Jackson Road As shown in Table TR-17, the addition of vehicle trips generated by project buildout would result in the exceedance of applicable LOS and delay thresholds.		~~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.~~	

IMPACT: FREEWAY FACILITY IMPACTS
 	
FREEWAY MERGE / DIVERGE / WEAVE SEGMENTS
 	
Table TR-25 summarizes a.m. and p.m. peak hour freeway operations at merge/diverge/weave segments. Detailed merge/diverge/weave data and analysis is included in Appendix TR-1.
 	
Due to the addition of project-related traffic to the freeway network, the following location would experience merge / diverge LOS worse than the freeway's LOS:
 	
• Westbound Watt Avenue to Howe Avenue weave - p.m. peak hour
	~~P~~S	TR-~~5~~**3**. Freeway ~~Capacity~~ Improvements
		
		• ~~The project applicant shall implement Mitigation Measures TR-1 and TR-2. No other feasible mitigation is available.~~
		
		• ~~To minimize to westbound US 50 weave between Watt Avenue and Howe Avenue, the project applicants shall pay their fair share contribution toward the construction of one or more of the following improvements. At the time of issuance of building permits, SacDOT and the County Special Districts group will coordinate with Caltrans to identify the project-applicant's appropriate fair share contributions.:~~
		
		  • ~~Bus/HOV lanes from Watt Avenue to Downtown Sacramento (2035 SACOG MTP). The bus/HOV lanes from Watt Avenue to Downtown Sacramento are programmed and the project is anticipated to be completed by 2030.~~
		
		  • ~~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 onramp (2035 SACOG MTP). The auxiliary lane between the NB Howe Avenue on-ramp and the SB Howe Avenue onramp is planned and completion of the project is anticipated after 2036.~~
		
		  • ~~Ramp meter improvements (Caltrans ITS/OPS~~
			SU

		~~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:** o **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.** o **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].** ~~Capacity improvements such as widening of the freeway and freeway junctions would reduce the severity of the impacts but were considered infeasible due to right-of-way restrictions, legal and jurisdictional constraints, and potential economic infeasibility. 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. ITS is the application of technology to ground transportation to improve safety, mobility and efficiency. ICM projects focus on the management of corridors as a multimodal system and make operational decisions for the benefit of the corridor as a whole. ITS and ICM projects 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.~~	
IMPACT: BICYCLE AND PEDESTRIAN IMPACTS The Mather South Project would not remove any existing or planned bicycle or pedestrian facilities. Additionally, the Mather South Project would include the provision of new bicycle and pedestrian facilities throughout the Mather South Plan Area, and between the project site and other nearby land uses. As detailed in the Project Transportation Improvements section and Plate TR-12, the Mather South Project would provide sidewalks and on-street (Class II) bike lanes on all collector, arterial and thoroughfare roadways. The project also provides several off-street (Class I) multi-purpose trails. Sidewalks would be required as part of the frontage improvements along all new roadway construction in the Mather South Project vicinity in conformance with County design standards. However, because the design of facilities is unknown, they could potentially result in an increase in pedestrian/bicycle-vehicle conflict points; and thus, could result in a degradation of bicycle and pedestrian safety.	PS	TR-~~6~~**4**. Bicycle and Pedestrian **System Implementation** ~~Improvements~~ **Future development within the Mather South Community Master Plan (MSCMP) shall implement the proposed bicycle and pedestrian path/trail system as described in the Mather South Community Master Plan and Design Guidelines.** Before approval of any tentative map, the project applicants shall coordinate with Sacramento County to identify the necessary on- and offsite pedestrian and bicycle facilities to serve the individual project 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 Guidelines.** The proposed improvements would be constructed within the footprint of the overall project area and as such the construction-related environmental impacts of these improvements have been evaluated throughout this Draft EIR.	LTS
IMPACT: TRANSIT IMPACTS Public transit is not currently provided to, or in the vicinity of the Mather South Project site. As detailed in the Project Transportation Improvements section, a conceptual transit system to serve the Jackson Corridor Projects (including the Mather South Project) was developed by Sacramento County, SacRT, DKS Associates, and the applicants of the Jackson	~~PS~~**LTS**	TR-~~7~~**5**. Transit Improvements 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	~~LTS~~**~~N/A~~**

Corridor Projects as part of a joint transit planning process. The proposed transit system is a condition of approval for the project and was assumed as an attribute of the Mather South Project and included in the traffic modeling and analysis in the Joint TIS. The assumed transit routes and service frequency would be required at full development of the Mather South Project. The proposed transit system has been included as a condition of approval, included in the draft Development Agreement for the project, and must be phased with development of the Mather South Project. Additionally, as indicated in Policy 4.4-35 of the Community Master Plan, the Mather South Financing Plan would include a funding source to implement this transit service.		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. **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.**	
IMPACT: ROADWAY FUNCTIONALITY IMPACTS Table TR-26 summarizes the results of the rural roadway segment functionality analysis. This table includes the number of lanes assumed with the implementation of the Mather South Project, which in many cases is greater than the number of lanes in the existing condition. The "Substandard" heading indicates whether a roadway meets the County standards requiring12-foot wide travel lanes with 6-foot wide 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. The traffic analysis assumed that the Mather South Project would construct several travel lanes on roadway segments that are internal to, or on the boundary of the Mather South Project, and the entire roadway segment would be reconstructed to County standards. The timing of implementation of these additional traffic lanes on these internal or boundary roadway segments would affect whether or not impacts would occur as some point before full build out of the Mather South Project. As shown in Table TR-26, implementation of the project would result in functionality impacts along 12 roadway segments	~~P~~S	TR-~~8~~**6**. Roadway Functionality Improvements The project applicant shall implement Mitigation Measure TR-1 and TR-2. The applicant shall consult with the County on the timing needs of proposed improvements and shall either submit their fair share payment and/or enter into an agreement to construct the assigned improvements. Improvements projected to be required based on the status of current development in the area is summarized in Table TR-27. As development in the area is approved and proceeds to construction, the timing or assignment of specific traffic improvements may change but would nonetheless be assigned to each project based on their fair-share contribution to the overall area impacts. As shown in Table TR-27 proposed improvements include widening the deficient rural roadway segments to County standards Table TR-27 summarizes the proposed improvements of widening the deficient rural roadway segments to County standards, and the resultant functionality analysis for these roadway segments with these improvements implemented.	SU

within the project study area.			
IMPACT: EMERGENCY ACCESS AND HAZARDOUS DESIGN FEATURE IMPACTS The Mather South Project would provide new roadway connections which would provide for improved emergency access and connections within the project area; and thus, would not interfere with emergency response. Additionally, the project would not modify the existing roadway network such that emergency access along existing roadways would be impaired.	LTS	No mitigation required.	N/A
CUMULATIVE PLUS FOUR PROJECTS IMPACTS			
IMPACT: CUMULATIVE ROADWAY SEGMENT OPERATIONS Table CU-7 shows the operations analysis for the traffic study area roadway segments which would experience significant impacts under the Cumulative Plus Jackson Corridor Projects scenario. The table includes the new roadways and/or widened roadways, the project(s) responsible for the roadway improvements, and the roadway segments where a LOS impact occurs. Plate CU-8 illustrates the resultant traffic operating conditions associated with the Cumulative Plus Jackson Corridor Projects scenario. Detailed roadway segment operations calculations and the full list of study area roadway segment operating conditions are included in Appendix TR-1. As shown in Table CU-7, the addition of vehicle trips generated by the Jackson Corridor Projects would result in the exceedance of applicable LOS and V/C thresholds along 69 roadway segments in the study area.	~~P~~S	CU-TR-1. The project applicant shall implement Mitigation Measures TR-1 and TR-2. The project applicant shall implement the set of improvements assigned to the project by the Tool (Mitigation Measure TR-1) as identified in Table CU-8. Detailed intersection operations calculations and the full list of study area intersection operating conditions are included in Appendix TR-1. Where feasible, the number of roadway lanes was increased to mitigate the impact. However, the roadways cannot be widened such that they exceed the maximum General Plan standards and designations of the appropriate jurisdictions. The shaded table cells under the “Travel Lanes” and “Facility Type” headings illustrate roadways widened as part of mitigation, which would be the responsibility of the Mather South project to implement. The shaded table cells under the “Level of Service” heading indicate those locations that would continue to operate unacceptably after mitigation. The table also includes the constraint that precluded full mitigation of the LOS impact. 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 would either fully mitigate the impact or substantially reduce the level of impact. The shaded table cells under the “Level of Service” heading indicate those locations that would continue exceed applicable LOS	SU

		standards after mitigation. The "LOS Impact with Mitigation" column shows whether a mitigation measure successfully mitigates the impact or not. A total of 45 of the 69 roadway segments would remain significant and unavoidable with implementation of mitigation.	
IMPACT: CUMULATIVE INTERSECTION OPERATIONS Table CU-9 and Table CU-10 summarize the results of the operations analysis for the study area intersections under the Cumulative Plus Jackson Corridor Project scenario. The tables include the implementation of intersection changes associated with the Jackson Corridor Projects. Table CU-10 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 CU-9 illustrate those locations with a LOS impact. Plate CU-8 illustrates the resultant traffic operating conditions associated with the Cumulative Plus Jackson Corridor Projects scenario. Detailed intersection operations calculations and the full list of study area intersection operating conditions are included in Appendix TR-1. A signal warrant analysis was conducted for all unsignalized intersections along Jackson Road, and other unsignalized intersections in close proximity to the project. Detailed signal warrant calculation sheets are included in Appendix TR-1. The following unsignalized intersections would operate at unacceptable levels and meet one or more traffic signal warrant under the Cumulative Plus Jackson Corridor Projects conditions: • Happy Lane and Old Placerville Road • Eagles Nest Road and Florin Road As shown in Table CU-9, the addition of vehicle trips generated by Jackson Corridor Projects would result in the exceedance of applicable LOS and delay thresholds under Cumulative Plus	~~P~~S	CU-TR-2. Cumulative Intersection Operations. The project applicant shall implement Mitigation Measures TR-1 and TR-2. The project applicant shall implement the set of improvements assigned to the project by the Tool (Mitigation Measure TR-1) as identified in Table CU-11a and Table CU-12a. Table CU-11a and Table CU-12a summarize recommended mitigation and the results of the operations analysis for the traffic study area intersections with mitigation, which does not exceed the County's standard number of approach lanes, under the Cumulative Plus Jackson Corridor Projects scenario. Table CU-11b and Table CU-12b summarize recommended mitigation and the results of the operations analysis for the traffic study area intersections with ultimate mitigation, which may exceed the County's standard number of approach lanes, under the Cumulative Plus Jackson Corridor Projects scenario. Shaded table cells 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. Table CU-12a and Table CU-12b also identify those intersections that would continue operate at unacceptable levels after mitigation, along with the constraint that precluded full mitigation. 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 would either fully mitigate the impact or substantially reduce the level of impact. Detailed intersection operations calculations and the full list of study	SU

Jackson Corridor Project conditions.		area intersection operating conditions are included in Appendix TR-1. Additionally, detailed descriptions of the three "High Capacity Intersections" identified in Table CU-12b are provided in Appendix TR-1.	
IMPACT: CUMULATIVE FREEWAY FACILITY IMPACTS Table CU-14 summarizes a.m. and p.m. peak hour US 50 freeway mainline operations under the Cumulative Plus Jackson Corridor Project scenario. Detailed freeway mainline operations calculations are included in Appendix TR-1. The following freeway mainline location would experience unacceptable operating conditions with the addition of traffic generated by the Jackson Corridor Projects: • Eastbound • Stockton Boulevard to 59th Street - a.m. peak hour Due to the addition of traffic to freeway ramp intersections in the study area generated by the Jackson Corridor Projects, the following locations would experience queues that exceed the available storage capacity: • Eastbound • Exit ramp to Howe Avenue - right turn queue length exceeds available storage – a.m. peak hour • Exit ramp to Zinfandel Drive-right turn and through queue length exceeds available storage – a.m. peak hour • Westbound • Exit ramp to Rancho Cordova Parkway - left turn queue length exceeds available storage – a.m. and p.m. peak hours As shown in Table CU-17, with implementation of the Jackson Corridor Projects, the following merge/diverge/weave segment would experience merge / diverge LOS worse than the	~~P~~S	CU-TR-3. Cumulative Freeway Capacity Improvements. 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. **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**	SU

freeway's LOS: • Westbound • Hazel Avenue to Rancho Cordova Parkway weave - a.m. peak hour		**Folsom for incident management (non-capacity increasing) [Caltrans ID SAC25113].** ~~Thus, to minimize the impact that the Jackson Corridor Projects would have on the westbound US-50 existing ramp to Rancho Cordova Parkway, at the time of issuance of building permits, SacDOT and the County Special Districts group shall coordinate with Caltrans to identify the appropriate fair share contribution that the project applicants shall pay toward the construction of one or more of the following alternative improvements:~~ ~~• 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.~~ ~~To minimize the impact that the Jackson Corridor Projects would have on the US-50 mainline between Stockton Boulevard and 59th Street, at the time of issuance of building permits SacDOT and the County Special Districts group shall coordinate with Caltrans to identify the appropriate fair share contribution that the project applicants shall pay toward the construction of the following alternative improvement:~~ ~~• Ramp meter improvements (Caltrans ITS/OPS Project List)~~ ~~To minimize the impact that the Jackson Corridor Projects would have on the westbound US-50 weave between Hazel Avenue and Rancho Cordova Parkway, at the time of~~	

		~~issuance of building permits SacDOT and the County Special Districts group shall coordinate with Caltrans to identify the appropriate fair share contribution that the project applicants shall pay toward the construction of the following alternative improvement:~~ ~~• 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)~~	
IMPACT: CUMULATIVE ROADWAY FUNCTIONALITY IMPACTS Table CU-18 summarizes the results of the rural roadway segment functionality analysis. This table includes the number of lanes assumed with the implementation of the Mather South Project, which in many cases is greater than the number of lanes in the existing condition. The "Substandard" heading indicates whether a roadway meets the County standards requiring12-foot wide travel lanes with 6-foot wide 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. Plate CU-9 depicts the location of the segments along which functionality impacts would occur.	~~P~~S	CU-TR-4. Cumulative Roadway Functionality Improvements The project applicant shall implement Mitigation Measure TR-1 and TR-2. This program would require that before the issuance of tentative maps, the County shall identify the appropriate fair share contribution that the project applicants shall pay toward the construction of the improvements summarized in Table CU-19. Proposed improvements include widening the deficient rural roadway segments shown in Table CU-19 to County standards. Table CU-19 summarizes the proposed improvements of widening the deficient rural roadway segments to County standards, and the resultant functionality analysis for these roadway segments with these improvements implemented.	SU
CUMULATIVE PLUS MATHER SOUTH PROJECT			
IMPACT: CUMULATIVE ROADWAY SEGMENT OPERATIONS CUMULATIVE PLUS MATHER SOUTH PROJECT Table CU-20 summarizes the results of the operations analysis for the traffic study area roadway segments under the Cumulative No Project and Cumulative Plus Jackson Corridor Projects conditions. The table includes the new roadways or widened roadways, the roadway improvements that would be the responsibility of the project, and the roadway segments	~~P~~S	CU-TR-5. Cumulative Roadway Segment Operations Cumulative Mather South Project The project applicant shall implement Mitigation Measure CU-TR-1 which requires the applicant to pay their appropriate fair share contribution toward the construction of the improvements summarized in Table CU-21. Table CU-21 summarizes the results of the operations analysis for the study area roadway segments with	SU

where a LOS impact occurs. Detailed roadway segment operations calculations and the full list of study area roadway segment operating conditions are included in Appendix TR-1. As shown in Table CU-20, the addition of vehicle trips generated by the Mather South Project would result in the exceedance of applicable LOS and V/C thresholds along four roadway segments in the study area.		mitigation under the Cumulative Plus Mather South Project scenario. 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 Mather South Project would contribute its fair share for these improvements. The shaded table cells under the "Level of Service" heading indicate those locations that would continue to operate unacceptably after mitigation. The table also includes the constraint that precluded full mitigation of the LOS impact. 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.	
IMPACT: CUMULATIVE INTERSECTION OPERATIONS CUMULATIVE MATHER SOUTH PROJECT Table CU-22 and Table CU-23 summarize the results of the operations analysis for the study area intersections under Cumulative Plus Mather South Project conditions. The tables include the implementation of intersection changes associated with the Mather South Project. Table CU-23 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 CU-22 illustrate those locations with a LOS impact. Detailed intersection operations calculations and the full list of study area intersection operating conditions are included in Appendix TR-1. A signal warrant analysis was conducted for all unsignalized intersections along Jackson Road, and other unsignalized intersections in close proximity to the project. Detailed signal	~~P~~S	CU-TR-6. Cumulative Intersection Operations Cumulative Mather South Project The project applicant shall implement Mitigation Measure CU-TR-2. This mitigation will require the project applicant to contribute their appropriate fair share contribution toward the construction of the improvements summarized in Table CU-24a through Table CU-25b below. Table CU-24a and Table CU-25a summarize recommended mitigation and the results of the operations analysis for the traffic study area intersections with mitigation, which does not exceed the County's standard number of approach lanes, under the Cumulative Plus Mather South Project scenario. Table CU-24b and Table CU-25b summarize recommended mitigation and the results of the operations analysis for the traffic study area intersections with ultimate mitigation, which may exceed the County's standard number of approach lanes, under the Cumulative Plus Mather South Project scenario.	SU

warrant calculation sheets are included in Appendix TR-1. The following unsignalized intersection would operate at an unacceptable level and meet one or more traffic signal warrant under the Cumulative Plus Mather South Project conditions: • Eagles Nest Road and Florin Road As shown in Table CU-22, the addition of vehicle trips generated by the Mather South Project would result in the exceedance of applicable LOS and delay thresholds under Cumulative Plus Mather South Project conditions.		Shaded table cells 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. Table CU-25a and Table CU-25b also identify those intersections that would continue operate at unacceptable levels after mitigation, along with the constraint that precluded full mitigation. 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 would either fully mitigate the impact or substantially reduce the level of impact. Detailed intersection operations calculations and the full list of study area intersection operating conditions are included in Appendix TR-1.	
IMPACT: FREEWAY FACILITY IMPACTS CUMULATIVE PLUS MATHER SOUTH PROJECT Table CU-14 summarizes a.m. and p.m. peak hour US 50 freeway mainline operations under the Cumulative Plus Mather South Project scenario. Detailed freeway mainline operations calculations are included in Appendix TR-1. As shown in Table CU-14, with implementation of the Mather South Project, the Caltrans' threshold of significance (5 percent V/C increase) would not be exceeded along any of the freeway segments analyzed. Due to the addition of traffic to freeway ramp intersections in the study area generated by the Mather South Project, the following location would experience queues that exceed the available storage capacity: • Westbound • Exit ramp to Rancho Cordova Parkway - left turn queue	~~P~~S	CU-TR-7. Freeway Capacity Improvements The project shall implement Mitigation Measure CU-TR-3.	SU

length exceeds available storage As shown in Table CU-17, with implementation of the Mather South Project, none of the merge/diverge/weave segments would experience merge / diverge LOS worse than the freeway's LOS.			
IMPACT: CUMULATIVE ROADWAY FUNCTIONALITY IMPACTS CUMULATIVE MATHER SOUTH PROJECT Table CU-26 summarizes the results of the rural roadway segment functionality analysis under Cumulative Plus Mather South Project conditions. This table includes the number of lanes assumed with the implementation of the Mather South 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 Mather South 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 shown in Table CU-26, the implementation of the Mather South Project would result in functionality impacts along 13 roadway segments within the project study area.	~~P~~S	CU-TR-8. Roadway Functionality Improvements The project applicant shall implement Mitigation Measure CU-TR-4. This mitigation would require the project applicant to pay their appropriate fair share contribution toward the construction of the improvements summarized in Table CU-27. Proposed improvements include widening the deficient rural roadway segments shown in Table CU-27 to County standards. Table CU-27 summarizes the proposed improvements of widening the deficient rural roadway segments to County standards, and the resultant functionality analysis for these roadway segments with these improvements implemented.	SU
Water Supply			
IMPACT: REQUIRE OR RESULT IN THE CONSTRUCTION OF NEW OR THE EXPANSION OF EXISTING WATER FACILITIES, THE CONSTRUCTION OF WHICH COULD CAUSE SIGNIFICANT ENVIRONMENTAL EFFECTS. RESULT IN DEMAND THAT CANNOT BE MET BY EXISTING OR REASONABLY FORESEEABLE FUTURE SERVICE CAPACITY. The Mather South Project would result in the extension of 8-inch and 12-inch supply lines to the Plan Area from ~~the existing~~	LTS	No mitigation required.	N/A

~~30-inch-diameter North Service Area (NSA) Pipeline Phase A water main transmission main in Kiefer Boulevard,~~ the existing 16-inch diameter water line in Zinfandel Drive (south of Douglas Road) and the existing 16-nch diameter water line in Sunrise Boulevard. Additionally, a new ~~one~~**ten**-million-gallon water tank **farm** would be constructed in the northeastern portion of the Plan Area to serve the greater NSA. However, the need for the tank **farm** is related to the greater cumulative demand from anticipated storage needs within the NSA. The tank **farm** would be required when demands from new connections exceed the current storage capacity of the system. Depending on the timing of adjacent development and the water demands resulting from such development, the construction of the tank **farm** may not be required to serve the Plan Area. No new offsite water distribution or treatment infrastructure would be needed for the project as adequate supplies and treatment capacity is available to meet project demands.			
IMPACT: HAVE SUFFICIENT WATER SUPPLIES AVAILABLE TO SERVE THE PROJECT FROM EXISTING ENTITLEMENTS AND RESOURCES, OR ARE NEW OR EXPANDED ENTITLEMENTS NEEDED? Sacramento County Water Agency (SCWA) is the service provider to the Mather South Project and would provide a mix of surface water in wet years, with a higher utilization of groundwater during dry years. SCWA would also supplement surface and groundwater with remediated and recycled water as available. The water demands associated with the Mather South Project were included in the latest Zone 41 Urban Water Management Plan (UWMP) which estimates total water consumption for the project at 1,483.61 ac-ft/yr (including 7.5% system losses). SCWA's existing supplies for normal and dry years would exceed the total projected buildout water demand for the entire NSA. SCWA determined that it has sufficient water supplies to meet the water demands of the Mather South Project over the next 20 years during normal, single-dry, and multiple-dry years.	LTS	No mitigation required.	N/A
IMPACT: CONTRIBUTE TO GROUNDWATER PUMPING TO SERVE PROJECT GROWTH SUCH THAT THE AVERAGE ANNUAL SUSTAINABLE YIELD OF 273,000 ACRE-FEET	LTS	No mitigation required.	N/A

FOR THE CENTRAL SACRAMENTO GROUNDWATER BASIN IS EXCEEDED? SCWA is responsible for recognizing and implementing the sustainable long-term average annual yield for the Central Groundwater Basin of 273,000 acre feet. SCWA relies upon a conjunctive use supply program which alternates between surface and groundwater reliance in order to maintain the appropriate trajectory for groundwater basin sustainability. Additional protection against overdrafting of the groundwater resources within the Central Basin is provided by state legislation, and SCWA is responsible for complying with the Sustainable Groundwater Management Act. Therefore, because SCWA has determined that appropriate supplies for the Mather South Project are available without undermining the credibility of groundwater management.			
IMPACT: 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? Recharge of the aquifer system occurs along active river and stream channels where extensive sand and gravel deposits exist, and especially along the American, Cosumnes, and Sacramento rivers. Additional recharge occurs along the eastern boundary of Sacramento County at the transition point from the consolidated rocks of the Sierra Nevada to the alluvial-deposited basin sediments. Intensive groundwater use in the Central Basin over the past 60 years has resulted in a general lowering of groundwater elevations. The Mather South Project would introduce impervious surfaces that prevent or hinder groundwater recharge; however, most of the recharge and groundwater storage in the Central Basin occurs from subsurface flow, which would not be adversely affected by implementation of the project. Additionally, the Mather South Project includes approximately 210-acres of open space which is approximately 25 percent of the Plan Area, including 50.4-acres of stormwater management basins (~~nine~~ **ten** basins) which would allow for the percolation of stormwater.	LTS	No mitigation required.	N/A

MITIGATION MONITORING AND REPORTING PROGRAM

It shall be the responsibility of the project applicant/owner to comply with the Mitigation Monitoring and Reporting Program (MMRP) for this project and 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 $20,000.00. This deposit includes administrative costs of $900.00, which must be paid to the Office of Planning and Environmental Review 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, grading, work authorization, occupancy or other project-related permits. Over the course of the project, the 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.

TERMINOLOGY USED IN THIS EIR

This Draft EIR uses the following terminology to describe environmental effects of the project.

Significance Criteria. A set of criteria used by the lead agency to determine at what level, or "threshold," an impact would be considered significant. Significance criteria used in this EIR include those that are set forth in the State CEQA Guidelines or can be discerned from the State CEQA Guidelines; criteria based on factual or scientific information; criteria based on regulatory standards of local, state, and federal agencies; and criteria based on goals and policies identified in the Sacramento County General Plan.

Less-than-Significant Impact. A project impact is considered less than significant when it does not reach the standard of significance and would therefore cause no substantial change in the environment. No mitigation is required for less-than-significant impacts.

Potentially Significant Impact. A potentially significant impact is a substantial, or potentially substantial, adverse change in the environment. Physical conditions which exist within the area will be directly or indirectly affected by the proposed project. Impacts may also be short-term or long-term. A project impact is considered significant if it reaches the threshold of significance identified in the EIR. Mitigation measures may reduce a potentially significant impact to less than significant.

Significant Unavoidable Impact. A project impact is considered significant and unavoidable if it is significant and cannot be avoided or mitigated to a less-than-significant level once the project is implemented.

Cumulative Significant Impact. A cumulative impact can result when a change in the environment results from the incremental impact of a project when added to other related past, present or reasonably foreseeable future projects. Significant cumulative impacts may result from individually minor but collectively significant projects.

Mitigation. Mitigation measures are revisions to the project that would minimize, avoid, or reduce a significant effect on the environment. State CEQA Guidelines §15370 identifies five types of mitigation:

a) Avoiding the impact altogether by not taking a certain action or parts of an action.

b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.

c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.

d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

e) Compensating for the impact by replacing or providing substitute resources or environments.

1 PROJECT DESCRIPTION

PROJECT LOCATION

The Mather South Community Master Plan Project (Mather South Project) is located in the Cordova community of unincorporated Sacramento County. It is approximately 10 miles east of downtown Sacramento via Highway 50 and is generally situated within the central portion of Sacramento County (Plate PD-1). The project site (also referred to as the Plan Area) is approximately 848 acres in size and is located on a portion of the former Mather Air Force Base (Mather AFB), which is now a public airport facility referred to as Mather Field. The Plan Area is generally bounded by the Mather Golf Course and Mather Regional Park to the north, the Folsom South Canal to the east, Kiefer Boulevard to the south, and the Mather Preserve and planned alignment of Zinfandel Drive to the west. The Plan Area is within both the Urban Policy Area and Urban Services Boundary of Sacramento County. The City of Rancho Cordova is located immediately north and east of the Plan Area and unincorporated Sacramento County is located to the south and west (Plate PD-2).

The Plan Area is made up of seven individual parcels but its boundaries do not follow parcel lines. Therefore, the Plan Area includes portions of Assessor's Parcel Numbers: 067-0090-034, 067-0050-057, 067-0030-045, -072, -074, -076, and -077 located within Section 18 and 19, Township 8 North, Range 7 East on the Carmichael and Buffalo CR, California USGS 7.5-minute Quadrangle Maps. Refer to Plate PD-3.

PROJECT PROPONENTS

APPLICANTS

Mather South, LLC
Attention: Phil Rodriguez

OWNER

Sacramento County Office of Economic Development and Marketing
Attention: Clark Whitten

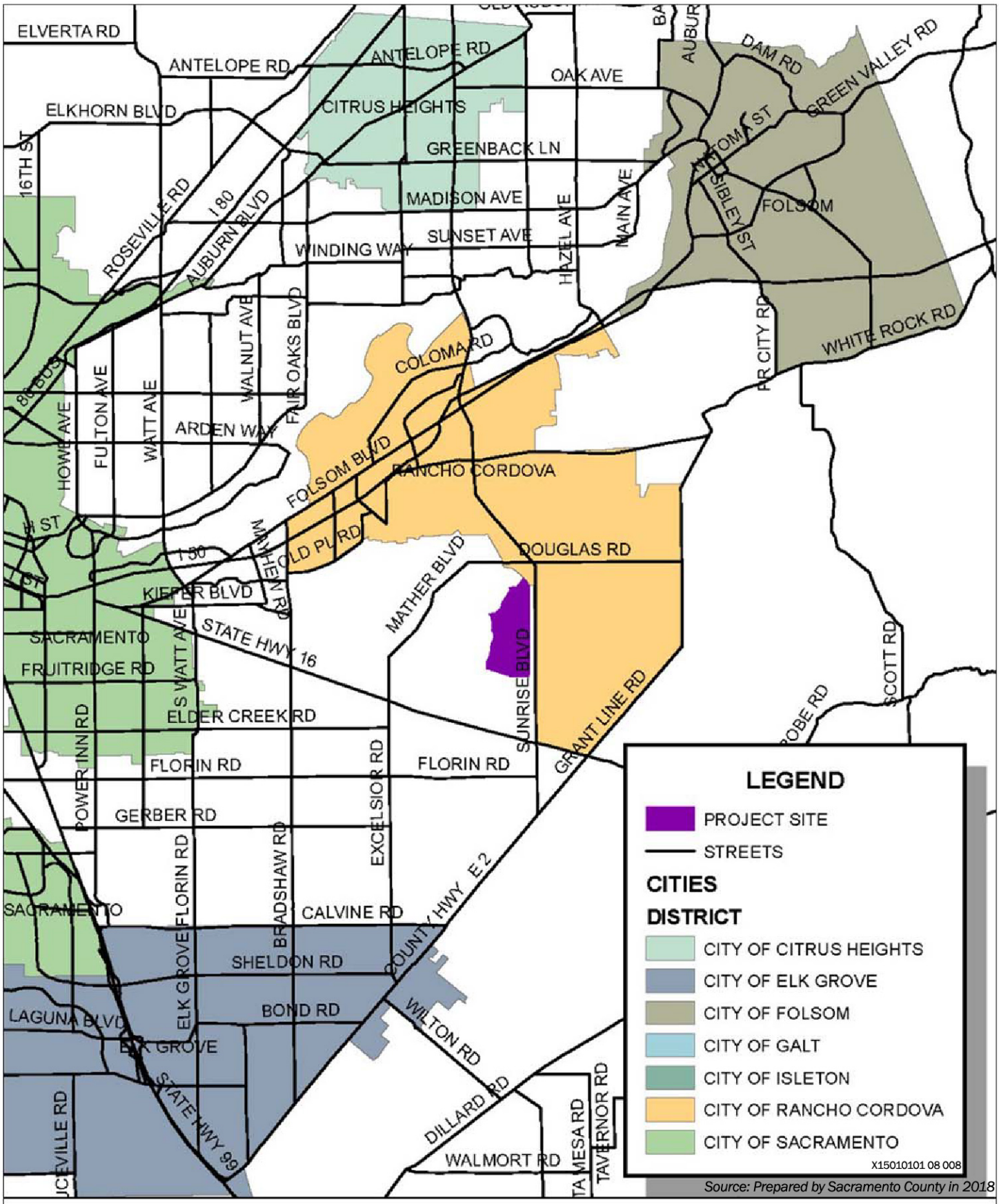
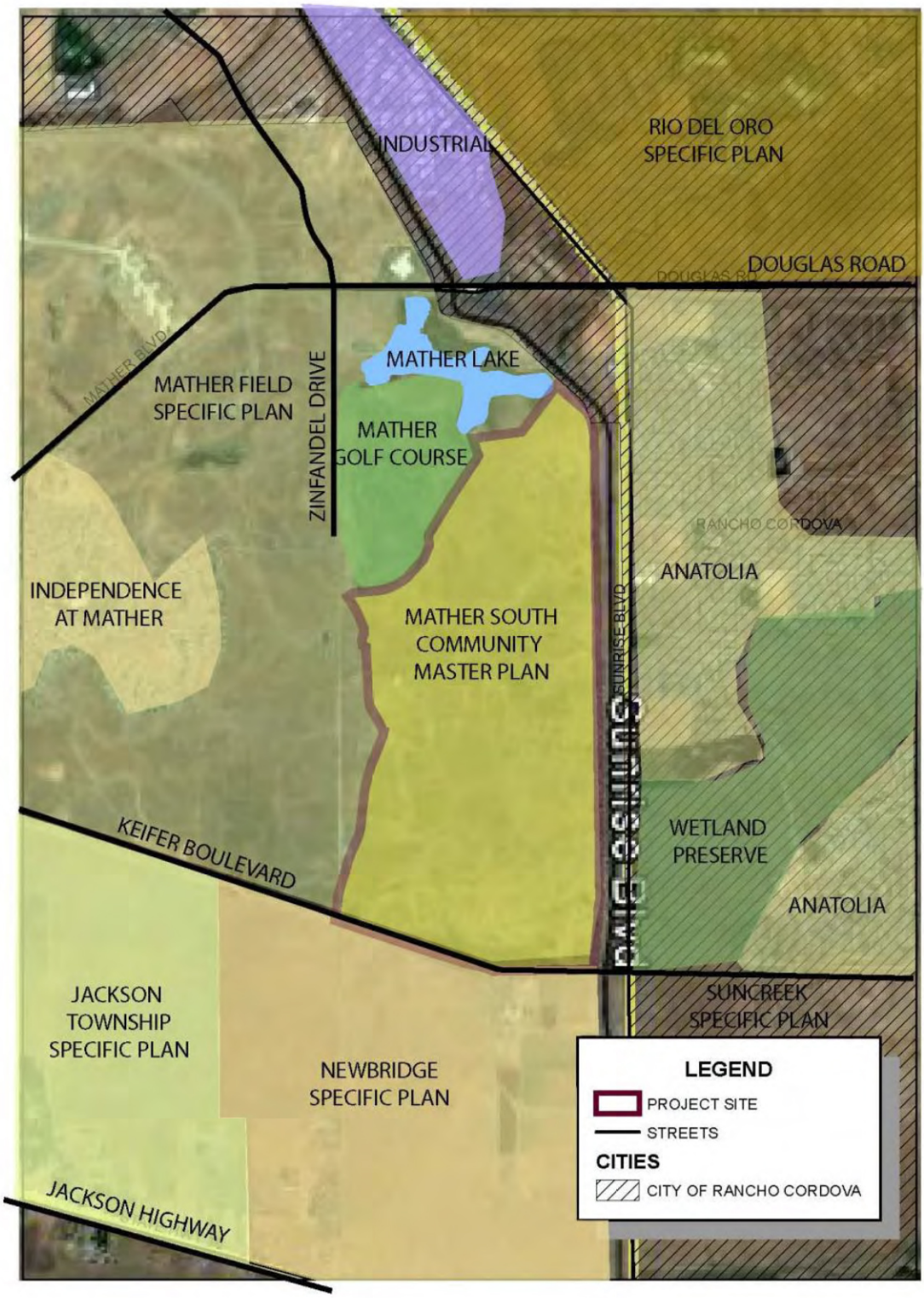


Plate PD-1: Regional Location



Source: Mather South Community Master Plan 2018

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Plate PD-2: Project Vicinity Map

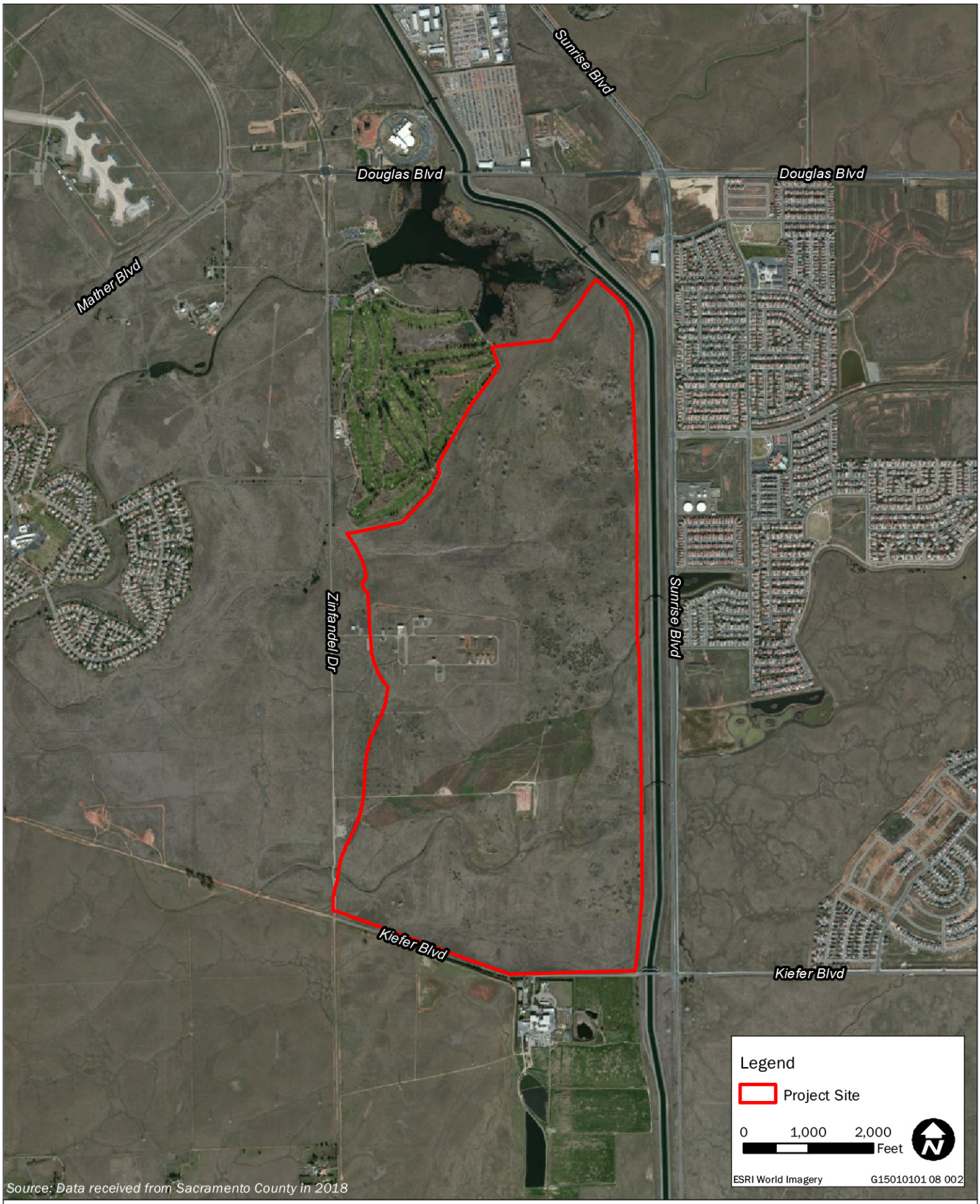


Plate PD-3: Aerial View

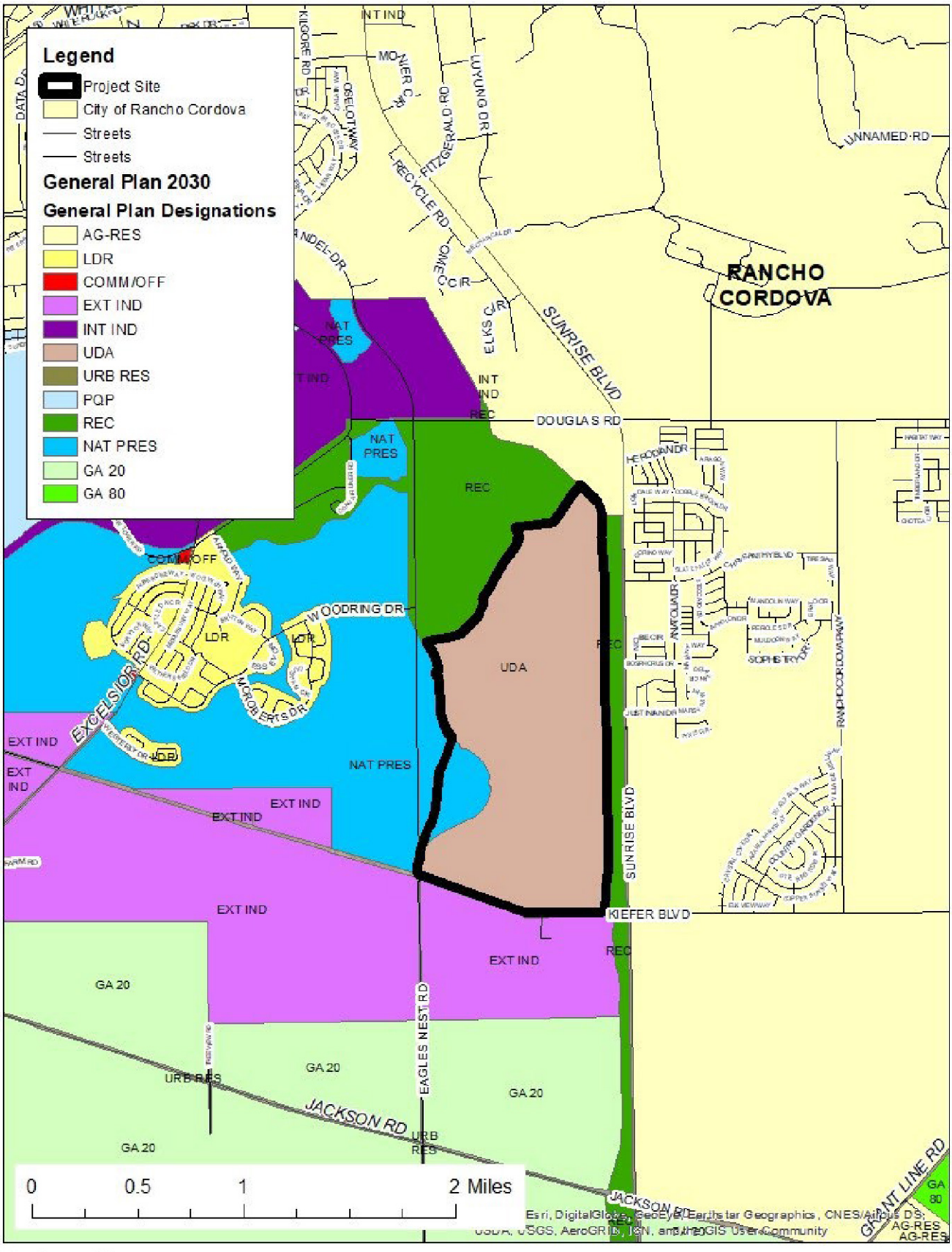
PROJECT SETTING

EXISTING LAND USES

The Plan Area was previously used and occupied by Mather AFB, which was developed in the early 20th century, and was decommissioned and closed by 1993. More information on past uses of the area is provided below under "Project Background." The Plan Area has been vacant since the closure of Mather AFB; however, some features remain from past military operations. Small outbuildings that served as ordnance storage and related military uses are located in the center of the Plan Area and a small private hobby model aeronautics area also remains in the southwest corner. The eastern margin of the Plan Area primarily contains excavated material from the construction of the Folsom South Canal, which borders the eastern edge of Plan Area. There are no existing roadways or infrastructure within the Plan Area; however, Zinfandel Drive extends south to the south end of the Mather Golf Course where it terminates on a dirt road along the west side of the Plan Area.

The Plan Area is generally flat with elevations ranging from 128 feet to 174 feet above mean sea level. Habitats present within the Plan Area include grassland, wetland and vernal pool areas, and intermittent drainages and swales. These water features occur throughout the Plan Area. There are two larger drainage features in the Plan Area which are tributaries of Todd Creek (a tributary of Morrison Creek). One crosses the Plan Area and flows east to west. The second originates from the middle of the Plan Area and flows to the west. The Plan Area contains several trees, which consist primarily of cottonwood.

Much of the land surrounding the Plan Area is open space and/or undeveloped. The Mather Golf Course and Mather Lake are immediately north of the Plan Area. Folsom South Canal and a parallel regional bikeway are located along the eastern edge of the Plan Area. Sunrise Boulevard and the Anatolia and Sunrise Douglas communities in the City of Rancho Cordova are located directly east of the Folsom South Canal. Zinfandel Drive and the Mather Preserve define the western boundary. The Independence at Mather community is located approximately one-half mile west of Zinfandel Drive. The runway and facilities associated with Mather Field are located approximately 1.7 miles northwest of the Plan Area. North of the runway are various businesses, the Sacramento Veterans Affairs Hospital and Medical Center, residential neighborhoods, and business parks. Kiefer Boulevard is located along the southern boundary of the Plan Area, and the Sacramento Rendering Plant is located on the south side of Kiefer Boulevard, directly adjacent to the Plan Area.



Source: County of Sacramento

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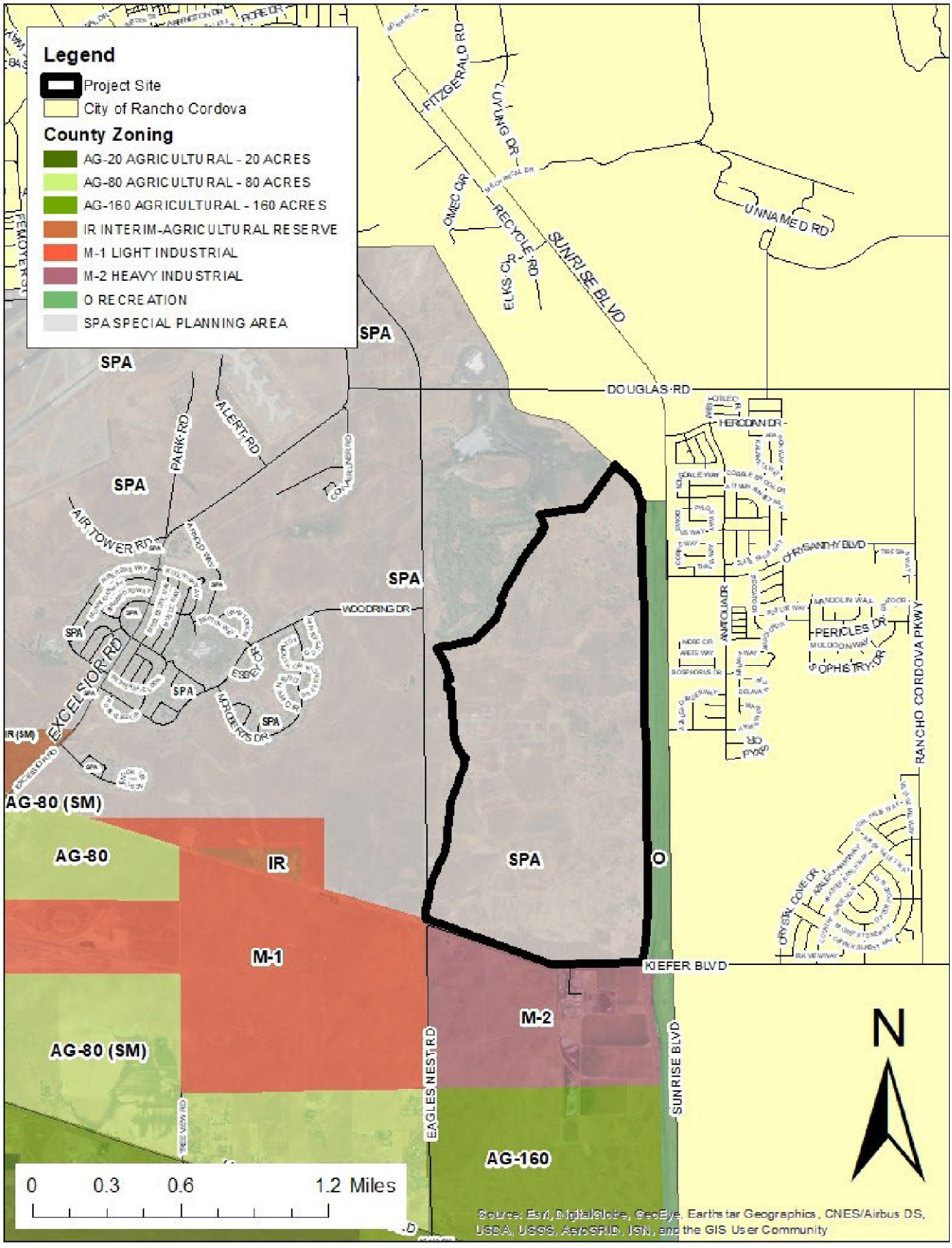
Plate PD-4: Existing Mather South Plan Area General Plan Designation



Source: County of Sacramento

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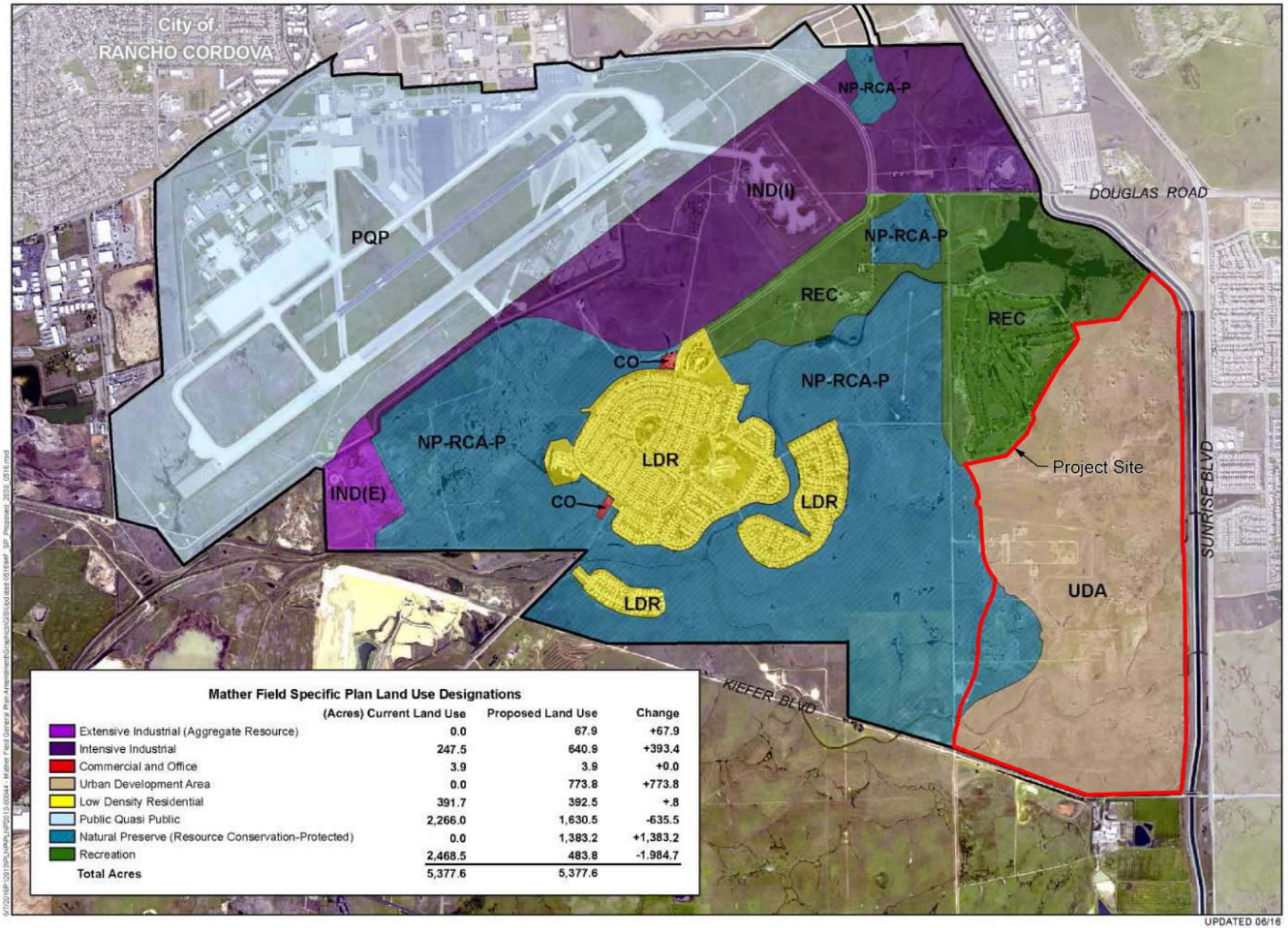
Plate PD-5: Existing Mather South Plan Area Sacramento County Zoning Districts



Source:

Plate PD-6: Existing Mather Field Specific Plan Land Use Districts

EXISTING LAND USE DESIGNATIONS AND ZONING

Multiple County plans are applicable to the Plan Area, including the General Plan, Mather Field Specific Plan (adopted in 1997, amended in 2016), and the Mather Field Special Planning Area, and the County Zoning Code. Table PD-1 contains the existing land use and zoning designations that apply to the Plan Area. Plate PD-4 through Plate PD-7 illustrate each of the land use and/or zoning designations shown in Table PD-1. These various designations and how they pertain to the Mather South Project are described in greater detail below under "Project Background."

Table PD-1: Existing Mather South Plan Area Land Use Designations

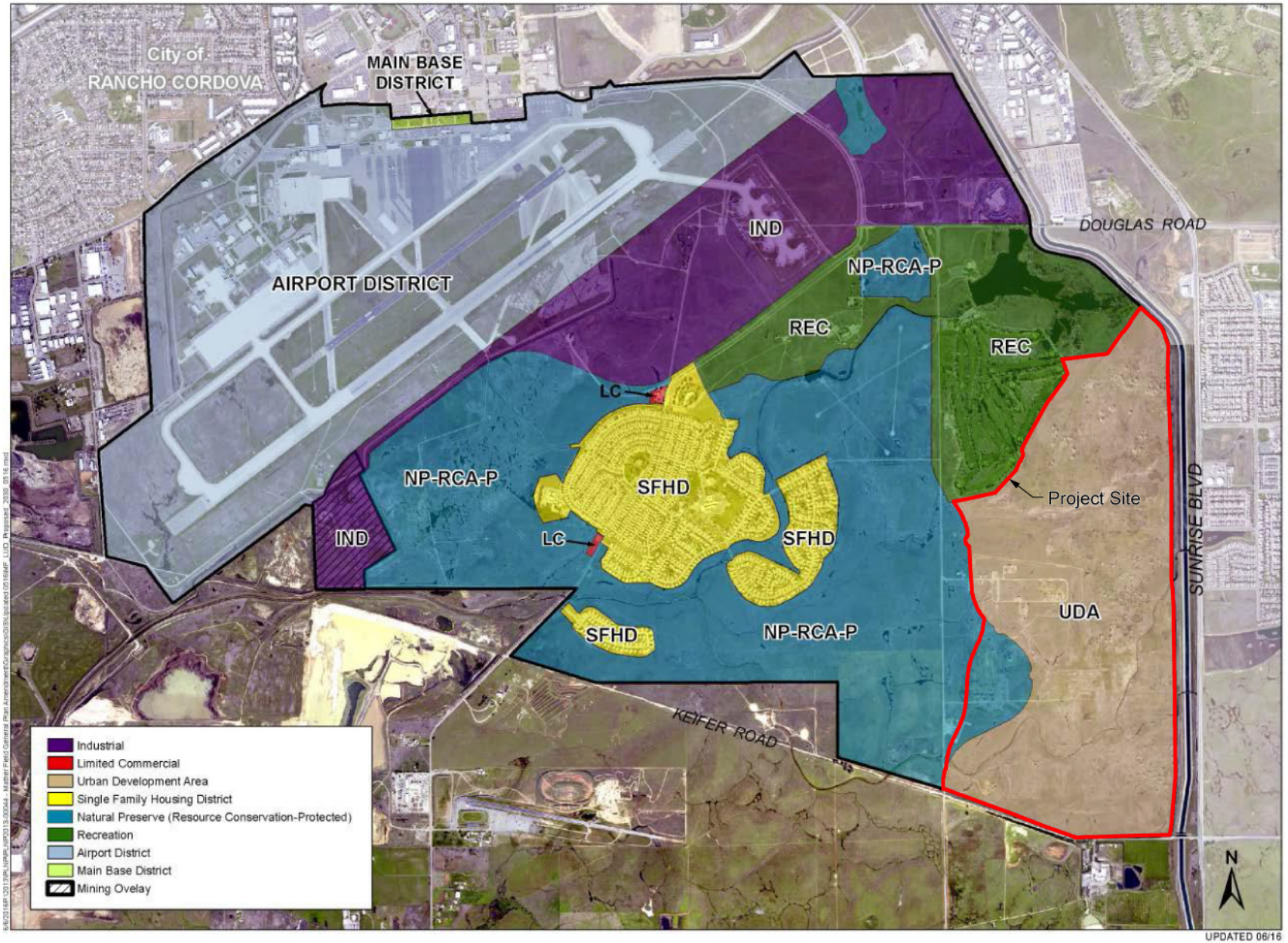
	General Plan Land Use Designation	County Zoning District	Mather Field Specific Plan Land Use	Mather Field Special Planning Area Land Use
Plan Area Designation	Urban Development Area (795 acres) Natural Preserve (53.31 acres)	Special Planning Area	Urban Development Area (795 acres) Natural Preserve (53.31 acres)	Urban Development Area (795 acres) Natural Preserve (53.31 acres)

PROJECT BACKGROUND

MATHER AIR FORCE BASE HISTORY

Mather AFB was established in 1918 as an airfield and pilot training school. Most base development occurred between 1941 and 1970, with expansion and improvements occurring through the 1980s. Following World War I, the base was used to support small military units and as a terminal for aerial forest patrol and air mail service planes. By the end of World War II, Mather AFB was used for pilot, navigator, observer, and bombardier training and was a stopover for aircraft traveling to and from the Pacific. After World War II, Mather AFB became the sole aerial navigation training school for the U.S. Air Force (USAF). The base was approved for closure in January of 1989. On October 1, 1993, Mather AFB was decommissioned as an active base under the Base Realignment and Closure Act of 1990.

The USAF completed an environmental impact statement (EIS) for the Disposal and Reuse of Mather AFB (USAF 1994). The U.S. Environmental Protection Agency (EPA) issued a Record of Decision (ROD) in March of 1993. A Supplemental ROD was issued in November of 1994, a Revised Supplemental ROD was issued in October 1995 (EPA 1996), and a Third Supplemental ROD was issued in May of 1998 (EPA 1998). These documents identify the organizations and agencies (which included Sacramento County) to receive property and facilities and the means of property conveyance.



Source:

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Plate PD-7: Existing Mather Field Special Planning Area Land Use Districts

MATHER FIELD SPECIFIC PLAN & SPECIAL PLANNING AREA DESIGNATIONS

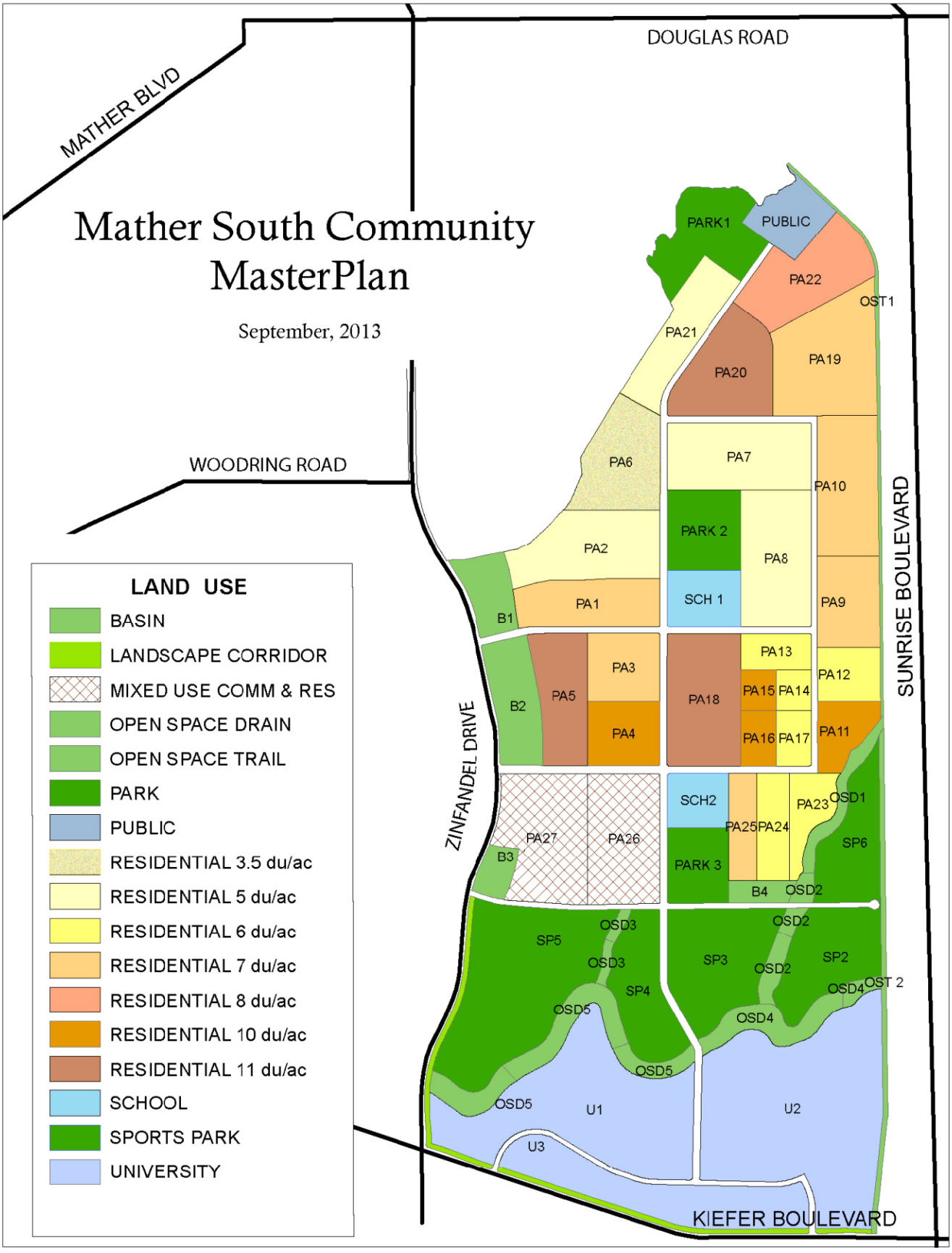
After Mather AFB was recommended for closure, Sacramento County began the planning process to adopt a specific plan for the area. From 1989 to 1991, the Sacramento Commission on Mather Conversion (SACOMC) analyzed numerous use alternatives for consideration by the County Board of Supervisors and recommended retention of the airport, reuse of other base facilities, and redevelopment of other portions of the base. Upon receiving the recommendations, the Board of Supervisors established the Mather Internal Study Team (MIST). MIST's goals were to refine and further evaluate SACOMC's recommendations and examine aviation and non-aviation reuse options. MIST recommended a reuse plan which also featured retention of the airport and mixed-use development surrounding the airport. In the fall of 1991, the Board of Supervisors endorsed the MIST plan and forwarded it to the Air Force Base Conversion Agency for consideration in its preparation of the EIS and ROD for the disposal of the base.

A specific plan (entitled the Mather Field Specific Plan) was adopted by the Sacramento County Board of Supervisors in May 1997. The planning document describes the envisioned transition of the former Mather AFB from military to civilian activities. Mather AFB is the historic name of the area; per the Specific Plan, the area is now referred to as Mather Field Specific Plan area.

MATHER FIELD PROJECT

In 2013, both the Mather South Project and the Mather Field Project (Control Number PLNP2013-00044) were initiated as subsequent development plans to the Mather Field Specific Plan described above. The Mather Field Project consisted of requests to change General Plan land use designations and text to amend the General Plan Transportation Diagram for a proposed realignment of Zinfandel Drive within the Mather Field Specific Plan Area. The Mather Field Project also included amendments to update the Mather Field Specific Plan and Special Planning Area to allow new land use designations and districts and to remove portions from the Mather South Plan Area that are now located within the City of Rancho Cordova. This included the creation of the Mather Preserve and the establishment of an Urban Development Area designation for the Mather South Plan Area.

The Notice of Preparation (NOP) for the Mather Field Project was issued in June 2014. Although the Mather South Project is a separate project from the Mather Field Project, it is geographically contained within the Mather Field Project area. Therefore, a planning level of analysis for what is proposed for the Mather South Plan Area was assumed in the Mather Field Project (refer to Plate PD-8).The conceptual plan for the Mather South Plan Area included in the NOP consisted of development on approximately 885 acres with approximately 3,545 residential dwelling units, a 47-acre mixed use area consisting of ten acres of commercial uses integrated with 37 acres of multiple family uses at up to RD-30 densities (approximately 1,068 units of the project's 3,545 residential units), 43 acres of neighborhood parks and trails, a 126-acre Sports Complex, and a 152-acre site for a university.



Source: County of Sacramento

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Plate PD-8: Conceptual Mather South Plan (2015)

MATHER FIELD STAKEHOLDER GROUP

The Board of Supervisors conducted a public hearing on the Mather Field Project on September 16, 2015. Members of the public provided public testimony related to the Mather Field Project and addressed concerns with the Mather South Plan Area conceptual plan as proposed in June 2014. Based on the feedback from the public, the Board chose not to take action on the project at that time and directed staff to engage in a collaborative process with key stakeholders, to work through technical issues and define a concept plan that focused on the concerns that were raised during the hearing. These concerns included: traffic impacts associated with the regional sports park and university, noise, lighting, and the potential for the proposed Zinfandel Drive alignment and sewer infrastructure to adversely affect important wetland resources.

Through several stakeholder meetings, various modifications to the Mather Field Project and Mather South Projects have occurred that address the concerns of the community and allow for additional preservation of wetland resources. The main revisions resulting from the stakeholder process to the Mather South Plan Area conceptual plan include the elimination of the original university concept and replacement with a smaller Environmental Education Campus, the elimination of the sports complex, and inclusion of additional wetland preserve area with associated open space corridors within the Plan Area. The Mather Wetland Preserve was also expanded to the east to protect known biological resources. Zinfandel Drive was also redesigned to run along the eastern border of the expanded Wetland Preserve area. Refer to Plate PD-9 below.

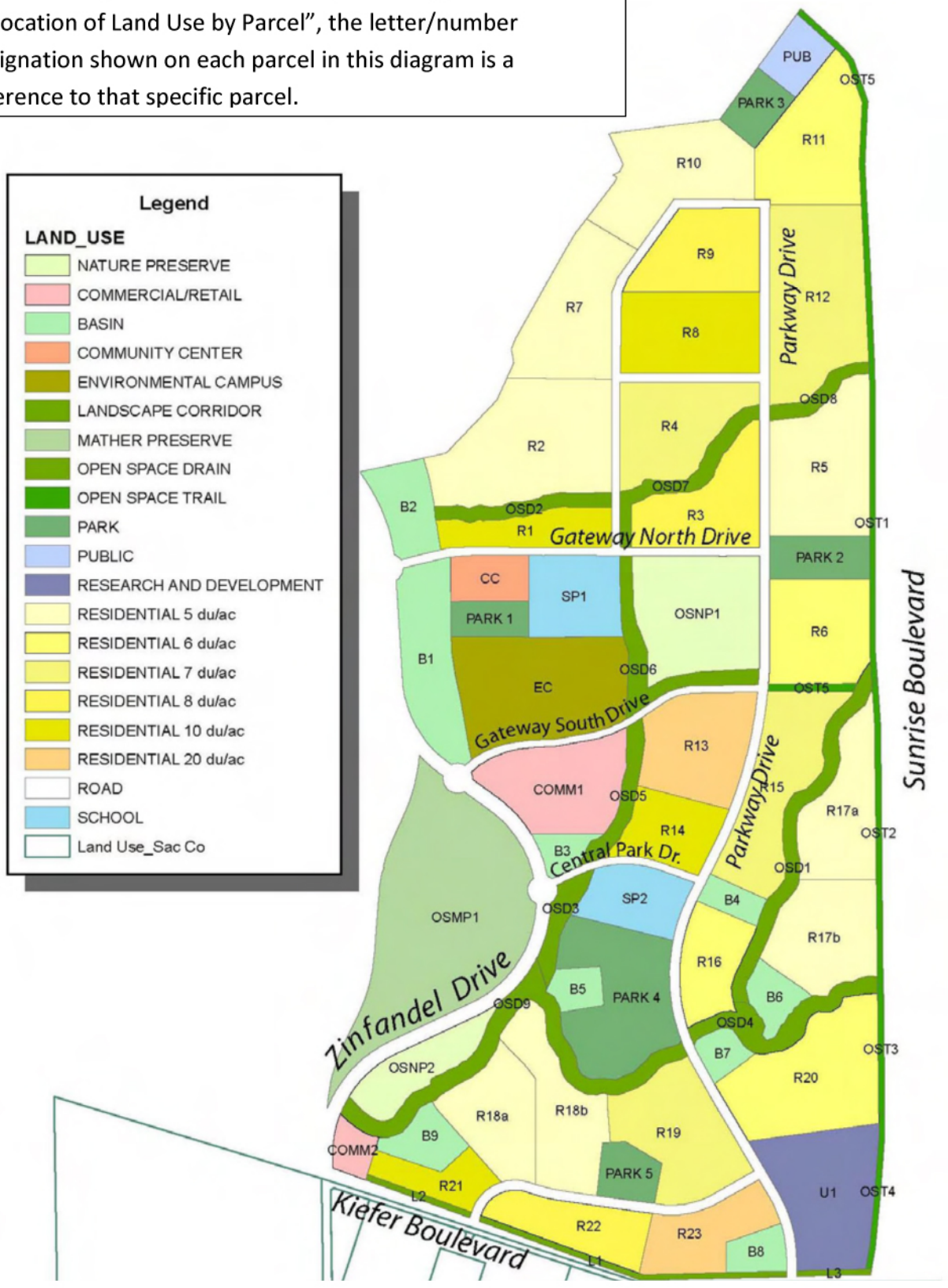
The Board of Supervisors approved the Mather Field Project's General Plan Amendments on July 26, 2016 and the Specific Plan and Special Planning Area Amendments on September 13, 2016. The Mather Field Project Final Environmental Impact Report (EIR) (SCH #2013072073) was also certified on September 13, 2016 and is hereby incorporated by reference. These actions established the current Mather Field Project and Mather South Plan Area land use designations and alignment for Zinfandel Drive south of Douglas Road.

The current Mather South Project, subject of this EIR, is a continuation of previous planning efforts and provides specificity at the project level. A revised NOP for the Mather South Project was issued on January 5, 2017, which is included as Appendix PD-2 of this EIR.

PLANNED DEVELOPMENT

The Mather South Project is one of four major planning applications currently in process for future urban growth areas located along the Jackson Road corridor, which are collectively referred to as the Jackson Highway Master Plans. The other three plans include the West Jackson Highway Master Plan, the NewBridge Specific Plan, and the Jackson Township Specific Plan.

NOTE: Throughout this Master Plan, and in Appendix B "Allocation of Land Use by Parcel", the letter/number designation shown on each parcel in this diagram is a reference to that specific parcel.



Source:

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Plate PD-9: Mather South Project Community Master Plan Land Use Diagram

In total, the four master plans cover approximately 9,247 acres and, based on the most recent NOPs prepared for each as of May 2018, would provide for the development of more than 27,000 new housing units of varying densities, nearly 6.8 million square feet of commercial space, employment-generating uses, mixed use land uses, 12 schools, and approximately 322 acres of developed parkland. The master plans were initiated at the request of each of the project applicants in response to long-term growth projections for the region, and if approved, are anticipated to build out over several decades.

The West Jackson Highway Master Plan area is located southwest of the Mather South Plan Area and includes approximately 5,913 acres on both the north and south sides of Jackson Highway. The New Bridge Specific Plan area is located just south of the Mather South Plan Area and includes approximately 1,095 acres north of Jackson Highway. The Jackson Township Specific Plan area is located southwest of the Mather South Plan area and includes approximately 1,391 acres north of Jackson Highway. Refer to Plate PD-2.

Each of the proposed master plans has been considered in the cumulative context and infrastructure planning for the Mather South Project. However, as of the writing of this EIR, applications for each of the Jackson Road corridor plans have been submitted to the County and are in various stages of processing. At this time, it is unknown if or when any of the master plans will be presented at hearing to the Board of Supervisors for consideration.

PROJECT PROPOSAL

The Mather South Project represents the second step in a two-step planning process for the Mather Field Specific Plan Area. The first, the Mather Field Project as discussed above, modified land uses and was completed in September 2016. The second, evaluation and consideration of specific project-level land uses and environmental impacts of the Mather South Project, is the subject of this EIR. If approved, the Mather South Project would result in amendments to the General Plan, the Mather Field Specific Plan, and the Mather Field Special Planning Area Ordinance, as described below in “Requested Entitlements.”

The Mather South Project in its current iteration includes an 848-acre master plan community with up to 3,522 residential dwelling units of various densities (multi-family, detached, and attached single-family), a 28-acre environmental education campus including 200 multi-family dwelling units, a 21-acre research and development park, two elementary schools, a 6-acre community center, 21 acres of commercial-retail with up to 225,000 square feet of retail space, 44 acres of parkland including 26 acres of neighborhood parks and a 17-acre community park, and 210 acres of open space areas that include a 53-acre portion of the Mather Preserve west of Zinfandel Drive, as well as other natural preserves and drainage corridors, stormwater quality and detention basins, landscape buffers, and public utility corridors all connected by multi-use pedestrian and bicycle trails. Refer to Plate PD-9 above and Table PD-2.

The proposed Mather South Community Master Plan (Community Master Plan) for the project provides goals and policies to guide development within the Plan Area. It also establishes design guidelines, development standards, permitted land uses, densities, maximum number of residential units, required public facilities, phasing and implementation mechanisms, and demonstrates compliance with applicable County policies. The proposed Community Master Plan is included in Appendix PD-1.

Table PD-2: Mather South Proposed Land Uses

Land Use	Residential Units	Commercial Sq. Ft.	Subtotal Acres	Total Acres
Open Space				**210.50**
Natural Preserve & Creek/Drainage			141.73	
Water Quality/Detention Basin			50.44	
Utility/Trail Corridors			13.48	
Landscape Buffers			4.85	
Parks & Recreation				**44.03**
Neighborhood			21.55	
Community			22.48	
Environmental Education Campus				**27.90**
Commercial-Office		275,000	22.90	
Residential Rd-20 (20 Du/Ac)	200		5.00	
Research and Development Park				**21.35**
Commercial-Office		325,000	21.35	
Commercial				26.86
Retail		185,000	21.06	
Community Center		15,000	5.80	
Public Facilities				**90.43**
School			22.19	
Utilities			5.27	
Roadways			62.97	
Residential				**427.24**
RD-5 (5 du/ac)	849		154.66	
RD-6 (6 du/ac)	476		71.38	
RD-7 (7 du/ac)	628		84.89	
RD-8 (8 du/ac)	338		42.30	
RD-10 (10 du/ac)	449		44.94	
RD-20 (20 du/ac)	581		29.07	
Totals	**3,522**	**800,000**	**848.31**	**848.31**

REQUESTED ENTITLEMENTS

The Mather South Project would modify the Sacramento County General Plan, the Mather Field Specific Plan and the Mather Field Special Planning Area Ordinance to reflect a level of detail applicable to a master planning and specific plan effort for an 848-acre portion of the more than 5,200 acre Mather Field Specific Plan Area. The following entitlements would result from approval of the project:

1. A **General Plan Amendment** to amend the Land Use Diagram from Urban Development Area (795 acres) to Low Density Residential (622 acres), Medium Density Residential (17 acres), Natural Preserve (86 acres) Commercial and Offices (42 acres), and Public/Quasi-Public (28 acres). Refer to Plate PD-10.

2. A **General Plan Amendment** to change the Transportation Plan to reflect proposed roadway alignments and transit systems. Refer to Plate PD-11.

3. A **General Plan Amendment** to change the Bicycle Master Plan to add internal and external bicycle facilities within and through the project area as shown in the Bicycle Master Plan Amendment Diagram. Refer to Plate PD-12.

4. A **Specific Plan Amendment** to change the Mather Field Specific Plan, specifically a portion of the South Base Area (795 acres) from Urban Development Area (795 acres) to Mather South Community Master Plan (795 acres). Refer to Plate PD-13.

5. Adoption of the **Mather South Community Master Plan** as an amendment to the Mather Field Specific Plan including text, a master plan land use diagram, design guidelines and development standards.

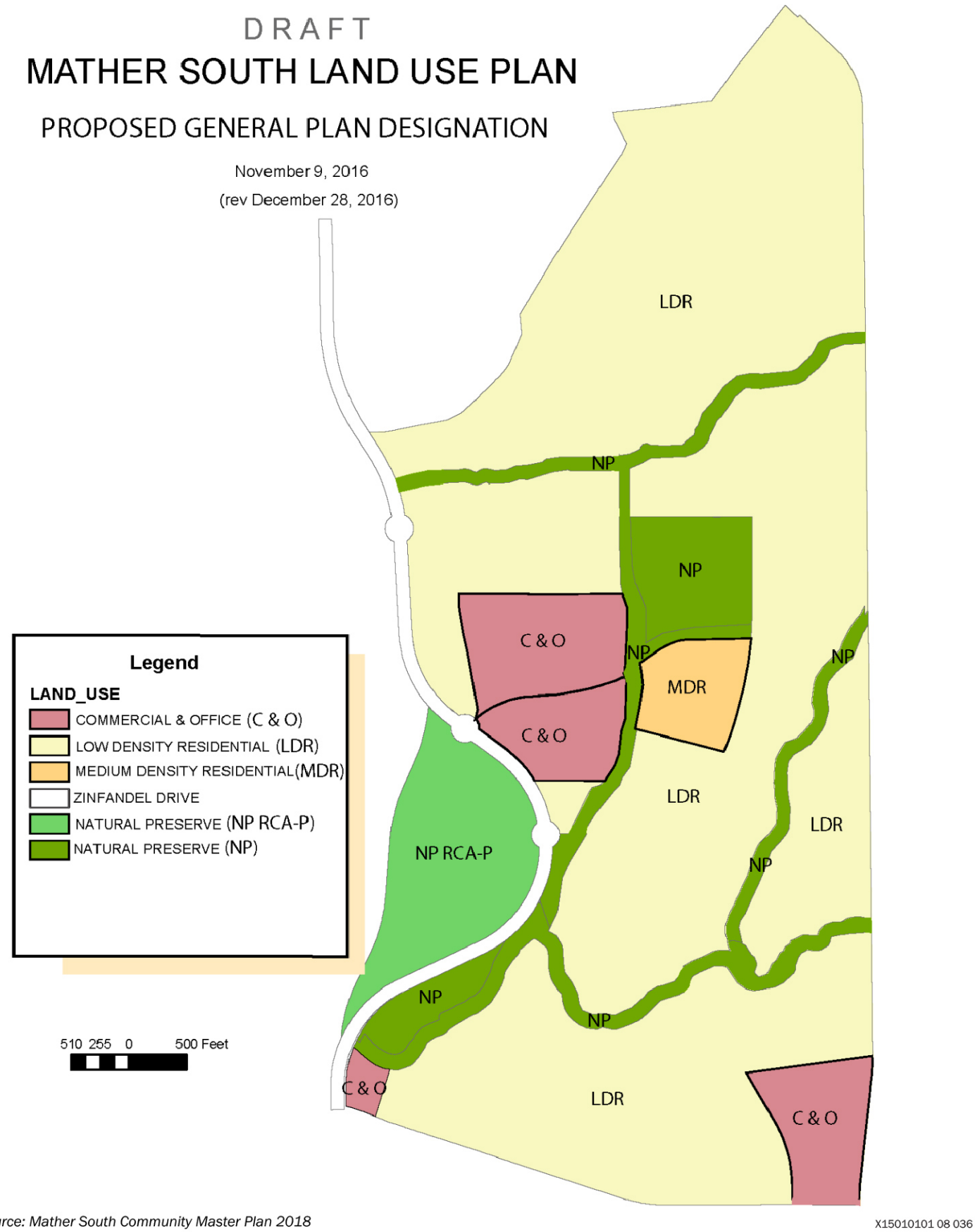
6. A **Zoning Ordinance Amendment** of the Mather Field Special Planning Area Ordinance (SZC 97-0021, Section 603) to incorporate the Mather South Community Master Plan, design guidelines, and development standards.

7. Acceptance of an Affordable Housing Strategy for the Mather South Community Master Plan consisting of on-site dedication of land for construction of affordable units.

~~7~~8. Adoption of a **Development Agreement** for the Mather South Community Master Plan by and between the County of Sacramento and Applicants.

~~8~~9. Amendment of the Mather Field **Public Facilities Financing Plan**.

10. Adoption of the Mather South Urban Services Plan.



Source: Mather South Community Master Plan 2018

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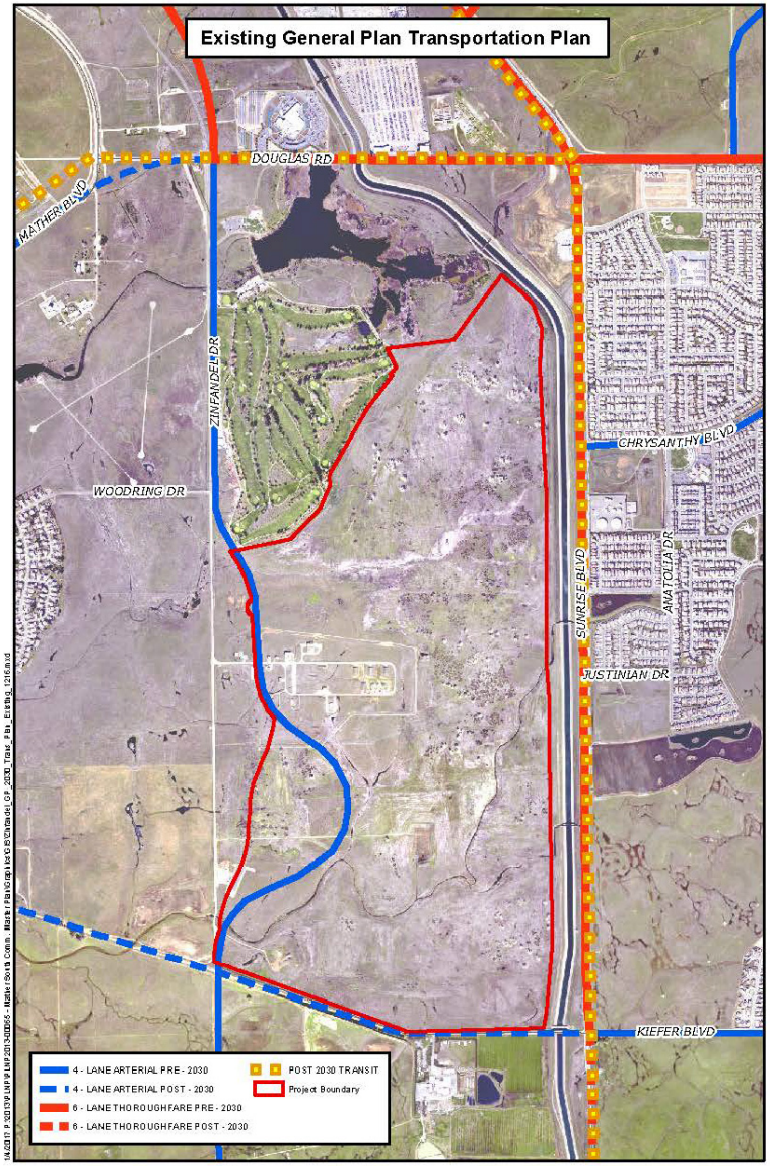
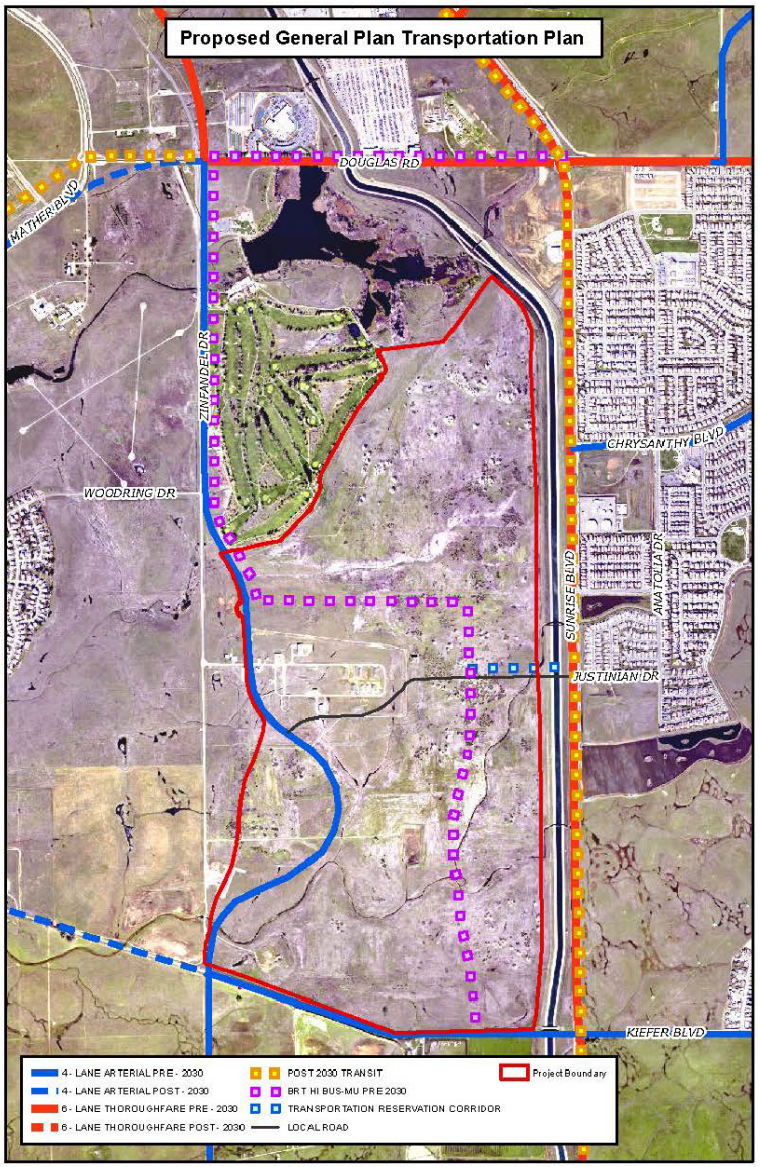
Plate PD-10: Proposed General Plan Designations





Source: Mather South Community Master Plan 2018

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Plate PD-11: Existing and Proposed General Plan Transportation Plan

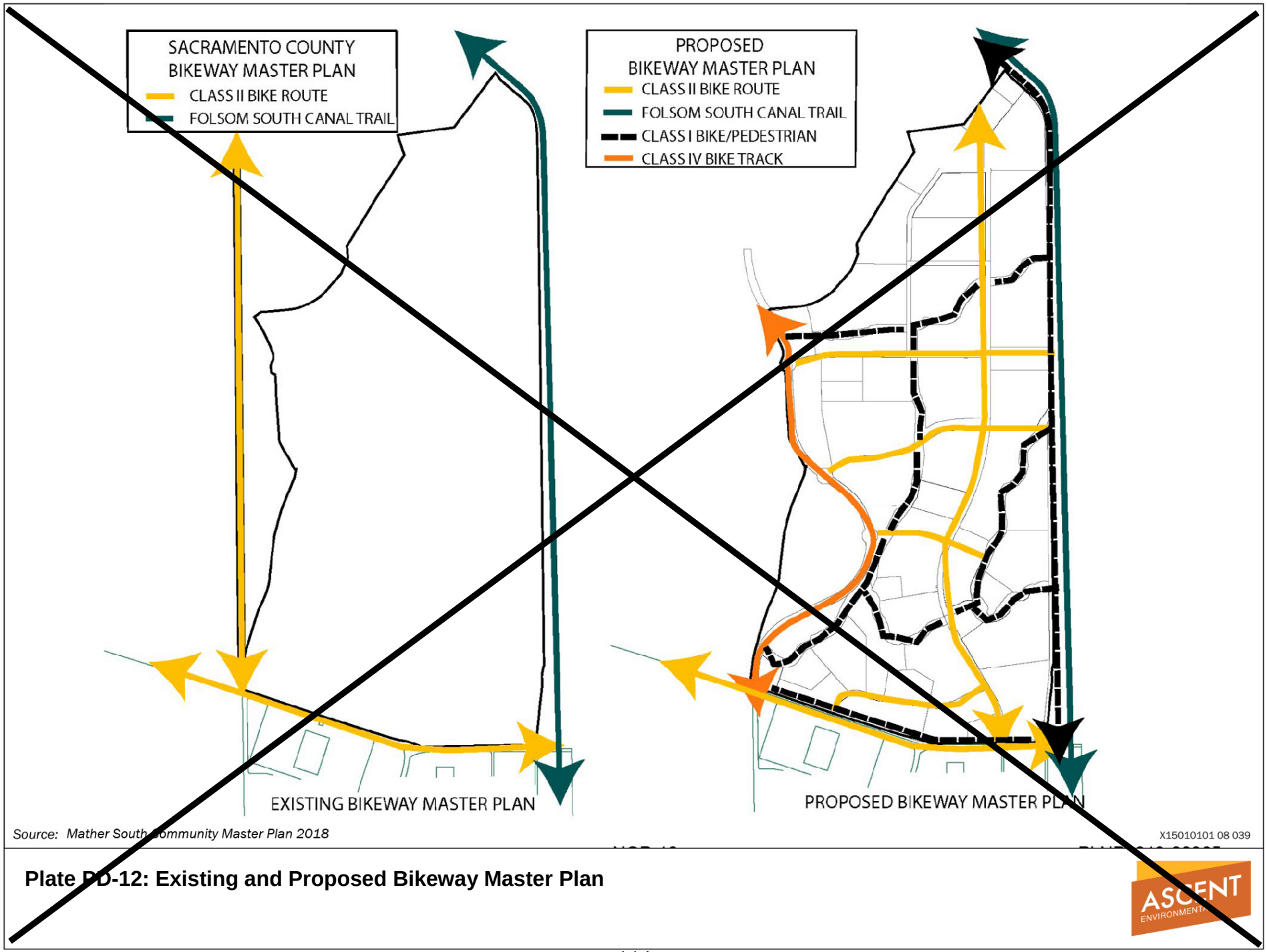
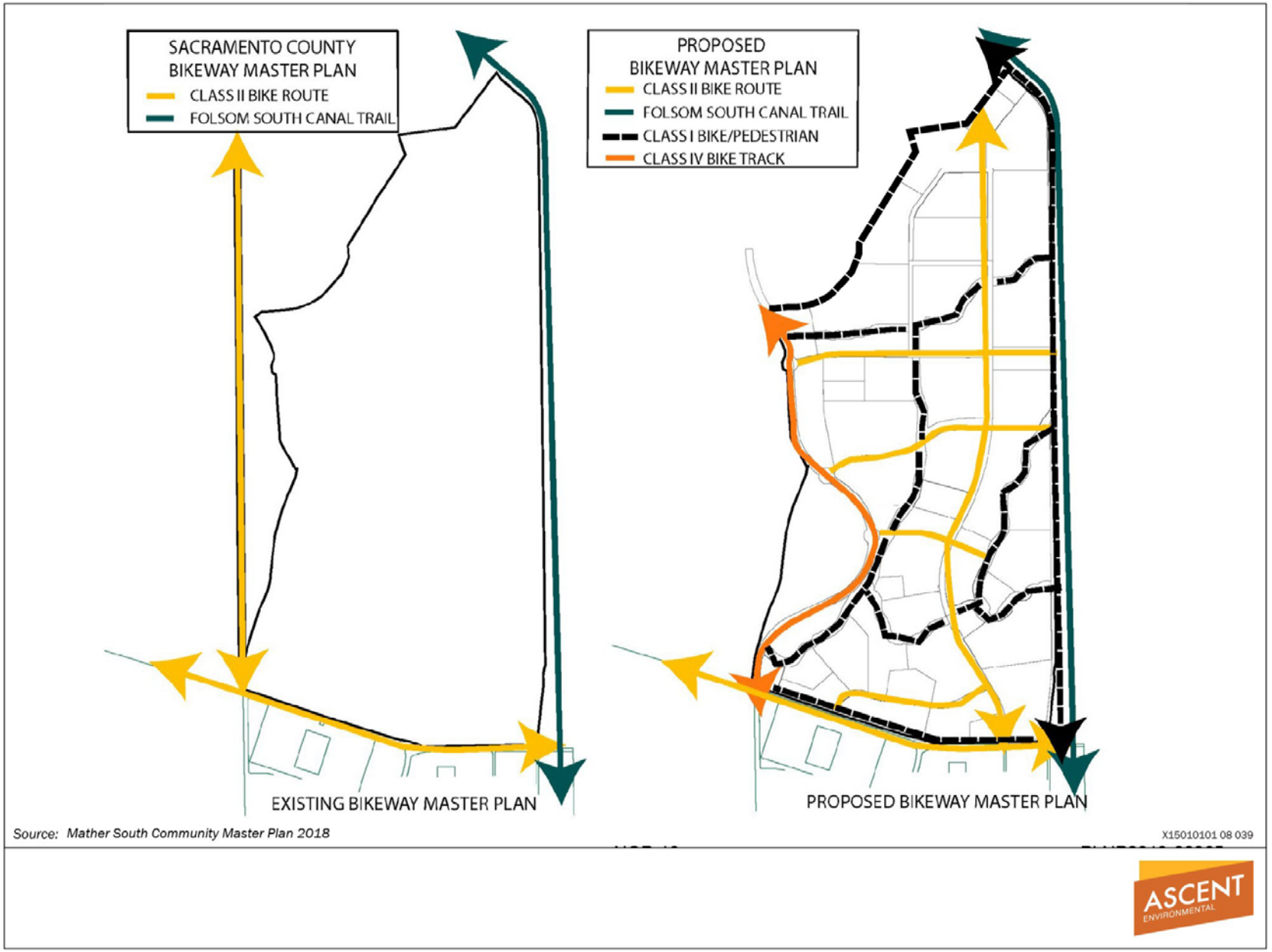
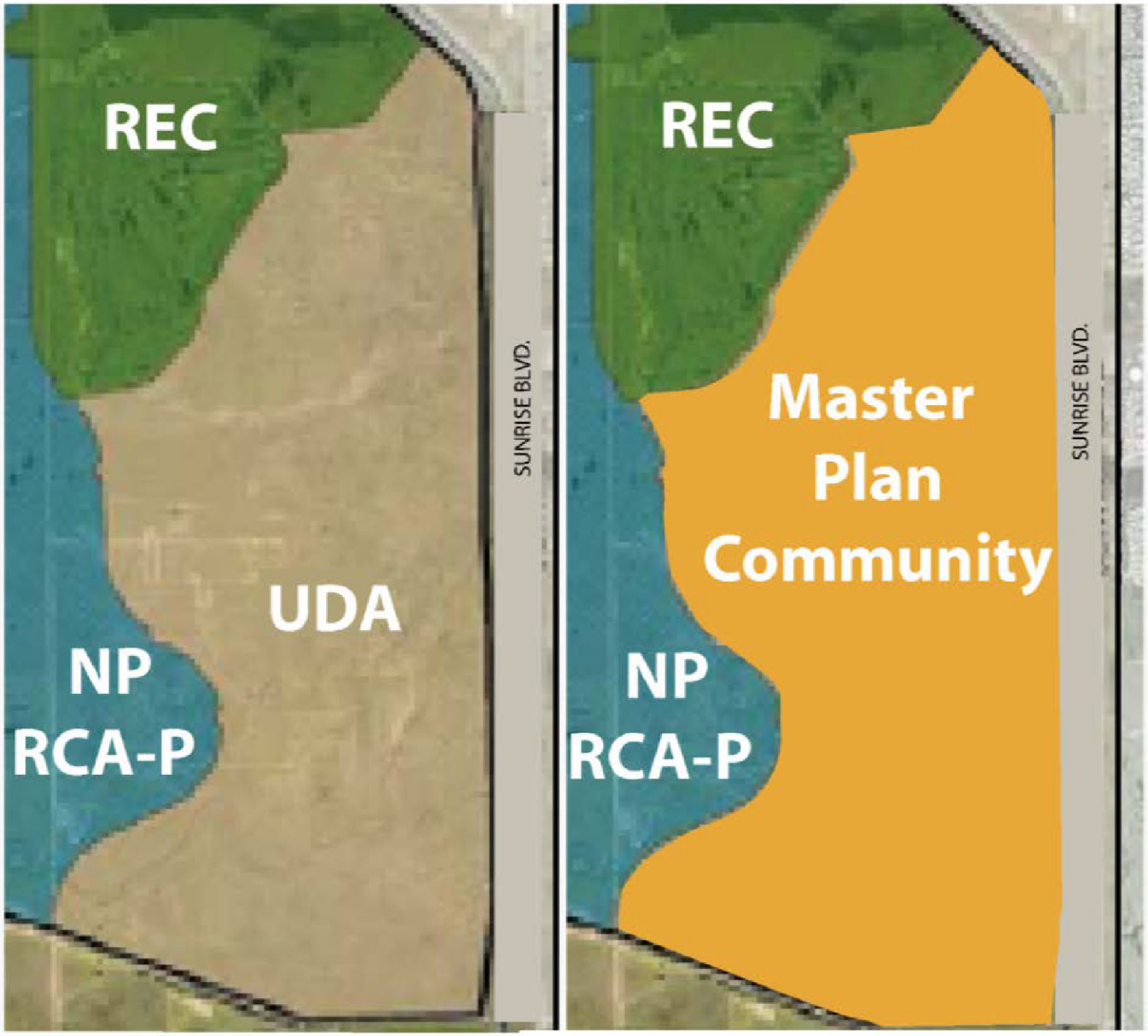


Plate PD-12: Existing and Proposed Bikeway Master Plan

Plate PD-12: Existing and Proposed Bikeway Master Plan





Existing Specific Plan
Land Use Designation

Proposed Specific Plan
Land Use Designation

Source: Mather South Community Master Plan 2018

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Plate PD-13: Existing and Proposed Mather Field Specific Plan and Mather Field Special Planning Area Land Use Designations

PROPOSED LAND USES

As shown in Plate PD-9 and listed by type in Table PD-2 above, the Plan Area is divided into 69 large-lot parcels, also referred to as builder parcels. Each of these builder parcels is assigned a land use. The intent is that a builder would purchase one or more large-lot parcels and subdivide, if necessary, and develop the land consistent with the designated land use. In addition to the specific large-lot parcels, the Community Master Plan describes two key activity hubs, the Environmental Education Hub and the Mixed-Use Village Center. The Environmental Education Hub includes the environmental education campus, a wetland preserve area, a neighborhood school, a park, a community center, a segment of the major internal open space drainage/trail network, and a large multi-use stormwater basin. The Mixed-Use Village Center includes a commercial center, multi-family residential, a segment of the major internal open space drainage/trail network, and a smaller multi-use stormwater basin.

The following sections describe the primary land uses by type below.

RESIDENTIAL LAND USE

The Mather South Project includes residential land uses on approximately 427 acres, or 50 percent of the Plan Area. The residential uses are dispersed among 25 distinct builder parcels and include a mix of housing types and densities in the range of five to 20 dwelling units per acre. They are labeled PA 1 through PA 22 on Plate PD-9.

Single-family housing would be located throughout the Plan Area at a range of densities from five to 10 dwelling units per acre (5 to 10 du/acre), which could accommodate both detached and attached homes.

Multi-family residential uses would accommodate apartments, townhouses, and condominiums at a density of 10 to 20 du/acre. Multi-family residential units would be adjacent to the large commercial site and across Parkway Drive from the Research and Development Park site. The multi-family site adjacent to the commercial center abuts an open space corridor and bike trail. The multi-family site adjacent to the Research and Development Park overlooks a stormwater management basin. Up to 200 additional multi-family housing units could be developed in the environmental education campus area.

COMMERCIAL LAND USE

The Mather South Project includes two commercial sites, labeled COMM1 and COMM2 on Plate PD-9 and Table PD-2. The Commercial Center (COMM1) is an 18-acre site at the South Gateway Drive entry from Zinfandel Drive. This site would be suitable for neighborhood retail with a large anchor store, office uses, and service commercial uses. The commercial use may incorporate a public gathering space, such as a plaza that could host special events. The adjacent open space corridor provides an opportunity to create outdoor dining, a promenade, or other marketable public space along the corridor.

The Convenience Commercial Center (COMM2) is approximately 3 acres in size and in the southwest corner of the Plan Area at the intersection of Zinfandel Drive and Kiefer Boulevard. This site would be suitable for small commercial services, such as a fuel

station, food services, retail, or office uses. This parcel also has the benefit of access from the corridor trail system.

Environmental Education Campus

The Mather South Project would include an environmental education campus at the center of the Plan Area that is approximately 28 acres in size, which is labeled as EC in Plate PD-9 and Table PD-2. The campus would host the environmental community and educational institutions, such as non-profit environmental organizations, community colleges, local school districts, satellite universities, community groups, and others with a common mission of advancing environmental education at the community level. The campus would include uses such as up to 275,000 square feet of office space, indoor and outdoor classrooms, laboratories, and support facilities such as administration offices, common restrooms, food service facilities, and other education-oriented facilities. The campus may also include up to 200 multi-family residential dwelling units.

Research and Development Campus

The Mather South Project would include a 21.4-acre research and development park in the southeast corner of the Plan Area, which is labeled as U1 in Plate PD-9 and Table PD-2. The site is prominently located at the southern entry to the Plan Area along Kiefer Boulevard. Parkway Drive serves as a primary entry to the park and to the residential neighborhoods to the north. This site could be developed with up to 325,000 square feet of commercial-office space. This site is suitable for office, research and development, light assembly, or some combination of these. The proximity to the campus also suggests that business enterprises associated with environmental research may find a synergy with the campus to the benefit of both areas.

Community Center

A community center is proposed near the campus and adjacent to the park and elementary school that are adjacent to the campus. It is labeled at CC in Plate PD-9 and Table PD-2. The community center is planned on approximately 6 acres as a 15,000 square-foot, private recreation and social facility open only to the residents of the Plan Area. Its central location, near the campus, may create a natural gathering place for the community. Pedestrian and bicycle access from nearby trails, as well as neighborhood electric vehicle (NEV) access from Gateway North Drive, provide easy access for all members of the community.

Schools

The Mather South Project is located in the Elk Grove Unified School District. As disclosed in the Community Master Plan, the project would generate a projected student enrollment of 1,272 elementary school students, 356 middle school students, and 663 high school students. Middle and high school students would attend area schools as described in Chapter 15, Public Services.

The project includes two elementary school sites totaling approximately 22 acres, which are labeled as SP1 and SP2 in Plate PD-9 and Table PD-2. These sites are connected

to proposed bike and pedestrian trails and adjacent to neighborhood parks to enhance opportunities for recreation. School Site 1 fronts on Gateway North Drive and a local street along the west side of the school would provide secondary access. School Site 2 would front on Parkway Drive and Central Park Drive.

Parks

The Mather South Project includes four neighborhood parks ranging in size from approximately 4.5 acres to 7.25 acres, which total 21.55 acres, and one 22.48-acre community park. The neighborhood parks are labeled as PARK1, 2, 3, and 5 in Plate PD-9 and Table PD-2, while the community park is labeled as PARK4. The neighborhood parks are dispersed throughout the Plan Area, while the community park is on the southern end of the Plan Area adjacent to one of the school sites. The community park is planned to provide active recreational areas such as fields for soccer, lacrosse or rugby, and baseball and softball fields, as well as open play areas, picnic tables, and gathering areas. Neighborhood parks would include open play areas, picnic and barbecue facilities, and children's playgrounds. Parks will be designed consistent with Cordova Recreation & Park District Inventory & Assessment Plan 2012 park standards.

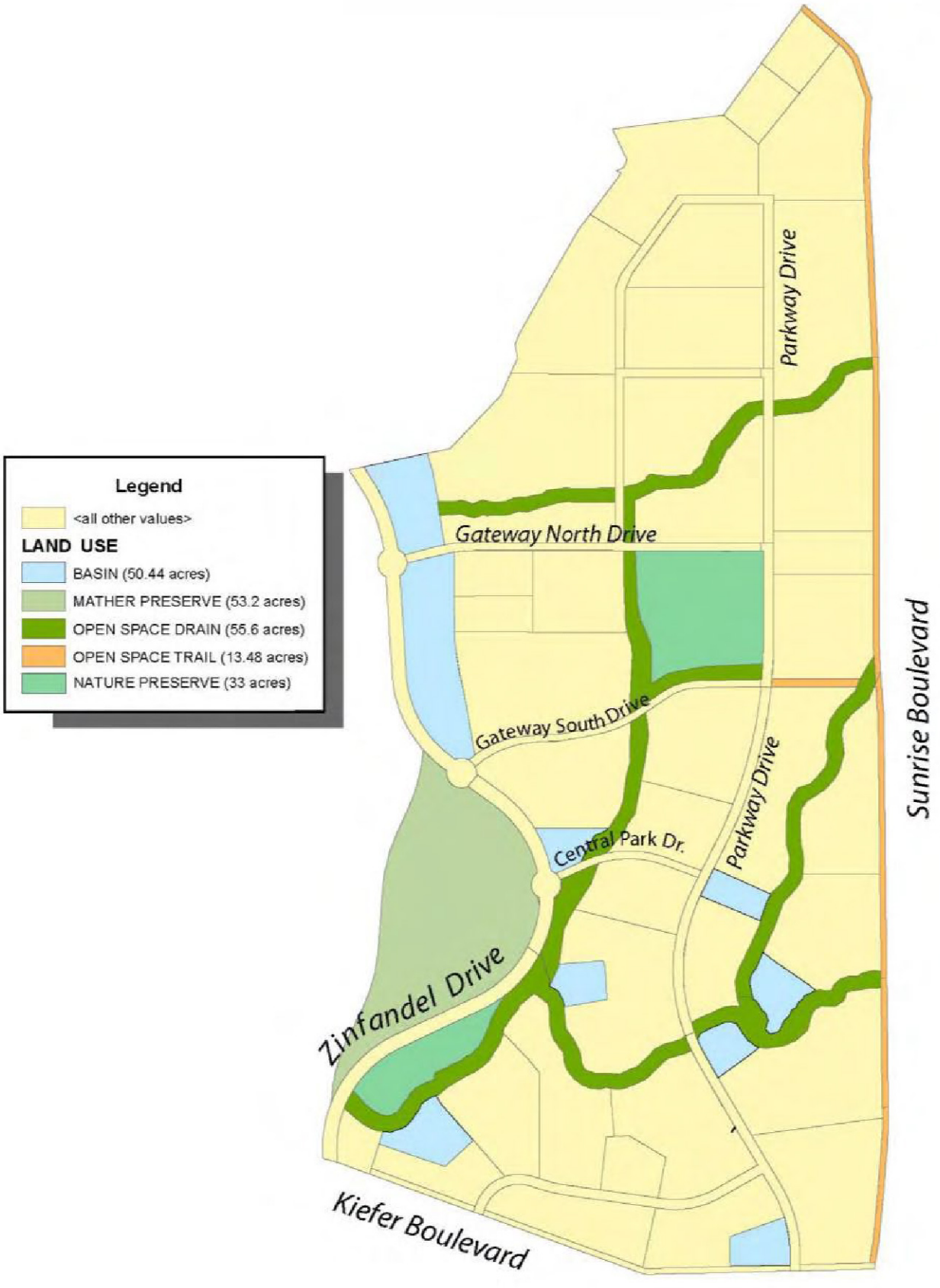
Open Space Trails and Basins

The Mather South Project includes multiple open space features including 53.2 acres of open space land in the Mather Preserve (on the west side of Zinfandel Drive), 33 acres of nature preserve (east of Zinfandel Drive), 55.6 acres of open space drainages, and 13.5 acres of open space trails (shown as OST on Plate PD-9 and Table PD-2) with pedestrian and bike trails. Refer to Plate PD-14 for an overview of open space areas proposed in the Plan Area.

There are ten proposed stormwater quality management basins (50.44 acres) that are located throughout the Plan Area that connect to major drainage open space corridors. The corridors convey stormwater to the basins, but also serve as a visual greenway and pedestrian/bike route linking all parts of the community. The basins would serve multiple purposes as they would provide a visual amenity and an informal recreation resource for the surrounding neighborhood. Portions of the basins may be configured for informal recreation use in the dry season. The basins would be "naturalized" with trees and native plant materials, and with contoured grading such that they blend with the surrounding terrain and the drainage corridors that feed them. On-site drainage is described in more detail below in "Infrastructure and Utilities/Public Services."

Fire Station

A new fire station is proposed within the Plan Area along Gateway Drive North near Zinfandel Drive within a residential parcel (R1; Plate PD-20). The fire station would be owned and operated by the Sacramento Metropolitan Fire District (Metro Fire). According to Metro Fire, a fire station must be approximately 3 acres of level, usable land, and have a minimum of approximately 400 feet of street frontage and be 300 feet deep. The site must also be at least 500 feet from a signal-controlled intersection at a major thoroughfare. The fire station would conform to the standards for such facilities established by Metro Fire.



Source: *Mather South Community Master Plan 2018*

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Plate PD-14: Proposed Open Space Areas

CIRCULATION

The Community Master Plan includes a Transportation Plan (Chapter 4.4), which addresses both local transportation needs of the Mather South Project and the connections to the regional transportation network. The Transportation Plan establishes goals and policies that aim to develop a cohesive circulation system within the Plan Area. Some of the goals and policies of the Transportation Plan include the following:

- "Complete streets" will accommodate multiple modes of travel, including pedestrians, bicyclists, and automobiles.
- Use traffic calming roadway design techniques in residential streets and intersections, near schools, and parks to provide safe pedestrian access across roadways and in parking areas.
- All modes of transportation will be coordinated with the land use plan to enable safe, convenient, and effective movement of people, goods, and services throughout the Master Plan, without necessarily relying on private automobiles.
- Not less than 5 percent of all parking shall be electric vehicle charging stations at each commercial center, the Community Center, the research and development campus, and the Environmental Education Campus.

The Community Master Plan acknowledges that the project would be developed amidst the emergence of new technologies in transportation and communications, which could alter the development of the Mather South Project. Therefore, the Community Master Plan is planned to accommodate conventional automobiles while incorporating flexibility to transition to alternative travel modes, including autonomous vehicles, active transportation (bicycles), and variations on conventional cars, such as NEVs.

PROPOSED ROADWAY NETWORK

Currently, access to the north from Douglas Road is blocked by the Mather Golf Course, which extends along the entire north border of the Plan Area. Access to the east from Sunrise Boulevard is also blocked by the Folsom South Canal. Due to this limited access to the north and east, the internal road network in the Plan Area tends to focus the major collector streets with access to Zinfandel Drive and Kiefer Boulevard. The proposed roadway network includes arterial roads and collector roads that are oriented in a north-south/east-west grid pattern.

Zinfandel Drive is currently a two-lane road on the western side of the site that would become a four-lane arterial. It would include a Class IV bikeway on both sides of the road. Collector roads would be two-lane streets and would include a median on the primary entry roads (Gateway South Drive and Gateway North Drive). Collector streets would not allow on-street parking, but would provide a combined NEV and bicycle lane. Local roads would typically have two lanes with sidewalks, landscaping, pedestrian-scale lighting, shade trees, and other features that encourage walking. These would be low speed streets, with speed limits not exceeding 25 miles per hour, and traffic volumes of less than

5,000 average daily trips. Sidewalks would be either attached or detached, and parking would typically be provided on both sides of the roadway.

The proposed Transportation Plan has identified a route that would provide a future connection to Sunrise Boulevard over the canal from the Plan Area; however, the physical link including a road extension and bridge over the Folsom South Canal is not included as part of the Mather South Project.

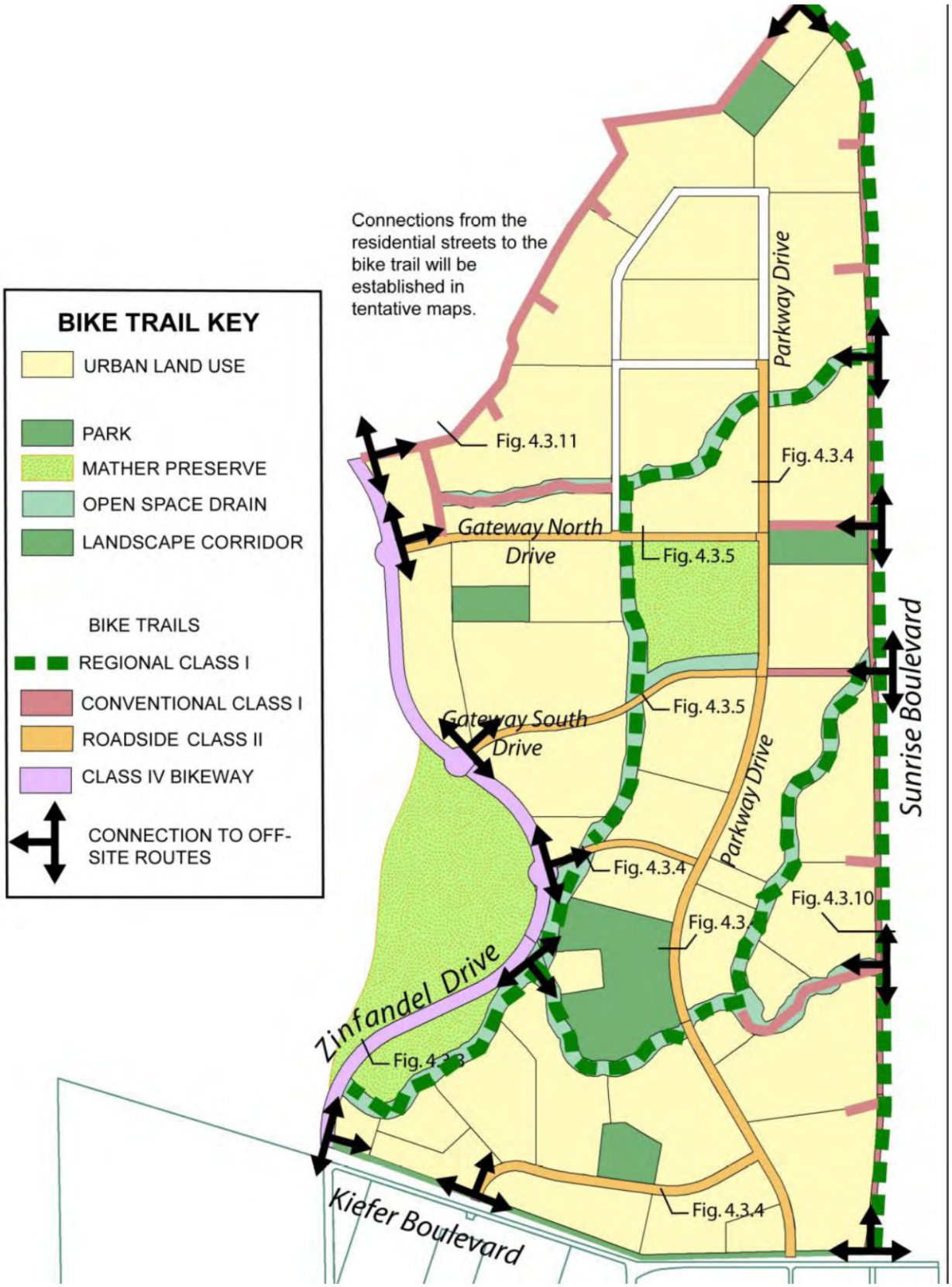
Bike and pedestrian network

Active transportation, including bicycles and pedestrian paths, is identified in the Community Master Plan as an important part of the project's transportation network. The project has been designed to provide a comfortable, safe, and interconnected pedestrian system that encourages walking and bicycling as a significant means of movement throughout the community. Multi-use trails in open space and sidewalks within the public rights-of-way of roadways are planned to connect residential neighborhoods to open space, parks, schools, the environmental education campus, the community center, the research and development park, and the commercial center. The bikeway system includes both off-street and on-street trails.

The bikeway system includes four distinct classes of bikeways:

- *Class I bicycle paths*. The proposed off-street trail system provides approximately 11 miles of Class I bicycle and pedestrian trails, parallel with Folsom South Canal and along both sides of the drainage corridors within the project. This multi-use trail system also connects to the regional trail and pedestrian system, recreational trails, open space, and commercial centers.
- *Class II bike lanes*. Class II bike lanes would be integrated with the collector street network and would be buffered from travel lanes by a minimum 4-foot wide painted striped marker pattern. Street signs would indicate the location of these bicycle lanes and major destination points. Class II bike lanes would connect with streets in the planned development communities south of Kiefer Boulevard and to the west through internal bike trails in those communities.
- *Class III bike lanes*. Class III bike lanes are signed bicycle routes (not striped bike lanes) and would be located on all residential streets.
- *Class IV bikeway (Cycle Track)*. These are bike lanes that are separated from the adjacent vehicle traffic lane through a solid vertical barrier or pavement markings. A class IV bikeway is planned along Zinfandel Drive.

The entire bikeway system would be built in phases conforming to the phased development of the Mather South Project. A map of proposed bicycle and pedestrian infrastructure is provided on Plate PD-15.



Source: Mather South Community Master Plan 2018

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Plate PD-15: Backbone Bike and Pedestrian Trail Network

Transit Plan

The Mather South Project is located within Sacramento Regional Transit District's (RT) service area. RT provides light rail and fixed-route bus services in Sacramento County. The County's General Plan Transportation Plan and RT's Transit Action Plan identify Jackson Road and Sunrise Boulevard as Bus Rapid Transit/Hi-Bus routes. At this time, RT does not provide high-frequency transit service proximate to the Plan Area. As the Mather South Project is developed over time, RT or an independent provider, or a combination of both could provide transit service. The closest RT bus stop is currently located at Mather Boulevard and Bleckley Street, which is approximately 2.5 miles from the Plan Area.

The Mather South Project would provide an internal transit service for residents of the community. The conceptual transit route would run along roads adjacent to the commercial center, the environmental education campus, the elementary schools, the community center, parks, medium density residential, and the research and development park (refer to Plate PD-16). Approximately 90 percent of the Plan Area would be within a one-half mile walk of this route. Transit service from the Plan Area could connect to the larger RT transit system of existing bus stops and light rail stations such as Mather/Mills, Zinfandel, Cordova Town Center, or Sunrise to the north of the Plan Area.

The transit service operations would be phased over time. At buildout, this transit service would operate with 15-minute headways during weekday peak hours and 30-minute headways during weekday non-peak hours. As indicated in Policy 4.4-35 of the Community Master Plan, the Mather South Financing Plan would include a funding source to provide this transit service. Refer to Chapter 17 Transportation and Circulation for additional information regarding this project amenity.

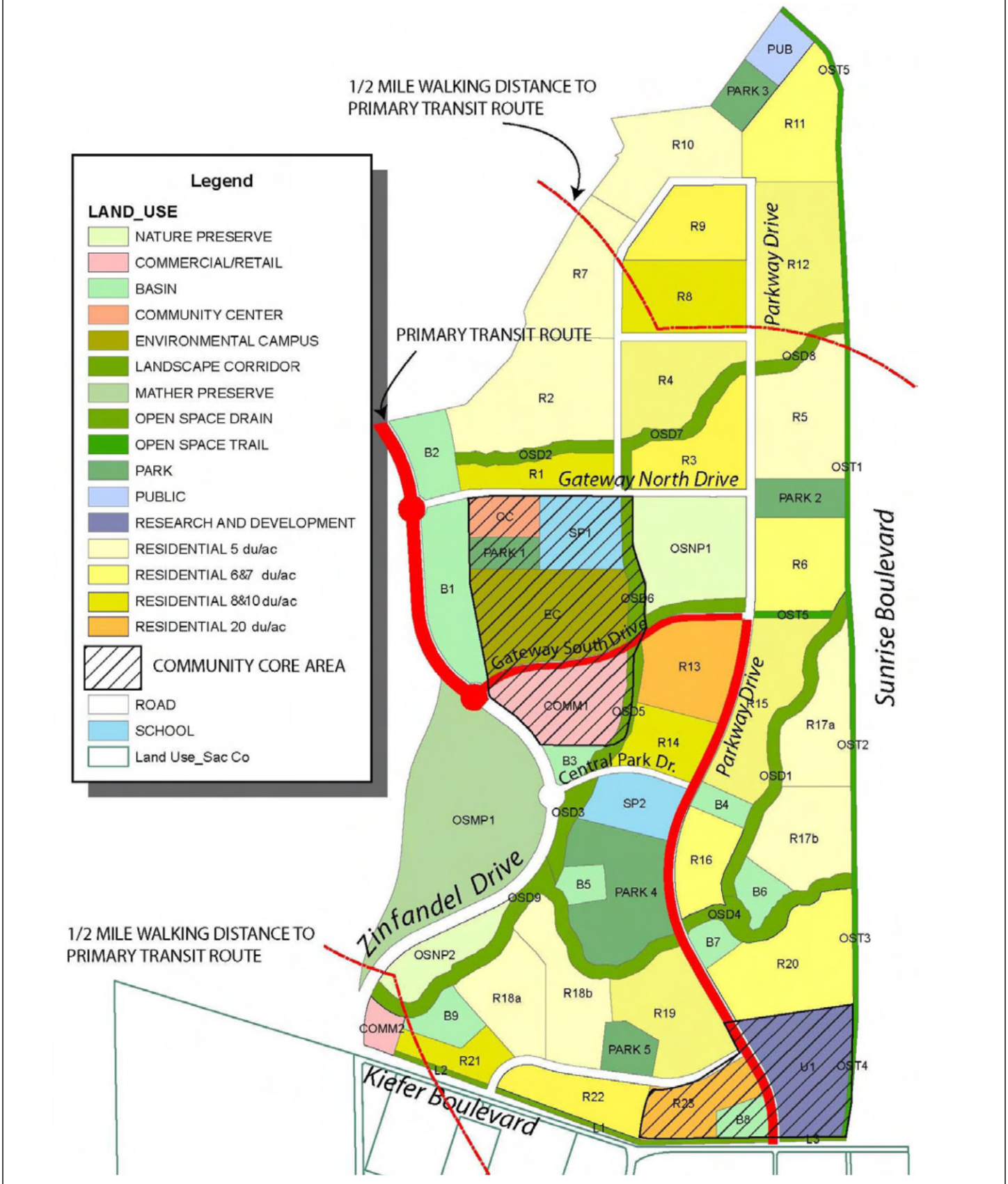
Infrastructure and Utilities/Public Services

The Mather South Project would require extensions of public infrastructure (sewer, water, drainage, and dry utilities) and expansion of public services. Public services include fire and police protection, public schools, library, animal protection services, and park and recreation services. For details related to provision of services and infrastructure, refer to Chapter 5 Public Facilities and Services of the Community Master Plan. Information on the proposed schools and fire station is provided above under "Proposed Land Uses." Additionally, the project's Public Facilities Financing Plan is included as Appendix PD-3 and the Urban Services Plan is included as Appendix PD-4.

Sewer Services

The Mather South Project would receive sewer service from the Sacramento Area Sewer District for intermediary trunk and collector systems and the Sacramento Regional County Sanitation District for regional interceptor pipes. As part of the Mather Field Project, a sewer line expansion along Zinfandel Drive was approved. The Mather South Project would connect to the newly expanded sewer line within Zinfandel Drive once it has been completed. The backbone collection system in the Plan Area would be

constructed within proposed street rights-of-way. Wastewater would flow by gravity west through the Plan Area, then north along Zinfandel Drive. Refer to Plate PD-17.



Source: Mather South Community Master Plan 2018

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Plate PD-16: Primary Transit Route Concept

Source: Mather South Community Master Plan 2018

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Plate PD-17: Proposed Sewer Collection System

Water Supply

The Mather South Project would receive water supplies from the Sacramento County Water Agency (SCWA) as the Plan Area is located within SCWA's Zone 40 North Service Area (NSA). The potable water transmission system would supply surface and groundwater deliveries to the NSA and would meet 100 percent of the build-out demand in the Plan Area. The Vineyard Surface Water Treatment Plant (WTP) NSA Pipeline Phase A would deliver potable water from the Vineyard Surface WTP to the Douglas Road Tanks located just north of the Plan Area. A one-million-gallon water tank to serve the Plan Area as well as the greater NSA of Zone 40 would be located in the northeast corner of the Plan Area, which would connect to an internal water supply delivery system as shown in Plate PD-18.

Initial service to the Plan Area would be from the Vineyard Surface WTP and from the North Vineyard Well Field and WTP. These supplies would be transported through an existing 30-inch diameter NSA Pipeline Phase A to the Anatolia Groundwater Treatment Plant located approximately 1.5 miles north of Kiefer Boulevard along Sunrise Boulevard. SCWA would install additional NSA transmission and storage facilities when regional water demands within the NSA warrant it. A grid of 8-inch to 12-inch mains will extend from the existing 30-inch diameter NSA Pipeline Phase A water main transmission main in Kiefer, the existing 16-inch diameter water line in Zinfandel Drive (south of Douglas Road) and the existing 16-inch diameter water line in Sunrise Boulevard to serve local developments within the Plan Area.

Drainage

Pursuant to stormwater and water quality requirements, on-site basins would capture and control the release runoff within the Plan Area. As a result, stream flows where drainage exits from the site would not exceed historic levels for both the 10-year and 100-year storms. Basins would also accomplish flow duration control to avoid downstream creek bed erosion mitigating for the hydro modification impacts of the Mather South Project. The Storm Water Drain Master Plan (Mather South Community Master Plan-Technical Appendix A) provides data on the flows and capacities of the drainage subareas within and contributing to the Plan Area, and the differences between natural and improved areas. Plate PD-19 illustrates the location of the 10 basins in the Plan Area. Three are located adjacent to and parallel with the relocated Zinfandel Drive along the west edge of the site. Seven other basins are distributed along the southerly stream. A residual benefit of the basins along Zinfandel Drive would be the creation of an open space corridor and buffer along this street.

The primary purpose of the basins is stormwater management and water quality control. However, the location of the basins along the natural drainage corridors and their proximity to parks creates the possibility of providing multi-purpose basins, such as environmental education opportunities, pedestrian and bike trail routes, and informal recreation areas.

Source: Mather South Community Master Plan 2018

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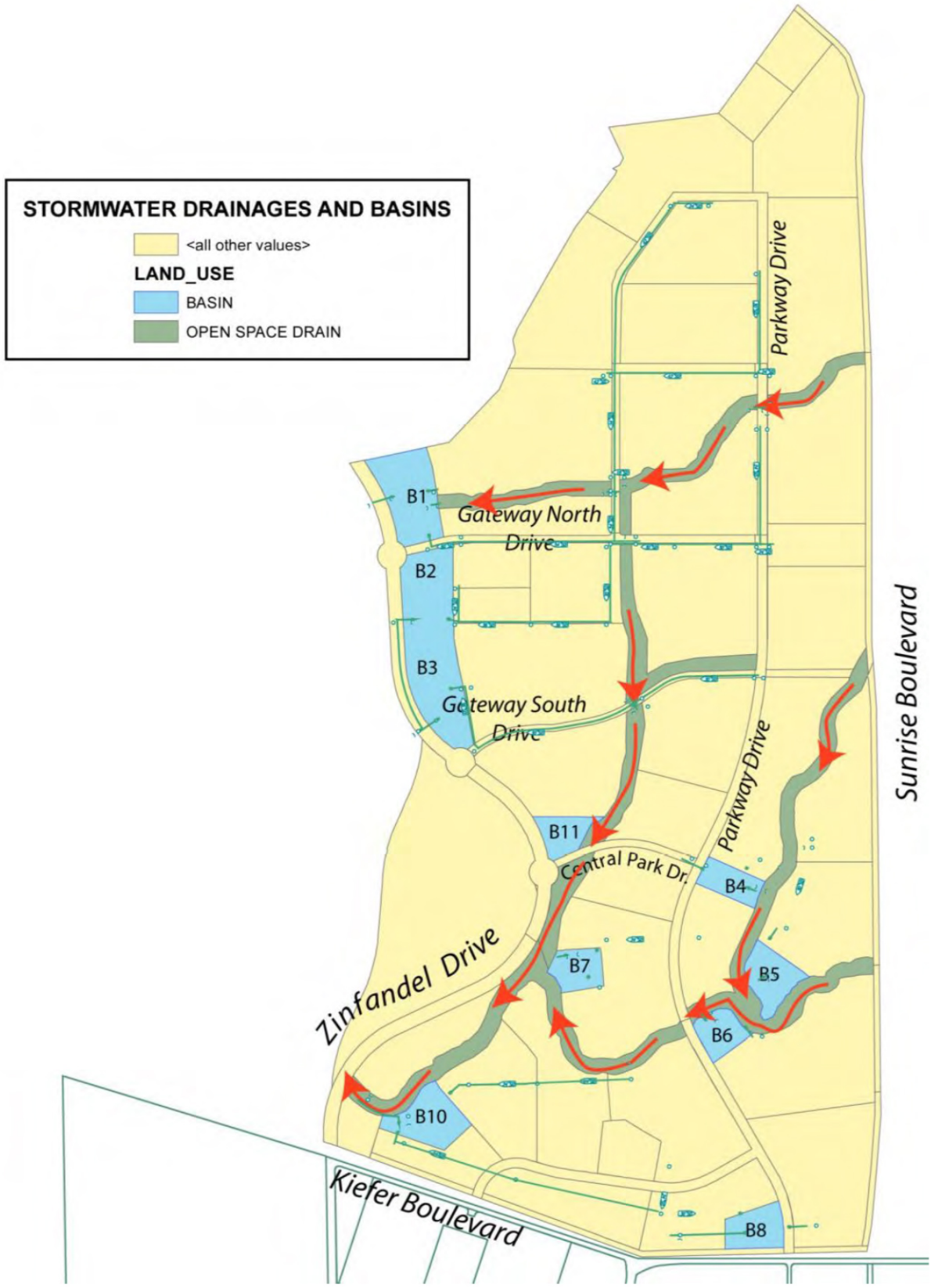
Plate PD-18: Proposed Trunk Domestic Water Delivery System Diagram



Source: Mather South Community Master Plan 2018

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Plate PD-19: Proposed Stormwater Drainages and Basins

Electrical Services

The Mather South Project is within the service territory of the Sacramento Municipal Utility District (SMUD). SMUD owns and maintains power lines within the Plan Area and would be the provider of electrical service. SMUD has indicated that a distribution substation is needed within the Plan Area. Two potential locations for the facility have been identified. The distribution substation would receive electricity from the Jackson Bulk Substation along a 69-kV overhead subtransmission line that runs along the east side of Zinfandel Drive, or alternatively, along the east side of the Regional Bike Trail on the west side of the Folsom South Canal

Location A: The distribution substation would be located in the center of the Plan Area within COMM1 and receive the subtransmission line along the east side of Zinfandel Drive.

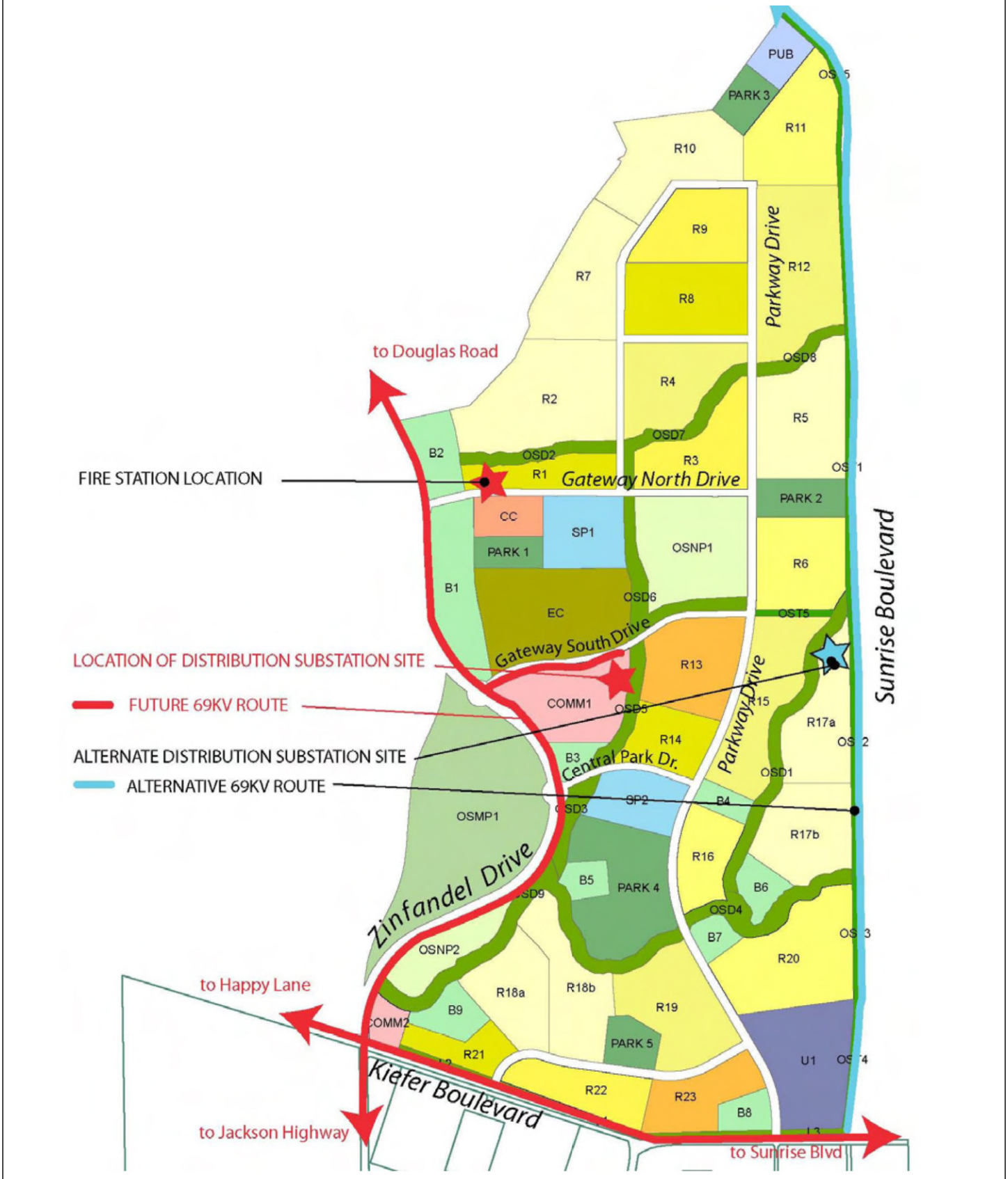
Location B: The distribution substation would be located on the eastern side of the Plan Area within R17a and receive the subtransmission line along the east side of the Regional Bike Trail on the west side of the Folsom South Canal.

Refer to Plate PD-20 for the locations of the proposed electrical infrastructure. A detailed description and evaluation of the Jackson Bulk Substation and distribution substation within the Mather South Project is located in Chapter 20 Summary of Impacts and Their Disposition. Environmental impacts associated with the construction of the distribution substation are analyzed within applicable resource areas especially related to ground disturbance (i.e., aesthetics, air quality, biological resources, cultural resources, etc.) of this EIR.

West Coast Gas will provide natural gas service within the Plan Area through existing gas line facilities external to the Plan Area. Gas facilities will be extended from Douglas Road south to Kiefer Boulevard.

Design Guidelines and Principles

The Community Master Plan includes Design Guidelines, Chapter 6, and Development Standards, Chapter 7, for the Plan Area. There are seven general principles and 61 design guidelines to implement the vision for development of the land uses in the community. The development standards provide physical standards for each major land use category, which include the permitted uses, residential type, minimum lot standards and setbacks, and specific conditions of the Plan Area. The County General Plan, Design Guidelines, and Zoning Code form the basis of the design criteria for the Plan Area; however, the Design Guidelines and Development Standards provide specific guidance on special conditions in the Plan Area and would result in the implementation of community character.



Source: Mather South Community Master Plan 2018

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Plate PD-20: SMUD Substation Locations

PROJECT PHASING

The Mather South Project phasing plan is intended to provide for the logical, timely, and efficient provision of the infrastructure needed to support the planned development. The phasing plan includes four phases and would begin at the intersection of Zinfandel Drive and Gateway South Drive. Plate PD-21 illustrates the construction sequence for required improvements to support the phased development. Table PD-3 below summarizes the land use by phase. Following the certification of this EIR and adoption of the General Plan Amendment and the Community Master Plan by the County of Sacramento, the phased development of the Plan Area would commence in a manner designed to address the following objectives:

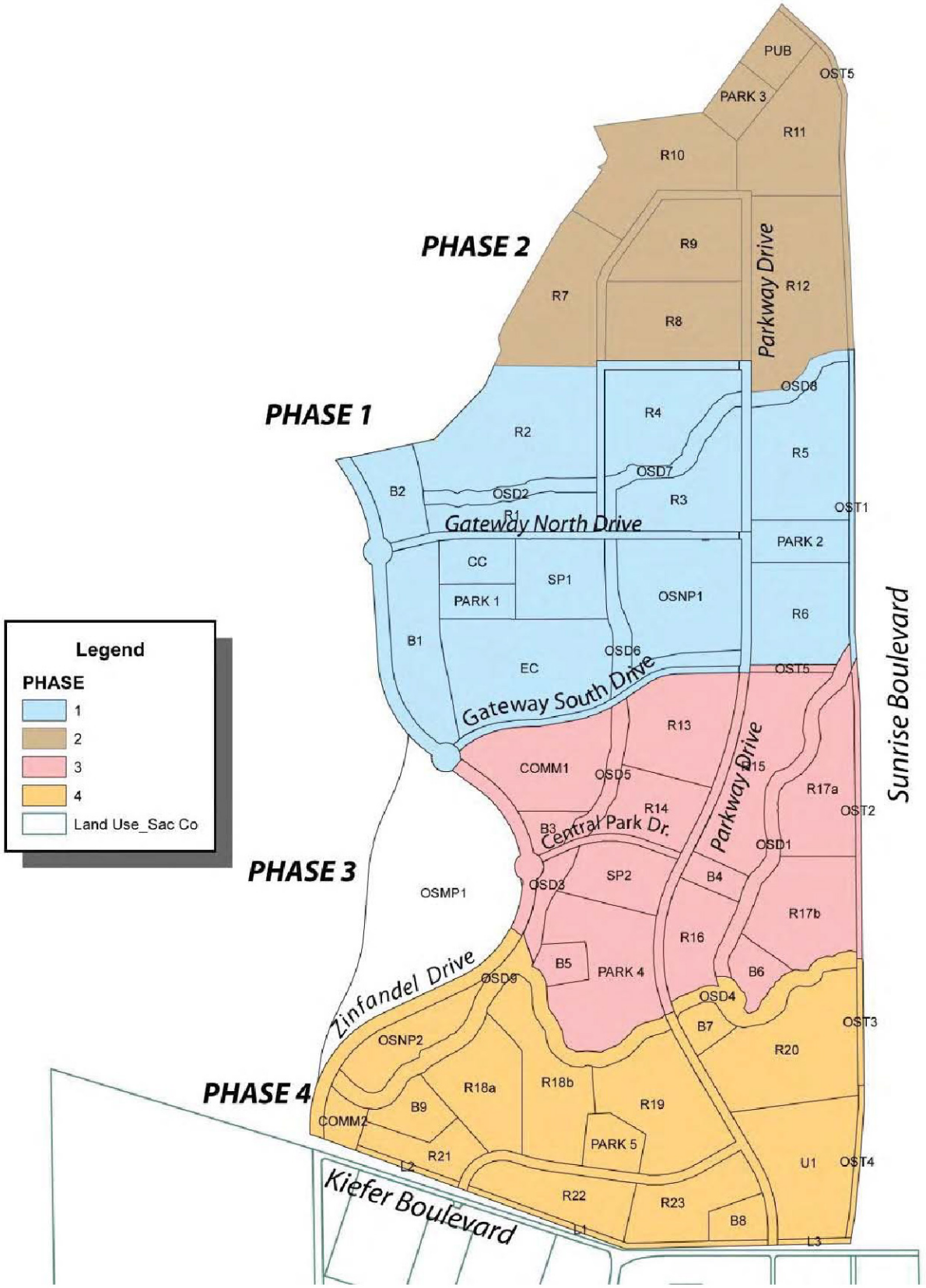
- orderly build-out of the community based upon market and economic conditions;
- implementation of financing mechanisms without creating a financial or administrative burden on the County of Sacramento;
- provision of adequate infrastructure and public facilities concurrent with development of each phase; and
- protection of public health, safety, and welfare.

Table PD-3: Land Use by Phase

Land Use	Phase				Totals
	One	***Two***	***Three***	***Four***	
Park Acres	11.6	5	22.5	5	**44.1**
School Acres	12.2	0	10	0	**22.2**
Commercial Acres	0	0	18	3.1	**21.1**
Environmental Education Campus Acres	27.9	0	0	0	**27.9**
Research and Development Acres	0	0	0	21.4	**21.4**
Open Space Acres	68.1	6.7	87.4	48.4	**210.6**
Residential Acres	115.1	120.7	90.5	105.9	**432.2**
Dwellings Units	943	853	846	879	**3,522**
Total Acres	262.5	144.4	241.2	200.2	**848.2**

Infrastructure requirements for each phase of development include all on-site backbone infrastructure and off-site facilities necessary for each phase to proceed. Among those facilities required are roadways, sanitary sewers, water transmission and storage, storm drainage retention/detention/treatment facilities, dry utilities, parks, recreation, school and other civic facilities needed to meet County standards.

This EIR addresses all known infrastructure needs based on information provided by the County and other service providers; any additional assumptions or analysis would be too speculative to evaluate at this time, and are therefore not required to be addressed at this time (California Environmental Quality Act Guidelines Section 15145).



Source: *Mather South Community Master Plan 2018*

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Plate PD-21: Phasing Map

PROJECT OBJECTIVES

The primary objectives for the project are as follows:

1. By way of a mutually beneficial public/private partnership, accomplish the reuse of a portion of the former Mather A~~R~~**F**B as a mixed-use, master planned, residential community.

2. Improve the balance between the projected number of jobs and housing units within the air force base reuse plan.

3. Improve the financial means to support the infrastructure, both physical and biological, of the ~~a~~**A**ir ~~f~~**F**orce ~~b~~**B**ase reuse plan.

4. Provide the opportunity for the development of an environmental education campus to provide environmental education and research proximate to the Mather Preserve and create employment opportunities and generate economic activity to fulfill the goals of the reuse of the former Mather AFB.

5. Provide the opportunity for the development of a technological research and development campus to create employment opportunities and generate economic activity to fulfill the goals of the reuse of the former Mather AFB.

6. Develop a mixed-use, master planned community guided by state, regional, and county principles of feasibility and sustainability.

INTENDED USES OF THE EIR

The Sacramento County Planning Commission and the Board of Supervisors will use the information contained in this EIR to evaluate the Mather South Project and render a decision to approve or deny the requested entitlements. Responsible agencies may also use the EIR for their own planning/permitting purposes. Based on the potential effects known at this time, responsible agencies may include (but may not be limited to) U.S. Army Corps of Engineers, U.S. Fish & Wildlife Service, California Department of Fish & Wildlife, the California Regional Water Quality Control Board, West Coast Gas Company, SMUD, SCWA, Cordova Recreation and Park District, and the Elk Grove Unified School District.

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2 ALTERNATIVES

INTRODUCTION

This chapter evaluates potential alternatives to the Mather South Project. The identified alternative projects would avoid or substantially reduce significant effects of the project, consistent with Section 15126.6(f) of the State California Environmental Quality Act (CEQA) Guidelines. As detailed in Chapters 3 through 18 and summarized in Chapter 19, the project would result in potentially significant impacts that could be avoided with the implementation of identified mitigation measures in airport compatibility, climate change, cultural resources, geology and soils, hazards, hydrology and water quality, and land use. Impacts were determined to be significant and unavoidable in aesthetics, air quality, biological resources, noise and traffic and circulation. A full description of environmental impacts and mitigation measures is included in the Executive Summary of this EIR.

The original Notice of Preparation for this project was issued in June 2014 which proposed a similar mixed-use master planned community containing residential, commercial, civic, and educational uses. The Sacramento County Board of Supervisors (Board) conducted a public hearing on the Mather Field Project on September 16, 2015 during which public testimony against the project was received. The Board chose to not take action on the project and directed County staff to engage in a collaborative process with key stakeholders, to work through technical issues and define a concept plan that focused on the concerns that were raised during the hearing.

The Mather South Project evaluated in this EIR is the result of the collaboration among the Mather Stakeholder Group, County staff, and the project applicant and addresses concerns previously raised. The main revisions are the elimination of the original university concept and replacement with a smaller Environmental Education Campus, the elimination of the sports complex, and inclusion of additional preserve area with associated open space corridors. The Mather Preserve was expanded to the east to protect known biological resources; approximately 53.2 acres of the Mather South Project area is now included in the Mather Preserve. Zinfandel Drive was also realigned to run along the eastern border of the expanded preserve area.

PROJECT OBJECTIVES

The primary objectives for the project are as follows:

1. By way of a mutually beneficial public/private partnership, accomplish the reuse of a portion of the former Mather Air Force Base (AFB) as a mixed-use, master planned, residential community.

2. Improve the balance between the projected number of jobs and housing units within the air force base reuse plan.

3. Improve the financial means to support the infrastructure, both physical and biological, of the air force base reuse plan.

4. Provide the opportunity for the development of an environmental education campus to provide environmental education and research proximate to the Mather Preserve and create employment opportunities and generate economic activity to fulfill the goals of the reuse of the former Mather AFB.

5. Provide the opportunity for the development of a technological research and development campus to create employment opportunities and generate economic activity to fulfill the goals of the reuse of the former Mather AFB.

6. Develop a mixed-use, master planned community guided by state, regional, and county principles of feasibility and sustainability.

RANGE OF ALTERNATIVES

Potential project alternatives carried forward for analysis were selected based on their ability to meet some or most of the project's stated objectives while reducing the significant effects of the project.

CALIFORNIA ENVIRONMENTAL QUALITY ACT REQUIREMENTS

The State CEQA Guidelines require analysis of a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the project's basic objectives and avoid or substantially lessen any of the significant effects of the project (Section 15126.6[a]). The range of potentially feasible alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The State CEQA Guidelines further require that the alternatives be compared to the project's environmental impacts and that the "no project" alternative is considered (Section 15126.6[d] [e]).

In determining what alternatives should be considered in the EIR, it is important to acknowledge the objectives of the project, the project's significant effects, and unique project considerations. These factors are crucial to the development of alternatives that meet the criteria specified in Section 15126.6(a). Only feasible alternatives need be considered. "Feasibility" of alternatives is described in the State CEQA Guidelines (Section 15364) as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." The ultimate determination as to whether an alternative is feasible or infeasible is made by the lead agency's decision-making body (see PRC Section 21081[a] [3].)

ALTERNATIVES DISMISSED FROM DETAILED EVALUATION

Consistent with State CEQA Guidelines Section 15126.6(c), a brief discussion of those alternatives considered but rejected follows below. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are:(i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts.

OFFSITE ALTERNATIVE

Under an offsite alternative, the project would be developed on a separate site within the unincorporated County. An alternative site would need to be of a similar size as the Plan Area (848 acres) and would need to be able to be acquired by the applicant. Further, the alternative site would need to be located a similar distance from downtown Sacramento to provide the similar benefits to residents including short commute times, and future transit access. There are no similar sites available within the UPA that have readily available infrastructure.

The Mather South Project is proposed to be developed within the southeast portion of the Mather Field Specific Plan Area. The Mather Field Specific Plan Area is in eastern Sacramento County and is the former site of the Mather AFB which began operations in 1918. After the base was recommended for closure in 1990, the Board began to plan for the adoption of a Specific Plan to redevelop the area. In 1995, 4,012 acres of the former Mather AFB were designated as a redevelopment area by the Board. The Mather Field Specific Plan was adopted by Sacramento County in 1997. The Mather South Project is consistent with the primary project objective to redevelop a portion of the Mather Field Specific Plan area, and the project's design and location are consistent with the development plans for the Mather Field Specific Plan Area. Even if an offsite alternative were available, it would not meet the primary project objective for the redevelopment of Mather Field. Therefore, an offsite alternative cannot be considered a potentially feasible project alternative.

GENERAL PLAN CONSISTENT ALTERNATIVE

The General Plan Consistent alternative would result in the development of the Plan Area consistent with the current land use designations for the site which is Urban Development Area (UDA). The UDA designation was adopted because of the approval of the Mather Field Project in 2016. The UDA designation indicates where the County will conduct studies leading to the appropriate configuration of urban land uses for the area or will accept applications to prepare a master plan (such as a specific plan) for the area. The UDA-designated areas are lands that would be converted to urban uses to accommodate the growth that is projected to occur during the 25-year planning period. Urban development and/or rezones cannot occur in these areas until a master plan has been approved and the UDA designation has been removed. Therefore, the UDA designation is a "holding" designation that does not assign allowable densities. The project has been designed to meet the intent of the UDA designation and to further the planning for Plan Area to accommodate future growth. A project that is designed only for a UDA designation would not allow the appropriate level of planning and evaluation

to occur to allow for future growth. For this reason, this alternative has been rejected from further evaluation.

STAFF RECOMMENDED LAND USE ALTERNATIVE

The Staff Recommended Land Use alternative would result in the development of a similar mix of land uses as the Mather South Project; however, the alternative would also include an additional 534 high-density residential units within the 21-acre Research and Development Campus at the southern portion of the Plan Area. This alternative was considered during the application process and included in the Notice of Preparation and evaluated quantitively in Transportation Impact Report (November 2018). The County's goal in considering this alternative was to meet the County's General Plan Housing Element requirements outlined in Policy LU-120. This policy requires master and specific plans to meet a minimum of greater than or equal to 90 percent of Sacramento County's Regional Housing Needs Allocation obligation for lands designated for 20 dwelling units or greater per net acre (RD-20). This would result in providing 4,056 housing units at the site. To meet this requirement an alternative that had a minimum of an additional 534 units would need to be considered.

The Staff Recommended Land Use alternative would meet the requirements of Policy LU-120 by providing an additional 534 high-density residential units, within the land area used for the 21-acre Research and Development Campus. The proposed increased residential development in this alternative would increase the intensity of development in the Plan Area. While the overall footprint of development would not change, as described in the traffic analysis, this alternative would result in increased traffic impacts because of additional vehicle trips associated with the residential units. Additionally, impacts related to air quality, greenhouse gas emissions, and noise would also increase related to increased vehicle trips. Because this alternative would result in an overall increase environmental impacts for several resource areas and would not reduce any of the project's significant impacts, this alternative has been rejected from further evaluation.

DESCRIPTION OF ALTERNATIVES

ALTERNATIVE 1: NO PROJECT

State CEQA Guidelines Section 15126.6 (e)(1) requires that the no project alternative be described and analyzed "to allow decision makers to compare the impacts of approving the project with the impacts of not approving the project." The no project analysis is required to discuss "the existing conditions at the time the notice of preparation is published…as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services."

Under the No Project Alternative, the project would not be built on the site and the site would remain in its current undeveloped state. No physical environmental changes to the site would occur. However, as with the project, there would be potential for development proposals in the future subject to environmental review and approval by

the Board. Nonetheless, for purposes of this analysis, it is assumed that the site would be unchanged from existing conditions.

ALTERNATIVE 2: BIOLOGICAL RESOURCES AVOIDANCE ALTERNATIVE

This alternative considers the preservation of additional sensitive biological resources and areas within the land use plan. This alternative would provide additional buffers around sensitive vernal pools along Kiefer Boulevard in the southern portion of the project and around the critter pool in the center of the Plan Area. This alternative would result in a reduced project development footprint (by 88.3 acres or approximately 10 percent). The northern parcels R3, R5, R6 and PARK 2 totaling 61 acres and adjacent roadways totaling 6.3 acres located north and east of the critter pool would be retained as an open space/preserve area by expanding the proposed open space/preserve area identified as OSMP1. The alternative would also retain southern residential parcels R22, R23, and the adjacent drainage/detention basin B8 totaling 27.3 acres as open space/preserve. Under this alternative, the Plan Area would develop 2,827 residential units, a reduction of 695 units. The proposed development of commercial uses, the research and development campus, the environmental education campus, and other parks and schools would remain the same as the original project. Plate Alt-1 shows the potential development concept for this alternative.

ALTERNATIVE 3: INTENSITY SHIFT ALTERNATIVE

The Intensity Shift Alternative would result in a reconfiguration of the land use map within the Plan Area, such that all commercial uses are shifted to the south along Kiefer Boulevard, and the residential uses are shifted to the north. This would result in the development of the same number of allowable residential dwelling units and commercial and retail, civic and open space areas as the project (refer to Table PD-2). In this scenario, the alternative would displace the density assigned to residential uses in parcels R20, R22, and R23, and reallocate across the Plan Area. Similarly, this alternative would result in the commercial and retail uses currently assigned to parcels CC and Comm being moved south and reoriented to be developed in the parcels previously occupied by R20, R22, and R23. The environmental education campus and school sites would remain in their current central location. The 21-acre research and development campus would remain in the southeastern portion of the property. Plate Alt-2 shows the potential development concept for this alternative.

ALTERNATIVE 4: REDUCED SCALE ALTERNATIVE

This Reduced Scale Alternative would result in a decrease in the scale of the project to 2,102 dwelling units (compared to 3,522 dwelling units or 40 percent decrease) and 480,000 square feet of commercial and retail uses (compared to 800,000 square feet or 40 percent decrease) within the same project footprint. This alternative would result in a shift from higher density parcels and multi-family units (up to 20 dwelling units/acre) to redistribute residential units such that all units would be low-density and single-family units (up to 5 dwelling units/acre). The higher density residential uses in the Plan Area within parcels R1, R3, R4, R5, R9, R13, R14, R15, R16, R19, R21, R22, R23, and R24 would remain residential, but would result in a maximum of 5 dwelling units per acre with an RD-5

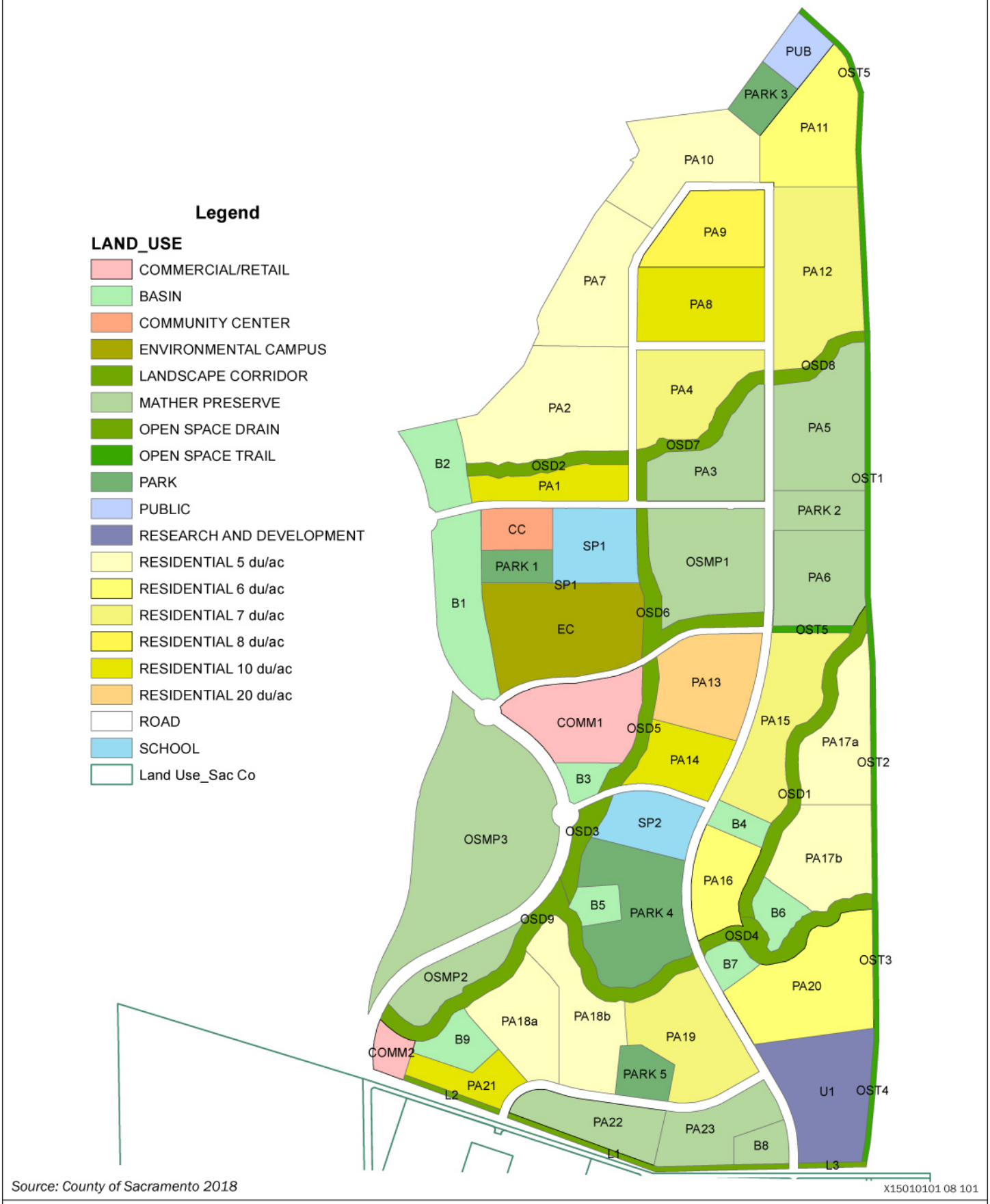
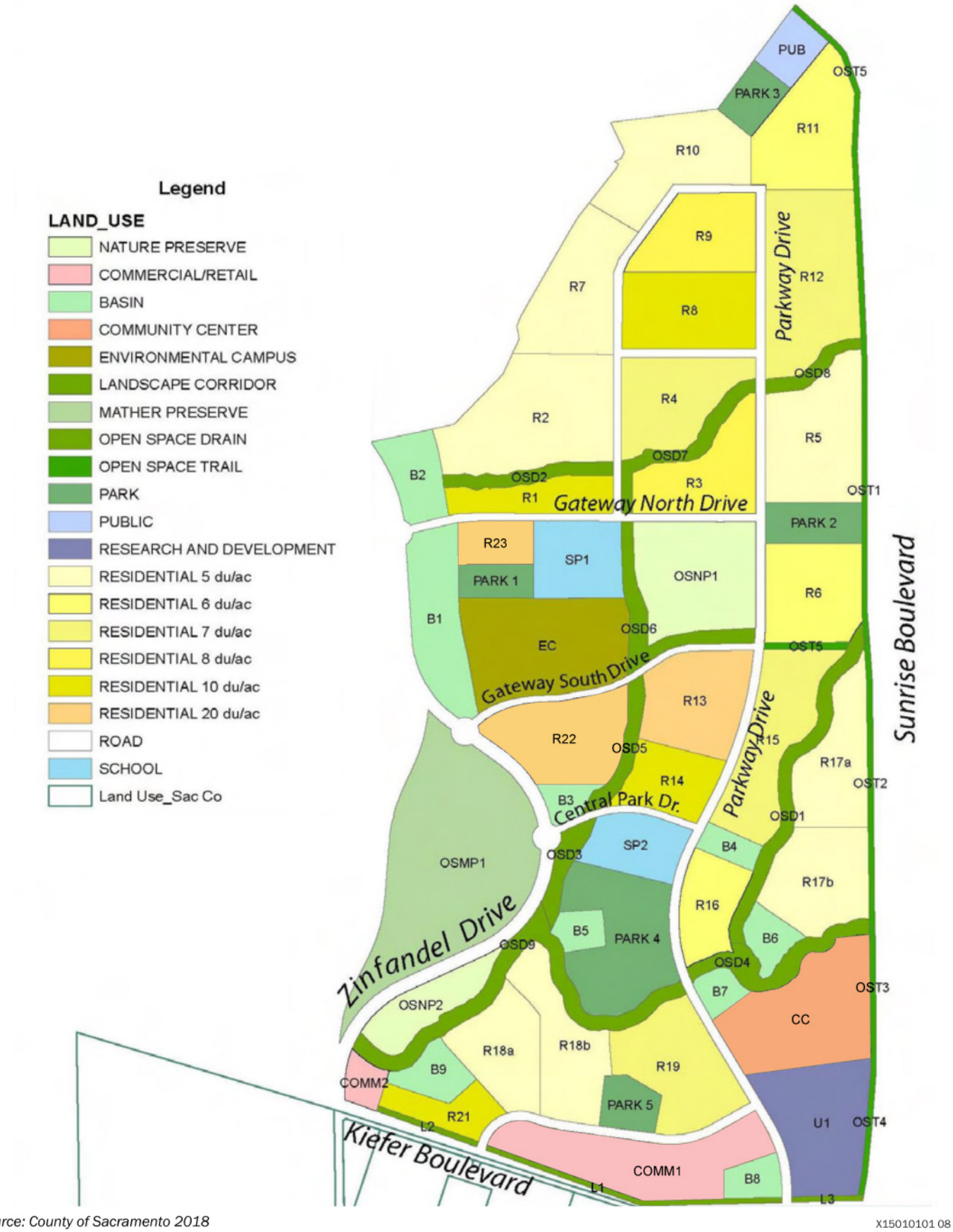


Plate Alt-1: Mather South Biological Resources Avoidance Alternative



Source: County of Sacramento 2018

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Plate Alt-2: Mather South Land Use Plan Intensity Shift Alternative

land use. This alternative would change the proposed 29-acre environmental education campus parcel (formerly designated EC; now R25) to low-density residential land use and eliminate the 375,000 square foot educational portion of the parcel which would have included classrooms, office space, satellite labs and other research supportive facilities. This alternative would also change the proposed 21-acre research and development campus (formerly designated U1; now R24) in the southeastern portion of the Plan Area to low-density residential land use. Under this alternative, the 15,000 square foot civic use would remain in the central portion of the Plan Area. Plate Alt-3 shows the potential development concept for this alternative.

COMPARATIVE EVALUATION OF ALTERNATIVES

The following discussion evaluates the three project alternatives identified above. Table ALT-1 summarizes which project objectives are met by the identified alternatives. Table ALT-2 summarizes the effects of the alternatives relative to the project.

Table ALT-1: Comparison of Alternatives and Project Objectives Met

Project Objectives	Objective Met?			
	No Project Alternative 1	Biological Resources Avoidance Alternative 2	Intensity Shift Alternative 3	Reduced Scale Alternative 4
By way of a mutually beneficial public/private partnership, accomplish the reuse of a portion of the former Mather AFB as a mixed-use, master planned, residential community.	No	Yes	Yes	Yes
Improve the balance between the projected number of jobs and housing units within the air force base reuse plan.	No	Yes	Yes	Yes
Improve the financial means to support the infrastructure, both physical and biological, of the air force base reuse plan.	No	Yes	Yes	Yes
Provide the opportunity for the development of an environmental education campus to provide environmental education and research proximate to the Mather Preserve and create employment opportunities and generate economic activity to fulfill the goals of the reuse of the former Mather AFB.	No	Yes	Yes	No
Provide the opportunity for the development of a technological research and development campus to create employment opportunities and generate economic activity to fulfill the goals of the reuse of the former Mather AFB.	No	No	Yes	No
Develop a mixed-use, master planned community guided by state, regional, and county principles of feasibility and sustainability.	No	Yes	Yes	Yes

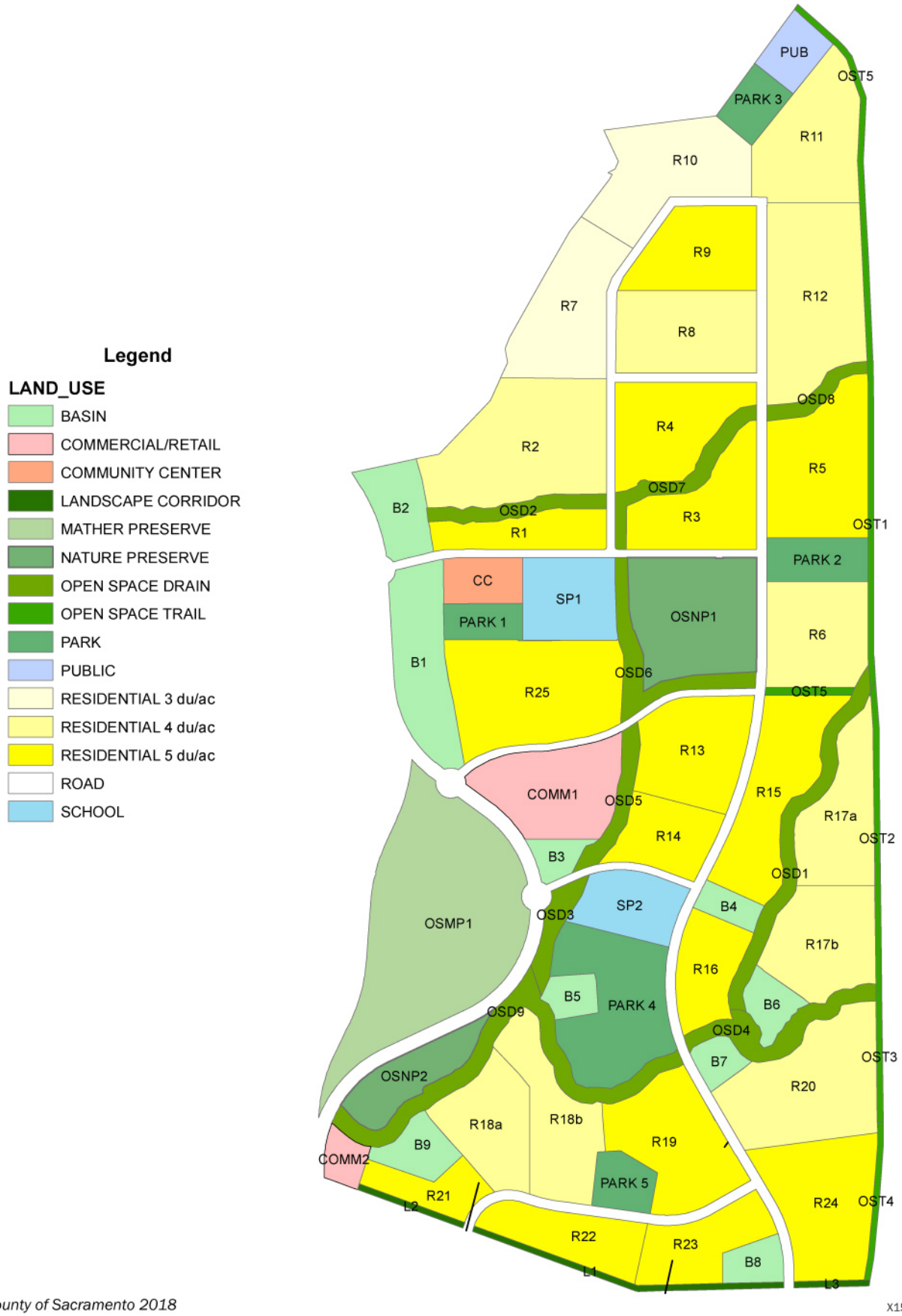

Plate Alt-3: Mather South Low-Density Alternative Land Use Plan

Table ALT-2
Comparison of the Environmental Impacts of the Alternatives in Relation to the Proposed Project

Environmental Topic	Proposed Project	No Project Alternative 1	Biological Resources Avoidance Alternative 2	Intensity Shift Alternative 3	Reduced Scale Alternative 4
Aesthetics	SU	Less	Similar, slightly less	Similar. slightly more	Similar
Air Quality	SU	Less	Less	Similar, slightly more	Similar
Airport Compatibility	LTSM	Less	Similar	Similar	Similar
Biological Resources	SU	Less	Less	Similar	Similar
Climate Change/Greenhouse Gas Emissions	LTSM	Less	Less	Similar, slightly more	Similar
Cultural Resources	LTSM	Less	Similar, slightly less	Similar	Similar
Energy	LTS	Less	Less	Similar	Similar
Geology and Soils	LTSM	Less	Similar, slightly less	Similar	Similar
Hazardous Materials	LTSM	Less	Similar, slightly less	Similar	Similar
Hydrology and Water Quality	LTSM	Less	Similar, slightly less	Similar	Similar
Land Use	LTSM	Less	Less	Less	More
Noise	SU	Less	Less	Similar. slightly more	Less
Public Services	LTS	Less	Less	Similar	Similar
Public Utilities	LTS	Less	Less	Similar	Similar
Traffic and Circulation	SU	Less	Less	Similar	Less
Water Supply	LTS	Less	Less	Similar	Similar

Notes: LTS = Less Than Significant Impact, LTSM = LTS with Mitigation, SU = Significant and Unavoidable
Source: Compiled by Ascent Environmental in 2018

ALTERNATIVE 1: NO PROJECT

CEQA requires consideration of the No Project Alternative, which addresses the impacts associated with not moving forward with the project. The purpose of analyzing the No Project Alternative is to allow decision-makers to compare the impacts of the project versus no project. With the implementation of the No Project Alternative, there would be no development or physical changes to the Plan Area. The Plan Area would remain undeveloped, and consist primarily of grasslands, with seasonal wetlands, vernal pools, and scattered remnants of previously used military infrastructure from historic Mather AFB.

EVALUATION OF ENVIRONMENTAL EFFECTS

AESTHETICS

Under the No Project Alternative, the undeveloped nature of the Plan Area would not change. No buildings, roadways, or infrastructure would be improved. Unlike the project, there would be no significant and unavoidable impacts to visual quality, and mitigation would not be required to reduce light and glare impacts. Overall, impacts would be less under this alternative.

AIR QUALITY

The No Project Alternative would not generate any air pollutants form construction or operational activities. Unlike the project, this alternative would not result in significant and unavoidable long-term operational emissions and would not require mitigation to reduce construction-related criteria air pollutants, reduce odor impacts, and reduce air emission impacts on sensitive receptors. Air quality impacts would be less under this alternative.

AIRPORT COMPATIBILITY

The No Project Alternative would not result in the construction and development of buildings or infrastructure and would not bring new sensitive receptors to the Plan Area. This alternative would not require mitigation to reduce airport safety hazards and airport noise like the project. Even though the project would result in less than significant impacts related to building heights and bird hazards, and no impacts related to air traffic patterns, this alternative would result in less impacts. Overall, this alternative would result in less impacts than the project.

BIOLOGICAL RESOURCES

The No Project Alternative would not result in potential impacts to special-status species or sensitive habitats as no development or construction-related disturbance would occur. This alternative would not result in significant and unavoidable impacts to Swainson's hawk and habitat, or to offsite areas of sensitive biological resources because of roadway improvements. This alternative would not require mitigation to reduce impacts to vernal pool species, special-status plants, western spadefoot habitat, valley elderberry longhorn beetle habitat, western pond turtle, tricolored blackbird,

burrowing owl, American badger, wetlands, wildlife movement, or the tree ordinance. Overall, impacts would be less compared to the project.

CLIMATE CHANGE

The No Project Alternative would not result in the production of greenhouse gas (GHG) emissions related to construction or operation activities. This alternative, unlike the project, would not require mitigation to reduce project emissions to less than significant. GHG emissions under this alternative would be less than the project.

CULTURAL RESOURCES

Implementation of the No Project Alternative would not disturb any known or unknow cultural resource, archaeological resource, or human remains because no development would occur. The No Project Alternative would not result in disturbance to tribal cultural resources. The No Project Alternative would not require mitigation to reduce potentially significant impacts to less than significant like the project. Overall, cultural and tribal cultural resources impacts would be less under this alternative.

ENERGY

Under the No Project Alternative, the Plan Area would remain undeveloped or in its existing rural state. Therefore, no energy would be used for construction or operational activities. Even though the project would not result in significant energy impacts, impacts to energy under this alternative would be less.

GEOLOGY AND SOILS

Under the No Project Alternative, no changes to site geology or soils would occur. No structures or roadway infrastructure would be developed, and no risk would occur related to seismicity or unstable soils. While the project would not result in significant impacts related to seismicity, soil erosion, expansive soils, minerals or agricultural soils, under this alternative, impacts would be less. This alternative would not require mitigation to reduce impacts to paleontological resources to less than significant like the project. Overall, impacts would be less under this alternative.

HAZARDS AND HAZARDOUS MATERIALS

Under the No Project Alternative, no changes to the soils within the Plan Area, or disturbance would occur which could expose nearby residents or workers. Unlike the project, there would be no need for mitigation to reduce impacts related to hazardous materials upset, proximity to schools, or issues related to portions of the site having been listed on the Cortese List. No changes would occur related to the nature of emergency response plans or wildfires. Overall, impacts would be less under the alternative as compared to the project.

HYDROLOGY AND WATER QUALITY

Implementation of the No Project Alternative would result in no changes to the existing hydrology or water quality of the site and in the vicinity. No changes related to flooding or downstream contributions would occur nor would mitigation be required, as under the project. No hydromodification would occur to the site, resulting in the need for mitigation

as under the project. No project construction activities would occur that would disturb soils, even as the project would result in less than significant water quality issues. No changes would occur that would result in greater risk related to dam failure. Impacts would be less under this alternative.

LAND USE AND PLANNING

Under the No Project Alternative, no development would occur. Therefore, like the project there would be no impacts related to dividing an existing community. There would be less potential for conflicts with land use policies enacted to reduce environmental impacts, even though the project would not result in significant impacts in this category. Under this alternative there would be no development of residential uses near Kiefer Boulevard, and therefore, no potential for adjacency issues related to the existing rendering plant. Overall, impacts would be less under this alternative.

NOISE

Under the No Project Alternative, there would be no development of commercial, education, or residential facilities. Therefore, noise and vibration related to construction activities would not occur, and mitigation would not be necessary. Traffic noise would not increase above the existing ambient noise present currently, so ambient noise increases would not occur under this alternative. Stationary noise sources would not be developed under this alternative, so significant and unavoidable noise related to stationary sources under the project would not occur. Impacts would be less.

PUBLIC SERVICES

Under the No Project Alternative, no residential, commercial or educational uses would be developed. Therefore, new demand for fire protection, law enforcement, schools, parks, and libraries would remain the same as it is now in the undeveloped state. While the project does not result in significant impacts because of the payment of required fees and building a new fire station, demand for services would be less under the No Project Alternative.

PUBLIC UTILITIES

Under the No Project Alternative, the demand for wastewater and solid waste services would remain low because of the undeveloped nature of the Plan Area. Even as the project would result in less than significant impacts, demand for these services and capacity would rise in the developed state. Impacts would be less compared to the project for this alternative.

TRAFFIC AND CIRCULATION

Under the No Project Alternative, the Plan Area would not be developed with land uses that will require new and improved roadway infrastructure. Significant and unavoidable impacts related to roadway segments and freeway operations would not occur under this alternative, as would under the project. Intersections operations, bicycle and pedestrian infrastructure, and rural roadway functionality would not require mitigation under this alternative as with the project. Transit facilities and emergency access would not change nor would demand increase for these features under this alternative, even

as these topics are less than significant under the project. Impacts would be less under this alternative.

WATER SUPPLY

Under the No Project Alternative, no development would occur that would require new water supplies to be utilized within the Plan Area. Even though the project would result in less than significant impacts related to capacity, entitlements, groundwater availability and recharge, impacts would be less under this alternative because no new demand would occur.

SUMMARY

Overall, the No Project Alternative would reduce impacts in all resource areas compared to the project, however, it would not meet any of the project objectives.

ALTERNATIVE 2: BIOLOGICAL RESOURCES AVOIDANCE ALTERNATIVE

The Biological Resources Avoidance Alternative assumes that development of the Plan Area would be limited to approximately 760 acres of the Plan Area, (a reduction of 10% from the project) see Plate Alt-1. Under this alternative, additional buffers would be provided around sensitive vernal pools along Kiefer Boulevard in the southern portion of the project and around the critter pool in the center of the Plan Area. Development under this Alternative would be similar to the project because it would include a mix of residential, commercial, retail and civic uses, but residential development would be reduced by 695 units. Specifically, the alternative would result in an elimination of development in northern parcels R3, R5, R6, and PARK 2 and southern residential parcels R22, R23, adjacent to detention basin B8. By reducing the footprint of proposed development in the center and south portions of the Plan Area, the overall development footprint would result in less grading and soil disturbance. Overall, less roads, housing units, and infrastructure improvements would be constructed. The alternative would still require a General Plan Amendment to change the land use diagram to accommodate the mix of uses, reflect roadway alignments, and include bicycle facilities. The alternative would also require a specific plan amendment and zoning ordinance amendment to adopt the Mather South Community Master Plan into the Mather Field Specific Plan.

EVALUATION OF ENVIRONMENTAL EFFECTS

AESTHETICS

The Biological Resources Avoidance Alternative would result in development of a mix of uses across most of the Plan Area. Improvements would include buildings, roadways, and infrastructure and the aesthetics and visual character of the Plan Area would be largely changed from its currently undeveloped nature. Like the project, the alternative would result in permanent changes to the Plan Area that while slightly reduced compared to the project, would result in significant and unavoidable impacts to visual character. Also, although reduced because of the reduced project scale, this alternative would result in increased skyglow and potential impacts from the introduction of suburban lighting to a currently undeveloped area. Mitigation would be required to

reduce impacts like the project. Overall, this alternative would result in similar, but slightly reduced impacts compared to the project.

AIR QUALITY

The Biological Resources Avoidance Alternative, like the project would generate air pollutants from construction or operational activities associated with the development of mixed uses within the Plan Area. Like the project, this alternative would also result in significant and unavoidable long-term operational emissions related to mobile and stationary sources of emissions that would be associated with the new mix of land uses. Also like the project, the alternative would require mitigation to reduce construction-related criteria air pollutants, reduce odor impacts, and reduce air emission impacts on sensitive receptors. Nonetheless, air quality impacts while still significant, would be less under this alternative because of its reduced scale.

AIRPORT COMPATIBILITY

The Biological Resources Avoidance Alternative would result in the construction and development of new buildings, roadways, and other accessory infrastructure and would result in bringing new sensitive receptors to the Plan Area, albeit at a reduced scale compared to the project. This alternative would also require mitigation to reduce airport safety hazards and airport noise like the project. Like the project, this alternative would result in less than significant impacts related to building heights and bird hazards, and no impacts related to air traffic patterns. Overall, this alternative would result in similar, though reduced impacts than the project because of its reduced scale.

BIOLOGICAL RESOURCES

The Biological Resources Avoidance Alternative would result in the development of a mix of uses like the project within a reduced footprint. Therefore, less overall grading would be required within the Plan Area, and the project footprint associated with this alternative would leave additional naturally occurring biological features in place. As a result, the project's significant direct impacts to onsite vernal pools, vernal swales, seasonal wetlands, coyote brush scrub, elderberry shrub, and cottonwood would be reduced compared to the project. However, given the close proximity of developing mixed uses and because sensitive resources are located in multiple locations across the Plan Area some of which would be developed, these resources would still be at risk of being disturbed because of project activities including construction, hydromodification, introduction of humans and domestic animals to the area. Barriers, educational signage, and berms could reduce the potential for these outcomes to occur.

This alternative, like the project, would result in significant and unavoidable impacts to Swainson's hawk and habitat, and to offsite areas of sensitive biological resources because of roadway improvements. This alternative, like the project, would also require mitigation to reduce impacts to vernal pool species, special-status plants, western spadefoot habitat, valley elderberry longhorn beetle habitat, western pond turtle, tricolored blackbird, burrowing owl, American badger, wetlands, wildlife movement, or the tree ordinance. Overall, this alternative would result in significant biological impacts,

but these impacts would be substantially reduced compared to the project because of the reduce project footprint.

CLIMATE CHANGE

The Biological Resources Avoidance Alternative would result in the production of GHG emissions related to construction and operation activities, albeit at a reduced level compared to the project. This alternative, like the project, would result in the development of a mix of uses including residential, commercial, retail, and civic albeit at a reduced scale. Fewer residential dwelling units would be constructed compared to the project, and the research and development campus would not be developed. This would result in a significant reduction in GHG emissions; however, it is likely that this alternative would still require mitigation to reduce project emissions to less than significant. Overall, GHG emissions under this alternative would be less than the project, because of the reduced scale of development.

CULTURAL RESOURCES

The Biological Resources Avoidance Alternative would result in a smaller project footprint that would result in less grading on the site compared to the project. However, the potential to disturb previously unknown tribal cultural resources, archaeological resources, or human remains still exists, albeit at a reduced level. Like the project, this alternative would require mitigation to reduce the potential for significant impacts resulting from the development of mixed uses under this alternative. Overall, cultural and tribal cultural resources impacts would be similar, or slightly less under this alternative because of the reduced project footprint.

ENERGY

The Biological Resources Avoidance Alternative would result in the development of a mix of uses including residential, commercial, retail and civic and would require the consumption of energy during construction and operational activities. This alternative would result in a reduced scale project, but like the project, energy would be consumed under this alternative. However, like the project, energy would not be wasted and would available for use in the development of the project. This EIR assumes that the SMUD infrastructure, that is described in Chapter 9, “Energy,” would still be required under this reduced project alternative because of its substantial size and other cumulative development that is being considered. Therefore, energy impacts would be less under this alternative as compared to the project.

GEOLOGY AND SOILS

The Biological Resources Avoidance Alternative would result in the development of a mix of uses including residential, commercial, retail, and civic uses at a reduced scale. This alternative would result in a reduced amount of grading and ground disturbance within the Plan Area, which would reduce the potential for soil erosion as compared to the project. Like the project, this alternative would also require mitigation to reduce the potential for disturbance to paleontological resources. Like the project, impacts related to seismicity, expansive soils, and agricultural soils impacts would remain nonexistent or

less than significant. Overall, impacts under this alternative would be similar or slightly less than the project.

HAZARDS AND HAZARDOUS MATERIALS

The Biological Resources Avoidance Alternative would result in the development of a similar project reduced in scale and project footprint compared to the project. A reduced project footprint would result in less grading and ground disturbance which would slightly reduce the potential for exposure of residents and workers to contaminated soils in the Plan Area. Like the project, this alternative would require mitigation to reduce impacts related to hazardous materials upset, proximity to schools, and the potential for issues related to portions of the site having been listed on the Cortese List. Like the project, this alternative would result in no change to conflicts with emergency response plans or wildfires because the alternative would be required to coordinate with Sac Metro Fire like the project. Overall, impacts under this alternative would be similar or slightly less than the project.

HYDROLOGY AND WATER QUALITY

The Biological Resources Avoidance Alternative would result in the development of a reduced scale project with a smaller project footprint which would have less ground disturbing activities resulting in the potential for soil erosion and impacts to water quality. Similarly, the reduced project footprint under this alternative would result in a smaller portion of the Plan Area becoming developed with impervious surfaces, which would reduce the potential for downstream flood impacts. However, hydromodification would still occur across most of the Plan Area, which would require this alternative, like the project, to implement mitigation. The magnitude and scale of Impacts would, however, be reduced for these issue areas compared to the project. No changes would occur that would result in this alternative being at risk for dam failure compared to the project. Overall, impacts under this alternative would be similar or slightly less than the project.

LAND USE AND PLANNING

The Biological Resources Avoidance Alternative would result in the development of a mixed use, albeit smaller scale project than the proposed project. Like the project, this alternative would not result in divisions to an existing community because the Plan Area is vacant and surrounded by undeveloped land. Though the project would result in less-than-significant impacts related to conflicts with policies enacted to reduce environmental impacts, this alternative would reduce the potential for impacts because of the smaller footprint and additional biological resources protections. Unlike the project, this alternative would result in fewer adjacency impacts resulting from the placement of residential uses near the rendering plant south of Kiefer Boulevard those residential uses have been redistributed throughout the site at locations that are further from the rendering plant such that this impact would be eliminated. Overall, impacts would be less under this alternative.

NOISE

The Biological Resources Avoidance Alternative would result in the development of a mixed-use project that includes residential, commercial, retail and civic uses. The project footprint and scale would be reduced under this alternative, which would result in a reduction in residential dwelling units and the elimination of the research and development campus. Under this alternative, noise and vibration related to construction activities would still occur albeit at a reduced level, and mitigation would be necessary. Traffic noise would also increase above the existing ambient noise under this alternative, albeit less than compared to the project, and impacts to offsite sensitive receptors would still occur under this alternative. Stationary noise sources would also be developed under this alternative, so significant and unavoidable noise related to stationary sources under this alternative would still occur, albeit to a lesser extent compared to the project. Overall, impacts would be less under this alternative but still significant.

PUBLIC SERVICES

The Biological Resources Avoidance Alternative would result in the development of mixed uses at a reduced scale compared to the project. Therefore, this alternative would increase demand for public services including fire protection, law enforcement, schools, parks, and libraries above the existing undeveloped condition, but below the demand that would occur under the project because the scale of development under this alternative would be reduced. Effects on services would remain less than significant like the project under this alternative because the project applicant would be required to pay fees as mitigation and build a fire station and parks. Overall, impacts would be less under this alternative.

PUBLIC UTILITIES

The Biological Resources Avoidance Alternative would result in the development of a reduced scale project that would reduce demand for wastewater and solid waste services by approximately 10 percent. As described in the EIR, impacts would be less than significant. Therefore, while demand for utilities would be higher than the undeveloped existing condition of the Plan Area, it would be less than for the proposed project and impacts would be less than significant. Overall, impacts would be less under this alternative.

TRAFFIC AND CIRCULATION

The Biological Resources Avoidance Alternative would result in the development of a mix of land uses that would require the implementation of a new internal circulation network and improvements to the existing roadway network. Under this alternative, while the project footprint would be reduced and dwelling units and the research and development campus eliminated, it is likely that significant and unavoidable impacts related to roadway segments and freeway operations would still occur under this alternative because of the substantial change in land uses that would still occur. Under this alternative intersections operations, bicycle and pedestrian infrastructure, and rural roadway functionality would likely still require mitigation similar to that recommended for the project. Transit facilities and emergency access would still be required as demand

for transit would increase under this alternative, and the project would be required to coordinate emergency access. Even with implementation of mitigation recommended for the project, it is likely that some significant and unavoidable impacts would remain. Nonetheless, impacts would be less under this alternative.

WATER SUPPLY

The Biological Resources Avoidance Alternative would result in the development of a mix of land uses that would increase the demand for water supplies in the Plan Area above the current undeveloped condition. Even though the project would result in less than significant impacts related to capacity, entitlements, groundwater availability and recharge, impacts would be slightly reduced under this alternative because of the reduction in scale of the alternative compared to the project, which would result in less demand for water. Overall, impacts would be less under this alternative.

SUMMARY

Overall, the Biological Resources Avoidance Alternative would reduce environmental impacts compared to the project for most resource areas and would meet most of the project objectives.

ALTERNATIVE 3: INTENSITY SHIFT ALTERNATIVE

Under the Intensity Shift Alternative, the same number of dwelling units (3,522) would be constructed as the project but the land use map would be reconfigured to shift the most intense land uses of the project to the southern portion of the Plan Area. Specifically, the commercial center parcel would be relocated from the central western portion of the Plan Area, to the southeastern portion of the Plan Area, adjacent to the research and development campus, refer to Plate Alt-2. This would result in the least intense uses being clustered in the northern half of the Plan Area, which would include single-family and low-density residential uses with parks, schools, and the environmental education campus. The most intense uses would be clustered in the southern portion of the Plan Area along Kiefer Boulevard, with commercial, research and development and higher density residential uses. The Intensity Shift Alternative would be consistent with existing land uses in the north as the development pattern of residential uses and open space would be consistent with the existing Mather Golf Course, Mather Lake and Independence at Mather residential community. The overall proposed intensity of development would be consistent with the Mather Field Specific Plan.

EVALUATION OF ENVIRONMENTAL EFFECTS

AESTHETICS

The Intensity Shift Alternative would result in development of a mix of uses throughout the Plan Area with the greatest intensity of uses being clustered along Kiefer Boulevard in the southernmost portion. Improvements would include buildings, roadways, and infrastructure and the aesthetics and visual character of the Plan Area would be largely changed from its currently undeveloped nature. Like the project, the alternative would result in permanent changes to the Plan Area that under this alternative may be increased depending upon the viewer's vantage point compared to the project. The

clustering of higher density residential uses, commercial and retail, and the research and development campus would result in a taller and more concentrated hub of activity-generating uses in the southern portion of the Plan Are. Like the project, this alternative would result in significant and unavoidable permanent impacts to visual character. Also like the project, the alternative would result in increased skyglow and potential impacts from the introduction of suburban lighting to a currently undeveloped area. This impact could be exacerbated by clustering all commercial land uses into a smaller more concentrated portion of the plan. Mitigation would be required to reduce impacts like the project. Overall, this alternative would result in similar visual impacts.

AIR QUALITY

The Intensity Shift Alternative like the project, would generate air pollutants from construction or operational activities associated with the development of the same mix of uses within the Plan Area within the same footprint. Like the project, this alternative would result in significant and unavoidable long-term operational emissions related to mobile and stationary sources of emissions that would be associated with the new mix of land uses. Also like the project, the alternative would require mitigation, to reduce construction-related criteria air pollutants, reduce odor impacts, and reduce air emission impacts on sensitive receptors. Nonetheless, air quality impacts would still be significant, and would be similar to the project.

AIRPORT COMPATIBILITY

The Intensity Shift Alternative would result in the construction and development of new buildings, roadways, and other accessory infrastructure and would result in bringing new sensitive receptors to the Plan Area, like the project. This alternative, though reconfigured to cluster the most intense uses in the southern portion of the Plan Area, would also require mitigation to reduce airport safety hazards and airport noise like the project. As proposed, this alternative would result in less-than-significant impacts related to building heights and bird hazards, and no impacts related to air traffic patterns because the alternative would be required to comply with the airport comprehensive land use plan (ACLUP). Overall, this alternative would result in similar impacts to the project.

BIOLOGICAL RESOURCES

The Intensity Shift Alternative would result in the development of a mix of uses in a slightly different configuration. However, the overall grading footprint and ground disturbance would be similar to the project. As a result, this alternative's significant direct impacts to onsite vernal pools, vernal swales, seasonal wetlands, coyote brush scrub, elderberry shrub, and cottonwood would be the same as compared to the project. This alternative, like the project, would result in significant and unavoidable impacts to Swainson's hawk and habitat, and to offsite areas of sensitive biological resources because of roadway improvements. This alternative would also require the same mitigation as the project to reduce impacts to vernal pool species, special-status plants, western spadefoot habitat, valley elderberry longhorn beetle habitat, western pond turtle, tricolored blackbird, burrowing owl, American badger, wetlands, wildlife

movement, or the tree ordinance. Overall, this alternative would result in similar biological impacts.

CLIMATE CHANGE

The Intensity Shift Alternative, like the project, would result in the development of a mix of uses including residential, commercial, retail, and civic. Overall densities and development intensity would be similar to the project, resulting in the same level of construction-related GHG emissions. Because building types, densities, and overall development area would be the same as the project, building-related operational GHG emissions would also be the same as the project. However, this alternative would concentrate commercial uses in the southern portion of the Plan Area, which may decrease the walkability and bikeability of the Plan Area as a whole because of increased distance from most residences to services. This could result in a slightly higher vehicle-miles-traveled (VMT) rate internally because more people would drive to access those commercial services. VMT is directly linked to mobile-source GHG emissions and, therefore, an increase in internal VMT would result in a slight increase in mobile-source GHG emissions, as compared to the project. This alternative would require at least the same amount of mitigation or more related to project emissions as the proposed project. Overall, GHG emissions under this alternative would be slightly more than the project, because of the shift in development intensity and associated increased VMT.

CULTURAL RESOURCES

The Intensity Shift Alternative would result in a similar project footprint that would result in approximately the same amount of grading on site. Therefore, the potential to disturb previously unknown tribal cultural resource, archaeological resource, or human remains would be the same as the project. Like the project, this alternative would require mitigation to reduce the potential for significant impacts resulting from the development of mixed uses under this alternative. Overall, cultural and tribal cultural resources impacts would be similar under this alternative.

ENERGY

The Intensity Shift Alternative would result in the development of a mix of uses including residential, commercial, retail and civic and would require the consumption of energy during construction and operational activities. This alternative would develop a similarly scaled development as the proposed project within which energy would be consumed. Like the project, energy would not be wasted and is available for use in the development of the project. Therefore, energy impacts would be similar under this alternative.

GEOLOGY AND SOILS

The Intensity Shift Alternative would result in the development of a mix of uses including residential, commercial, retail and civic at a similar scale as the project. Therefore, this alternative would result in a similar amount of grading and ground disturbance within the Plan Area; therefore, a similar potential for soil erosion would exist. Like the project, this alternative would also require mitigation to reduce the potential for disturbance to

paleontological resources. Further, impacts related to seismicity, expansive soils, and agricultural soils impacts would remain nonexistent or less than significant because the Plan Area is does not exhibit seismic sensitivity, the development would be required to perform a geotechnical report and soils testing prior to grading, and there are no important agricultural soils on the site. Overall, impacts under this alternative would be similar to the project.

HAZARDS AND HAZARDOUS MATERIALS

The Intensity Shift Alternative would result in the development of a similar project footprint that would result in approximately the same amount of grading and ground disturbance and a similar potential for exposure of residents and workers to contaminated soils in the Plan Area. Like the project, this alternative would require mitigation to reduce impacts related to hazardous materials upset, proximity to schools, and the potential for issues related to portions of the site having been listed on the Cortese List because this alternative would develop the same types of uses as the project. Similarly, this alternative would result in no change to conflicts with emergency response plans or wildfires because the alternative would be required to coordinate with Sac Metro Fire. Overall, impacts under this alternative would be similar to the project.

HYDROLOGY AND WATER QUALITY

The Intensity Shift Alternative would result in the development of a similarly-scaled project over a similar project footprint which would have the same amount of ground disturbing activities. This would result in a similar potential for soil erosion and impacts to water quality during construction. Similarly, this alternative would result in the same potential for downstream flood impacts and hydromodification. This alternative, like the project, would be required to implement mitigation to reduce the potential for flooding. No changes would occur that would result in this alternative being at increased risk for dam failure compared to the project. Overall, impacts under this alternative would be similar to the project.

LAND USE AND PLANNING

The Intensity Shift Alternative would result in the development of a mix of uses, similar to the project, albeit reconfigured to include the most intense uses in the southern portion of the Plan Area. Like the project, this alternative would not result in divisions to an existing community because the Plan Area is vacant and surrounded by undeveloped land. Like the project, this alternative would result in less-than-significant impacts related to conflicts with policies enacted to reduce environmental impacts. Unlike the project, this alternative would result in fewer adjacency impacts resulting from the placement of residential uses near the rendering plant south of Kiefer Boulevard because these residential land uses would be located a greater distance from these operations. Under this alternative, the residential density in parcels R22 and R23 which are the closest to the rendering plant, would shift to the north and be replaced by commercial uses. Overall, impacts would be less under this alternative compared to the project.

NOISE

The Intensity Shift Alternative would result in the development of a mixed-use project that includes residential, commercial, retail and civic uses. The project footprint and scale would be similar to the project under this alternative; however, the most intense land uses (i.e., high-density residential, commercial, and retail) would be concentrated in the southern portion of the Plan Area along Kiefer Boulevard. Under this alternative, noise and vibration related to construction activities would occur at a similar level as the project, and like the project, mitigation would be necessary. Traffic noise would also increase above the existing ambient noise under this alternative, and like the project, impacts to offsite sensitive receptors would occur under this alternative, at a potentially increased level because congestion may increase closer to the offsite receptors. Offsite noise impacts to existing sensitive receptors along the south side of Kiefer Boulevard could increase because of the proximity of new commercial uses clustered in the southern portion of the Plan Area. However, shifting the commercial intensity from the center of the Plan Area could reduce internal noise-related impacts from developing residential uses near commercial uses (e.g., loading docks, commercial HVAC, vehicle traffic noise), so internal sensitive receptor impacts compared to the project may be reduced. Overall, impacts would be similar to the project but may shift where the greatest noise conflicts would occur increase for offsite receptors.

PUBLIC SERVICES

The Intensity Shift Alternative would result in the development of mixed uses at the same scale as the project; therefore, this alternative would result in the same demand for public services including fire protection, law enforcement, schools, parks, and library services because like the project, this alternative would result in the payment of mitigation, construction of a new fire station, and development of parks. Like the project, impacts on services would be less than significant. Therefore, impacts would be the same with implementation of this alternative.

PUBLIC UTILITIES

The Intensity Shift Alternative would result in the development of a similarly-scaled project as the project and as a result, demand for wastewater and solid waste services would be the similar to the project. Therefore, under this alternative, demand for utilities would be the same as the proposed project. Like the project, impacts would be less than significant. Overall, impacts would be similar under this alternative.

TRAFFIC AND CIRCULATION

The Intensity Shift Alternative would result in the development of a mix of land uses that would require the implementation of a new internal circulation network and improvements to the existing roadway network. The clustering of commercial and employment uses in the southern portion of the Plan Area would be consistent with the four-lane arterial classification for Kiefer Boulevard and the access provided by the regional network in the area. However, traffic and circulation patterns would change compared to the project, with largely local and residential traffic prevailing in the northern portion of the Plan Area, and largely regional and commercial and employment traffic prevailing along Kiefer Boulevard. Additional impacts could occur under this

alternative because commercial uses would be concentrated in the southern portion of the Plan Area, which may decrease the walkability and bikeability of the Plan Area as a whole because of increased distance from most residences to services. This could result in a slightly higher VMT rate internally because more people would drive to access those commercial services. Under this alternative, it is likely that significant and unavoidable impacts related to roadway segments and freeway operations would still occur, though impacts may be redistributed among the proposed roadway network.

Also, because the alternative would concentrate commercial uses in the southern portion of the Plan Area, it may decrease the walkability and bikeability of the Plan Area as a whole because of increased distance from most residences to services. This could result in a slightly higher VMT rate internally because more people would drive to access those commercial services. Under this alternative, intersections operations, bicycle and pedestrian infrastructure, and rural roadway functionality would likely still require mitigation under this alternative, as with the project because the overall intensity of this alternative is similar to the project. Transit facilities and emergency access would still be required as demand for transit would still occur under this alternative, and the project would still be required to coordinate emergency access. Overall, impacts would be similar under this alternative as compared to the project.

WATER SUPPLY

The Intensity Shift Alternative would result in the development of a mix of land uses that would result in the same demand for water supplies in the Plan Area as the project. The project would result in less than significant impacts related to capacity, entitlements, groundwater availability and recharge, and impacts under this alternative would be similar. Overall, impacts would be similar under this alternative.

SUMMARY

Overall, the Intensity Shift Alternative would result in similar impacts to the project, and would increase aesthetics, air quality, climate change, and noise. This alternative would reduce land use impacts. It would meet all project objectives.

ALTERNATIVE 4: REDUCED SCALE ALTERNATIVE

Under the Reduced Scale Alternative, a reduced number of residential dwelling units (2,102) would be constructed but the higher density residential parcels would be redistributed to decrease density overall staying within the same project footprint as the project. The environmental education campus and research and development campus would be eliminated and would instead support low-density residential uses. Like the project, the commercial and retail parcel and community center parcels in the center of the Plan Area would be developed under this alternative. This alternative would result in a less intense project, because all residential parcels would be low density and single family. Commercial uses would be central to most of the residential uses and many services could be accommodated within the 480,000 square feet dedicated to this land use type. However, the research and development and environmental education campus would not be developed, so the Plan Area would not provide regional employment opportunities, and residents would be required to look for offsite

employment. The Reduced Scale Alternative would be consistent with existing land uses in the north and general development pattern in eastern Sacramento County. Refer to Plate Alt-3 for an illustration of this alternative.

AESTHETICS

The Reduced Scale Alternative would result in the development of predominantly low-density residential uses across most of the Plan Area, albeit at a reduced level, with a central parcel devoted to commercial and retail uses. Improvements would include buildings, roadways, and infrastructure and the aesthetics and visual character of the Plan Area would be largely changed from its currently undeveloped nature. Like the project, the alternative would result in permanent changes to the Plan Area that while slightly reduced compared to the project because of the development of lower profile residential types, fewer dwelling units, and the elimination of the environmental education campus and research and development campus, would result in significant and unavoidable impacts to visual character because of the change from its undeveloped nature. Also, although reduced because of the reduced project scale, this alternative would result in increased skyglow and potential impacts from the introduction of suburban lighting to a currently undeveloped area, albeit at a reduced level compared to the project. Therefore, mitigation would be required to reduce impacts like the project. Overall, this alternative would result in similar impacts compared to the project.

AIR QUALITY

The Reduced Scale Alternative, like the project, would generate air pollutants from construction or operational activities associated with the development of residential, commercial, civic, and park uses, as well as roads and utility infrastructure within the Plan Area, albeit at a reduced scale. However, under this alternative, the scale of development would be reduced through a decrease in residential development by 40 percent, and a 40 percent reduction in commercial uses, including elimination of the environmental education campus and research and development campus. While this reduction in development may reduce construction-related air quality emissions, this would result in residents driving further to work because of a loss of onsite employment options, and it is likely that mobile source emissions related to driving would offset any gains. Therefore, like the project, this alternative would result in significant and unavoidable long-term operational emissions related to mobile and stationary sources of emissions that would be associated with the new development. Also like the project, the alternative would require mitigation to reduce construction-related criteria air pollutants, reduce odor impacts, and reduce air emission impacts on sensitive receptors. Therefore, impacts to air quality would be similar to the project and ultimately still significant.

AIRPORT COMPATIBILITY

The Reduced Scale Alternative would result in the construction and development of new buildings, roadways, and other accessory infrastructure. Under this alternative, buildings would be reduced in height because of the elimination of multi-family housing and both campuses. Low-density residential uses would be developed in the parcels that formerly contained the research and development and environmental education campus, and

overall the number of dwelling units would be reduced by 40 percent, compared to the project. However, these changes would have little effect on airport compatibility because like the project, development under this alternative would be required to be compatible with the ACLUP. This alternative would also require mitigation to reduce airport safety hazards and airport noise like the project. Like the project, this alternative would result in less than significant impacts related to building heights and bird hazards, and no impacts related to air traffic patterns because of compliance with the ACLUP. Overall, this alternative would result in similar impacts to the project because of its reduced scale.

BIOLOGICAL RESOURCES

The Reduced Scale Alternative would result in the development of residential, commercial, park and civic uses, albeit at a reduced scale compared to the project. However, the overall grading footprint and ground disturbance would be similar to the project. As a result, this alternative's significant direct impacts to onsite vernal pools, vernal swales, seasonal wetlands, coyote brush scrub, elderberry shrub, and cottonwood would be the same as compared to the project. This alternative, like the project, would result in significant and unavoidable impacts to Swainson's hawk and habitat. Additionally, it is likely that the same amount of roadway improvements would be made, which would could impact offsite areas of sensitive biological resources. This alternative would also require the same mitigation as the project to reduce impacts to vernal pool species, special-status plants, western spadefoot habitat, valley elderberry longhorn beetle habitat, western pond turtle, tricolored blackbird, burrowing owl, American badger, wetlands, wildlife movement, or the tree ordinance because of the similar project footprint. Overall, this alternative would result in similar biological impacts.

CLIMATE CHANGE

The Reduced Scale Alternative would result in the production of GHG emissions related to construction and operation activities, albeit at a reduced level compared to the project. This alternative, like the project, would result in the development of residential, commercial, civic, and parkland uses, along with roadways and utility infrastructure. However, this alternative would eliminate development of multi-family residential uses (40 percent density reduction overall), and the research and development campus and environmental education campus. While this would result in a significant reduction in GHG emissions because of decreased construction activities, and fewer residents and employees driving to and from the Plan Area, the future residents that do live in the Plan Area will be forced to find offsite employment which will increase the amount of distance traveled to and from work. This would result in an increase in VMT, which would likely offset the amount of GHG emissions otherwise reduced through the smaller project. This alternative would still require mitigation to reduce project emissions to less than significant. Overall, GHG emissions under this alternative would be similar to the project, even at the reduced scale of development.

CULTURAL RESOURCES

The Reduced Scale Alternative would result in a similar project footprint as the project and would result in approximately the same amount of grading on site. Therefore, the potential to disturb previously unknown tribal cultural resource, archaeological resource, or human remains would be the same as the project. Like the project, this alternative would require mitigation to reduce the potential for significant impacts resulting from the development of the Plan Area under this alternative. Overall, cultural and tribal cultural resources impacts would be similar under this alternative.

ENERGY

The Reduced Scale Alternative would result in the development of residential, commercial, civic, and park uses in the Plan Area that would require the consumption of energy during construction and operational activities. This alternative would result in a reduced scale project, but like the project, energy would be consumed under this alternative. However, like the project, energy would not be wasted and would available for use in the development of the project. While the scale of the project would be reduced under this alternative by decreasing residential density and commercial uses by 40 percent, including the replacement of employment uses with low density residential uses, the difference in energy usage would be nominal as compared to the project because there would be more individual buildings consuming energy. This EIR assumes that the SMUD infrastructure that is described in Chapter 9 Energy would still be required under this reduced project alternative because of its substantial size and other cumulative development that is being considered. Therefore, energy impacts would be similar under this alternative as compared to the project.

GEOLOGY AND SOILS

The Reduced Scale Alternative would result in the development of residential, commercial, civic and park space at a reduced scale as the project but within the same footprint. Therefore, this alternative would result in a similar amount of grading and ground disturbance within the Plan Area. This would result in similar potential for soil erosion would exist. Like the project, this alternative would also require mitigation to reduce the potential for disturbance to paleontological resources. Further, impacts related to seismicity, expansive soils, and agricultural soils impacts would remain nonexistent or less than significant because the Plan Area does not exhibit seismic sensitivity, the development would be required to perform a geotechnical report and soils testing prior to grading, and there are no important agricultural soils on the site. Overall, impacts under this alternative would be similar to the project.

HAZARDOUS MATERIALS

The Reduced Scale Alternative would result in the development of a similar project footprint that would result in approximately the same amount of grading and ground disturbance and a similar potential for exposure of residents and workers to contaminated soils in the Plan Area. Like the project, this alternative would require mitigation to reduce impacts related to hazardous materials upset, proximity to schools, and the potential for issues related to portions of the site having been listed on the Cortese List because this alternative would develop the same types of uses as the

project, albeit at a reduced scale. Similarly, this alternative would result in no change to conflicts with emergency response plans or wildfires because the alternative would be required to coordinate with Sac Metro Fire. Overall, impacts under this alternative would be similar to the project.

HYDROLOGY AND WATER QUALITY

The Reduced Scale Alternative would result in the development of a reduced scale project over a similar project footprint which would have the same potential ground disturbing activities. While the larger environmental education campus and research and development campus with associated parking surfaces would be replaced with single family and low-density residential structures, this would not significantly reduce the overall impervious nature of the post development conditions within the Plan Area because it would likely be similar in surface area. Therefore, this would result in a similar potential for downstream flood impacts and hydromodification. This alternative, like the project, would be required to implement mitigation to reduce the potential for flooding. Since grading would be similar, the potential for soil erosion impacts to water quality during construction would be similar. No changes would occur that would result in this alternative being at increased risk for dam failure compared to the project. Overall, impacts under this alternative would be similar to the project.

LAND USE

The Reduced Scale Alternative would result in the development of a mix of uses, similar to the project, albeit at a reduced scale, and eliminating the employment uses. Like the project, this alternative would not result in divisions to an existing community because the Plan Area is vacant and surrounded by undeveloped land. Like the project, this alternative would result in less-than-significant impacts related to conflicts with policies enacted to reduce environmental impacts. However, unlike the project, this alternative may increase the potential for adjacency impacts resulting from the placement of new residential uses in parcel R24 (formerly designated as U1, the research and development campus) near the rendering plant south of Kiefer Boulevard because these residential land uses may be close enough to experience odors or noise related to the operation of the plant. Additionally, this alternative does not meet as many of the policy objectives in the Mather Field Specific Plan related to the development of economic and employment uses as a result of eliminating the environmental education campus and the research and development campus. Under this alternative, the reduction in multi-family housing would also conflict with the State's housing affordability targets consistent with the Regional Housing Needs Assessment because low-density and single-family homes do not qualify. Overall, impacts would be greater under this alternative compared to the project.

NOISE

The Reduced Scale Alternative would result in the development of a mixed-use project that includes residential, commercial, and civic uses. The project footprint would be similar to the project under this alternative; however, the most intense land uses (i.e., environmental education campus and research and development campus) would be eliminated. Under this alternative, noise and vibration related to construction activities

would occur at a similar level as the project, and like the project, mitigation would be necessary. Traffic noise would also increase above the existing ambient noise under this alternative, but unlike the project, impacts to offsite sensitive receptors may be reduced under this alternative, because of the reduction in employment uses which would reduce the number of non-residents traveling to the Plan Area. Offsite noise impacts to existing sensitive receptors along the south side of Kiefer Boulevard could decrease because of the elimination of the research and development campus. Additionally, reducing the employment uses could reduce some of the internal noise-related impacts from developing residential uses near commercial uses (e.g., loading docks, commercial HVAC, vehicle traffic noise) however this alternative would still develop the central commercial parcel. Overall, impacts would be reduced under this alternative compared to the project.

PUBLIC SERVICES

The Reduced Scale Alternative would result in the development of mixed uses at a reduced scale compared to the project. Therefore, this alternative would increase demand for public services including fire protection, law enforcement, schools, parks, and libraries above the existing undeveloped condition, but below the demand that would occur under the project because the scale of development under this alternative would be reduced. Effects on services would remain less than significant like the project under this alternative because the project applicant would be required to pay fees as mitigation and build a fire station and parks. Overall, impacts would be less under this alternative.

TRAFFIC AND CIRCULATION

The Reduced Scale Alternative would result in the development of a mix of land uses that would require the implementation of a new internal circulation network and improvements to the existing roadway network. Under this alternative, while the number of dwelling units would be reduced by 40 percent and the environmental education campus and research and development campus eliminated, it is still possible that significant and unavoidable impacts related to roadway segments and freeway operations would still occur under this alternative because of the substantial change from undeveloped rural land to developed land uses. Under this alternative intersections operations, bicycle and pedestrian infrastructure, and rural roadway functionality would likely still require mitigation similar to that recommended for the project because the project would result in a significant increase in new trips to and from the Plan Area. Transit facilities and emergency access would still be required as demand for transit would increase under this alternative, and the project would be required to coordinate emergency access. Even with implementation of mitigation recommended for the project, it is likely that some significant and unavoidable impacts would remain. Nonetheless, impacts would be reduced under this alternative.

WATER SUPPLY

The Reduced Scale Alternative would result in the development of a mix of land uses that would result in a reduced demand for water supplies in the Plan Area as the project, because residential density would be reduced by 40 percent and employment

uses would be eliminated. Therefore, like the project, this alternative would result in less than significant impacts related to capacity, entitlements, groundwater availability and recharge. Overall, impacts would be similar under this alternative.

SUMMARY

Overall, the Reduced Scale Alternative would result in similar environmental impacts compared to the project for most resource areas, with the exception of increased land use impacts, and reduced traffic and noise impacts. This alternative would meet most of the project objectives.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The No Project Alternative would avoid all significant environmental effects of the project and would be environmentally superior to the project. However, this alternative would not meet any of the project's objectives because a mixed-use residential community would not be constructed. State CEQA Guidelines Section 15126.6(e)(2) states that when the no project alternative is identified as the environmentally superior alternative, the EIR must also identify an environmentally superior alternative from among the other alternatives.

The Biological Resources Avoidance Alternative would be environmentally superior to the project and to all other alternatives as it would reduce the project's significant direct impacts to onsite vernal pools, vernal swales, seasonal wetlands, coyote brush scrub, elderberry shrub, and cottonwood. Additional impacts would be reduced related to construction and operations activities (e.g., air, cultural, GHG, and traffic) because of the reduced footprint and reduced number of units that would be developed. This alternative would meet most of the project's objectives; however, it may not be economically viable because of the substantially reduced number of units and the required backbone infrastructure needs.

Based on this information and the comparison of environmental impacts in Table ALT-2, the Biological Resources Avoidance Alternative is the environmentally superior alternative.