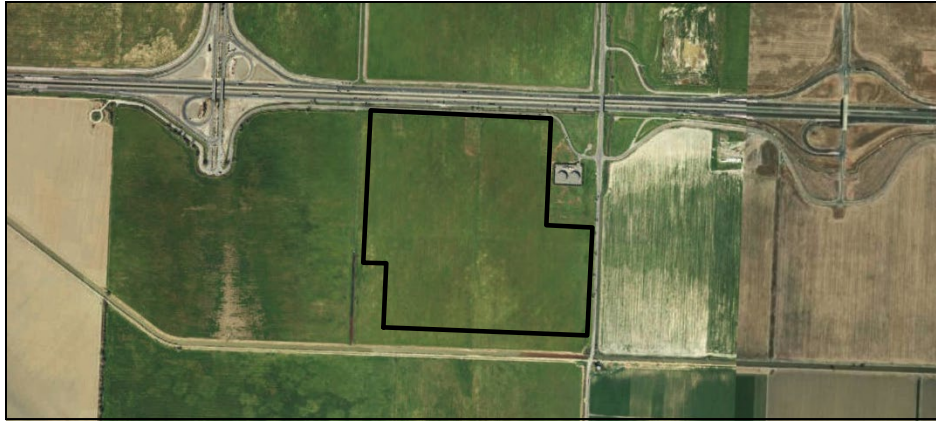

FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT
REPORT

*SACRAMENTO COUNTY WATTEV
INNOVATIVE FREIGHT TERMINAL (SWIFT)
PROJECT*



*Control Number: PLER2023-00069
State Clearinghouse Number: 2023080394
May 2024*

COUNTY OF SACRAMENTO
PLANNING AND ENVIRONMENTAL REVIEW
827 7TH STREET, ROOM 225
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County of Sacramento
Planning and Environmental Review

FINAL ENVIRONMENTAL IMPACT REPORT

SACRAMENTO COUNTY WATTEV INNOVATIVE FREIGHT TERMINAL (SWIFT) PROJECT

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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 Office 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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PLANNING AND ENVIRONMENTAL REVIEW
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PREFACE

FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

This final supplemental environmental impact report (Final SEIR) has been prepared by Sacramento County (County), as lead agency, in accordance with the requirements of the California Environmental Quality Act (CEQA) and the State CEQA Guidelines (CCR Section 15132). This Final SEIR contains responses to comments received on the draft supplemental environmental impact report (Draft SEIR) for the Sacramento County WattEV Innovative Freight Terminal (SWIFT) Project (proposed project). The Sacramento County Board of Supervisors will use the Final SEIR as one of the informational sources to determine whether to approve or deny the project.

A Notice of Preparation (NOP) for the proposed project was published in August 2023. A scoping meeting for service providers and other public agencies as well as a scoping meeting for the public were held on August 30, 2023.

Along with a Notice of Completion (NOC), the Draft SEIR was released to the Governor's Office of Planning and Research to begin the public review period (Public Resources Code, Section 21161) on February 2, 2024. Concurrent with the NOC, the County also provided public notice of the availability of the Draft SEIR for public review through publication in a local newspaper and with notices which were sent to individuals who had requested such notification. The written comment period began on February 2, 2024, and concluded on March 18, 2024 at 5 p.m.

Where changes to the text of the Environmental Impact Report (EIR) were made to reflect revisions to the proposed project or are required as a result of the comments received, those changes are shown with **bold underline for text added** and ~~strikethrough for text deleted~~ within the pertinent chapter(s). Corrections to errors in pagination or format, spelling corrections, grammatical corrections, and other such editorial changes that are unrelated to the substantive content of the EIR are not highlighted. It should be noted that the revisions do not change the intent or content of the analysis or effectiveness of mitigation measures presented in the Draft SEIR.

CEQA Guidelines Section 15088.5 requires a lead agency to recirculate an EIR when "significant new information" is added to the EIR after the lead agency gives public notice of the availability of the Draft SEIR but before certification. "Information" may include project changes, changes to the environmental setting, or additional data or other information. The CEQA Guidelines do not consider new information to be significant unless the lead agency changes the EIR in a way that deprives the public of a meaningful opportunity to comment on a substantial adverse environmental effect or a feasible way to mitigate the impact that the agency or project proponent has declined to implement.

Section 15088.5 states “significant new information” requiring recirculation may include:

- A new significant environmental impact that had not previously been disclosed in the Draft SEIR would result from the project or from a new mitigation measure;
- A substantial increase in the severity of an environmental impact that had already been identified unless mitigation measures would be adopted to reduce the impact to a level of insignificance;
- A feasible project alternative or mitigation measure would considerably lessen the significant environmental impacts of the project, but the proponents will not adopt it; or
- The Draft SEIR was so inadequate and conclusory that meaningful public review and comment were precluded.

In response to comments from the public and public agencies on the Draft SEIR, the County has incorporated minor revisions to the text of the Draft SEIR into the Final SEIR. The revisions to the text of the Draft SEIR outlined below present minor corrections, additions, and revisions initiated by Sacramento County based on comments received during the public review period by reviewing agencies and/or the public, as well as minor corrections added by the County during preparation of the Mitigation Monitoring and Reporting Program (MMRP). None of the information added to the Draft SEIR altered the significance conclusions. Rather, the new information amplified and clarified the information provided in the Draft SEIR. None of the revisions or updates to the Draft SEIR’s analyses represents “significant new information” as that term is defined by the CEQA Guidelines Section 15088.5. Thus, recirculation is not necessary as the changes do not constitute significant new information under CEQA.

The Draft SEIR, Final SEIR, and all appended materials are available electronically on Sacramento County’s website. Visit <https://planningdocuments.saccounty.net/>; within the “Application No.” search field type PLER2023-00069 and click “search”.

EXECUTIVE SUMMARY

The subject of this Supplement to the Sacramento International Airport Master Plan Update Supplemental Environmental Impact Report (SEIR) is a project known as the Sacramento County WattEV Innovative Freight Terminal (SWIFT) project. The project site is located within the Airport Master Plan area south of Interstate 5 between Airport Boulevard and Power Line Road in unincorporated Sacramento County. The Sacramento County Board of Supervisors certified the original SEIR on February 16, 2022, and approved the Sacramento International Airport Master Plan Update.

SUPPLEMENT TO SEIR SCOPE AND IMPACTS EVALUATED

As an initial step in the environmental review process, the proposed project was compared with the prior 2022 Airport SEIR prepared for the 2022 Airport Master Plan Update. Changes to the prior project along with new topical environmental analyses were considered to determine whether the proposed project would have the potential to result in significant impacts. During the Notice of Preparation (NOP) scoping process comments were received from the following agencies:

- California Department of Fish and Wildlife (CDFW)
- California Department of Transportation (Caltrans)
- City of Sacramento
- Sacramento Area Council of Governments (SACOG)
- Sacramento Municipal Utility District (SMUD)
- Environmental Council of Sacramento et al (ECOS)

This report identifies significant and unavoidable impacts related to agricultural resources (farmland conversion).

This report identifies impacts that are less than significant with mitigation for impacts associated with air quality (short-term construction emissions), biological resources, cultural resources (archaeological resources, including human remains), transportation (design hazards or incompatible uses), and tribal cultural resources. These impacts are identified as significant or potentially significant, which could be reduced to a less than significant level through inclusion of recommended mitigation measures.

Impacts associated with aesthetics, air quality (long-term operational emissions, toxic air contaminants, odors), climate change, cultural resources (historic resources), energy, hazards and hazardous materials, hydrology and water quality, land use, noise, transportation (conflict with transportation policies, vehicle miles traveled, emergency access), and utilities **are considered less than significant**.

The following environmental impact and mitigation summary table (**Table ES-1: Executive Summary of Impacts and Mitigation** on page 1-3) briefly describes the project impacts and the mitigation measures recommended to eliminate or reduce the impacts. The residual impact after mitigation is also identified. Detailed discussions of each of the identified impacts and mitigation measures, including pertinent support data, can be found in the specific topic sections 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			
The proposed project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings.	LTS	No mitigation is required.	NA
The proposed project would not create substantial new sources of light and glare.	LTS	No mitigation is required.	NA
AGRICULTURAL RESOURCES			
The proposed project would result in the conversion of important farmland to nonagricultural uses.	PS	AG-1: Prior to approval of a grading permit, improvement plans, or building permits (whichever comes first) for the project and its associated conversion of approximately 110 acres of farmland of local importance on the project site, an equal amount of identified airport land of like classification will be set aside via a deed restriction.	SU
The proposed project would not conflict with existing zoning for agricultural use or a Williamson Act Contract.	LTS	No mitigation is required.	NA

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

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
The proposed project would not involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use.	LTS	No mitigation is required.	NA
AIR QUALITY			
The proposed project would not conflict with or obstruct implementation of an applicable air quality plan.	LTS	No mitigation is required.	NA
While the proposed project would not result in a cumulatively considerable net increase of criteria air pollutants and precursors during construction, fugitive dust generated during construction could worsen ambient air quality if best management measures to control for fugitive dust are not implemented.	PS	<p>AQ-1: All future construction projects which exceed the SMAQMD construction ozone precursor screening thresholds in effect at the time of project submittal shall include an ozone precursor analysis. If the analysis results indicate that the project will generate ozone precursors that exceed the current Sacramento Metropolitan Air Quality Management District thresholds, this mitigation shall apply. This mitigation may be modified if guidance from the Sacramento Metropolitan Air Quality Management District changes in the future.</p> <p>a. The project applicant, or its designee, shall provide a plan for approval by the Sac Metro Air District that demonstrates the heavy-duty off-road vehicles (50 horsepower or more) to be used 8 hours or more during the construction project will achieve a project wide fleet-average 10% NOx reduction compared to</p>	LTS

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
		<p>the most recent California Air Resources Board (CARB) fleet average. The plan shall have two components: an initial report submitted before construction and a final report submitted at completion. (Acceptable options for reducing emissions may include use of cleaner engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.)</p> <ul style="list-style-type: none"> b. Submit the initial report at least four (4) business days prior to construction activity using the Sac Metro Air District’s Construction Mitigation Tool (http://www.airquality.org/businesses/ceqa-land-use-planning/mitigation). c. Provide project information and construction company information. d. Include the equipment type, horsepower rating, engine model year, projected hours of use, and the CARB equipment identification number for each piece of equipment in the plan. Incorporate all owned, leased and subcontracted equipment to be used. e. Submit the final report at the end of the job, phase, or calendar year, as pre-arranged with Sac Metro Air District staff and documented in the approval letter, to demonstrate continued project compliance. 	

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
		<p>The SMAQMD may conduct periodic site inspections to determine compliance. Nothing in this mitigation shall supersede other air district, state or federal rules or regulations.</p> <p>This mitigation will sunset on January 1, 2028, when full implementation of the CARB In Use Off-Road Regulation is expected.</p> <p>AQ-2: To mitigate the additional construction emissions that cannot be offset through implementation of Mitigation Measure AQ-1, above, the following shall apply: Prior to construction activities, SCDA or the project proponent will submit proof that the off-site air quality mitigation fee has been paid to SMAQMD, and that the construction air quality mitigation plan has been approved by SMAQMD and the Environmental Coordinator. The fee will be calculated based on the most current SMAQMD recommended methodology and fee rate available at the time of ground disturbance.</p> <p>AQ-3: The following mitigation measures will be incorporated into the project to minimize the generation of PM₁₀ dust during dry construction conditions:</p> <ol style="list-style-type: none"> a. Enclose, cover, or water twice daily all soil piles. b. Water exposed soil with adequate frequency for continued moist soil. c. Water all haul roads twice daily. d. Cover loads of all haul/dump truck securely. 	

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
		<p>AQ-4: Consistent with SMAQMD Basic Construction Emission Control Practices (BMPs), the following controls shall be included as a mitigation measure for the proposed project and implemented at the construction site:</p> <ul style="list-style-type: none"> • Control of fugitive dust is required by District Rule 403 and enforced by SMAQMD staff. • All exposed surfaces shall be watered two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads. • Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways shall be covered. • Wet power vacuum street sweepers shall be used to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited. • Vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph). • All roadways, driveways, sidewalks, parking lots to be paved shall be completed as soon as possible. In addition, building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. 	

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
The proposed project would not result in cumulatively considerable net increase of criteria air pollutants and precursors during operation.	LTS	No mitigation is required.	NA
The proposed project would not result in the exposure of sensitive receptors to substantial concentrations of toxic air contaminants.	LTS	No mitigation is required.	NA
The proposed project would not result in the potential to create objectionable odors.	LTS	No mitigation is required.	NA
BIOLOGICAL RESOURCES			
The proposed project may have a substantial adverse effect on protected State or federally protected wetlands or surface waters.	PS	<p>BR-1: To reduce impacts to waters of the State, or to protected aquatic or wetland habitats, the applicant shall comply with one or a combination of the following prior to construction of the proposed project which involves conversion of wetlands or waters of the State:</p> <p>a. Where a Waste Discharge Requirements (WDR) has been issued by Central Valley Regional Water Quality Control Board, or an application has been made to obtain a WDR, the Mitigation and Management Plan required by that permit or proposed to satisfy the requirements of the Central Valley Regional Water Quality Control Board for granting a WDR may be submitted for purposes of</p>	LTS

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
		<p>achieving a no net-loss of waters of the state. The required Plan shall be submitted to the Sacramento County Environmental Coordinator for approval prior to its implementation.</p> <p>b. If the regulatory permitting process results in less than a 1:1 compensation ratio for permanent loss of waters of the state, the project applicant shall demonstrate that the waters of the State which went unmitigated/uncompensated as a result of permitting have been mitigated through other means. In sum, a net mitigation ratio of at least 1:1 must be achieved for any permanent loss of waters of the state resulting from implementation of the proposed project. Acceptable methods include payment into a mitigation bank or protection of off-site wetlands through the establishment of a permanent conservation easement, subject to the approval of the Environmental Coordinator.</p>	
<p>The proposed project may have a substantial adverse effect, either directly or through habitat modification, on any species identified as a special status species.</p>	<p>PS</p>	<p>Initiation of ground disturbance (clearing and grubbing, grading, or construction) for any proposed construction project shall be conducted between September 15 and March 1. If new disturbance must be conducted during the nesting season, March 1 to September 15, a focused surveys for Swainson’s hawk nests on the site and within ½ mile of the site shall be conducted by a qualified biologist in accordance with the Swainson’s Hawk Survey Protocol outlined in the Swainson’s Hawk Technical Advisory Committee 2000 paper. Multiple</p>	<p>LTS</p>

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
		<p>surveys <u>will</u> may be required depending on the timing of the surveys. If no active nests are found during the focused survey, no further mitigation will be required.</p> <p>If active nests are found, a qualified biologist shall be retained to prepare a site-specific take avoidance plan that proposes measures to comply with the California Endangered Species Act and the Fish and Game Code, and these measures shall be implemented prior to the start of any ground-disturbing activities. Measures may include, but are not limited to, nest-specific no disturbance buffers, biological monitoring, rescheduling project activities around sensitive periods for the species (e.g., nest establishment), or implementation of construction best practice such as staging equipment out of the species' line of sight from the nest tree. In the event take of Swainson's hawk cannot be avoided, the project applicant may seek related take authorization as provided by Fish and Game Code. Evidence of take authorization from CDFW must be submitted to Sacramento County prior to removal of any Swainson's hawk nests. <u>Removal of known raptor nest trees will be replaced with appropriate native trees species at a ratio of 3:1 at a location within the Natomas Basin but outside the FAA-designated critical zone for the airport.</u></p> <p>BR-3: Prior to the commencement of ground-disturbing activity in the fallowed agricultural landcover suitable as foraging habitat for Swainson's hawks, the applicant will</p>	

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
		<p>compensate for permanent loss of 110 acres of foraging habitat through the preservation and management of foraging habitat. This compensatory mitigation will be at a ratio of 1:1 (mitigation habitat to permanently lost habitat). For permanent loss of foraging habitat, mitigation sites will be within 10 miles of the Natomas Basin so that habitat would be provided for Swainson’s hawks nesting or foraging in and near the Natomas Basin.</p> <p>This mitigation may be provided through purchase of credits from an agency-approved conservation bank, or through protection of habitat through acquisition of fee-title or a conservation easement and funding for long-term management of the habitat. Protection of land on Airport owned property for mitigation purposes will be implemented through deed restriction or other similarly enforceable land use restriction mechanisms.</p> <p>Mitigation provided through acquisition of fee title or a conservation easement outside of Airport owned property must satisfy the following requirements:</p> <ul style="list-style-type: none"> • The mitigation site must be approved by the County and CDFW. • The form and content of the easement must be recordable and acceptable to the County and CDFW, prohibit any activity that substantially impairs or diminishes the land’s capacity as suitable Swainson’s Hawk foraging habitat, and protect any 	

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
		<p>existing water rights necessary to maintain foraging habitat in agricultural production.</p> <ul style="list-style-type: none"> • The easement or title will be transferred to the CDFW or a third-party conservation organization acceptable to the County and CDFW. • A fee must be paid to the County to cover the costs of administering, monitoring, and enforcing the easement or managing the property in fee title in an amount determined by the County or the third-party conservation organization, not to exceed three thousand five hundred dollars (\$3,500.00) per acre. The actual amount will be calculated by use of the Property Analysis Record (PAR) software program or other generally accepted, attribute based, site-specific method for calculating in-perpetuity endowments for preserves. <p>BR-4: If construction activity (which includes clearing, grubbing, or grading) is to commence within 500 feet of suitable nesting habitat for raptor nests between February 1 and September 15, a survey for raptor nests shall be conducted by a qualified biologist. The survey shall cover all potential tree, ground, or manmade (e.g., utility poles) suitable nesting habitat on-site and off-site up to a distance of 500 feet from the project boundary. The survey shall occur within 15 days of the date that project activities will encroach within 500 feet of such suitable habitat. The biologist shall supply a brief written report (including date, time of survey, survey method,</p>	

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
		<p>name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity. If no active nests are found during the survey, no further mitigation will be required.</p> <p>If any active nests are found, the Environmental Coordinator and a site-specific take avoidance plan that describes avoidance/protective measures to comply with the Fish and Game Code shall be prepared in consultation with a qualified biologist. The avoidance/protective measures shall be implemented prior to the commencement of construction within 500 feet of an identified nest. Measures may include, but are not limited to, nest-specific no disturbance buffers, biological monitoring, rescheduling project activities around sensitive periods for the species (e.g., nest establishment), or implementation of construction best practice such as staging equipment out of the species' line of sight from the nest tree.</p> <p>If a lapse in project-related work of 15 days or longer occurs, the qualified biologist shall perform a new focused survey, and if nests are found, perform the tasks described in this measure.</p> <p>BR-5: Prior to ground disturbance (which includes clearing, grubbing, or grading) within 500 feet of suitable burrow habitat, a survey for burrowing owl shall be conducted by a qualified biologist. The survey shall occur within 30 days of the date that construction will</p>	

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
		<p>encroach within 500 feet of suitable habitat. Surveys shall be conducted in accordance with the following:</p> <ol style="list-style-type: none"> 1. A survey for occupied burrows and owls should be conducted by walking through suitable habitat over the area to be disturbed and in areas within 150 meters (~500 feet) of the project impact zone. 2. Pedestrian survey transects should be spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines should be no more than 30 meters (~100 feet) and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility. To efficiently survey projects larger than 100 acres, it is recommended that two or more surveyors conduct concurrent surveys. Surveyors should maintain a minimum distance of 50 meters (~160 feet) from any owls or occupied burrows. It is important to minimize disturbance near occupied burrows during all seasons. 3. If no occupied burrows or burrowing owls are found in the survey area, a letter report documenting survey methods and findings shall be submitted to the Environmental Coordinator and no further mitigation is necessary. 4. If occupied burrows or burrowing owls are found, then a complete burrowing owl survey is required. This consists of a minimum of four site visits conducted on four separate days, which must also 	

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
		<p>be consistent with the Survey Method, Weather Conditions, and Time of Day sections of Appendix D of the California Fish and Wildlife “Staff Report on Burrowing Owl Mitigation” (March 2012). Submit a survey report to the Environmental Coordinator which is consistent with the Survey Report section of Appendix D of the California Fish and Wildlife “Staff Report on Burrowing Owl Mitigation” (March 2012).</p> <p>5. If occupied burrows or burrowing owls are found the applicant shall contact the Environmental Coordinator and confer with California Fish and Wildlife prior to construction and will be required to submit a Burrowing Owl Mitigation Plan (subject to the approval of the Environmental Coordinator and in consultation with California Fish and Wildlife). This plan must document all proposed measures, including avoidance, minimization, exclusion, relocation, or other measures, and include a plan to monitor mitigation success. The California Fish and Wildlife “Staff Report on Burrowing Owl Mitigation” (March 2012) shall be followed in the development of the mitigation plan.</p> <p>BR-6: To avoid impacts to western pond turtles the applicant shall:</p> <p>1. Twenty-four hours prior to the commencement of ground-disturbing activity (i.e., clearing, grubbing, or grading) suitable habitat within the project area shall be surveyed for western pond turtle by a qualified</p>	

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
		<p>biologist. The survey shall include aquatic habitat and 1,650 feet of adjacent uplands surrounding aquatic habitat within the project area. The biologist shall supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity.</p> <ol style="list-style-type: none"> 2. Construction personnel shall receive worker environmental awareness training. This training instructs workers how to recognize western pond turtles and their habitat. 3. If a western pond turtle is encountered during active construction, all construction shall cease until the animal has moved out of the construction area on its own or relocated by a qualified biologist. If the animal is injured or trapped, a qualified biologist shall move the animal out of the construction area and into a suitable habitat area. California Fish and Wildlife and the Environmental Coordinator shall be notified within 24-hours that a turtle was encountered. 4. Install exclusion fencing along the entire western and southern perimeters of the work areas to prevent western pond turtles that may be occupying the nearby ditches from entering into active construction zones. Pre-construction surveys will be conducted prior to fence installation. The fencing shall extend to the edge of the bank of the ditches, perpendicular to the water line. The exclusion fencing shall consist of 	

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
		<p>silt fence material. Fences shall be installed to a depth of 6 inches below the ground surface to prevent special-status reptiles from going under the fence. Fences shall be installed before May 1 and prior to initial grading and deployment of staging equipment. It shall remain in place until construction machinery and material are completely removed. Prior to the commencement of daily construction activities, the on-site biological monitor shall conduct a morning pre-construction survey to verify that there are no special-status reptiles in the work area. This survey process shall also include verifying that the fence is in suitable condition. If any repairs are necessary, the monitor shall guide construction personnel in making the necessary repairs.</p> <p><u>5. The applicant shall prepare a western pond turtle relocation plan. This relocation plan shall include: a summary of the species and habitat features; identification of habitat suitability in relation to the project site; acceptable methods to capture, handle, and relocate individuals out of the construction area; minimum qualifications for biologists to conduct physical relocation of turtle individuals, if necessary; identification of where salvaged individuals will be relocated; and identification of wildlife rehabilitation center or veterinary facility where any injured individuals found within the project site will be taken.</u></p>	

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
<p>The proposed project may interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.</p>	<p>PS</p>	<p>BR-7: To avoid impacts to nesting migratory birds the following shall be required:</p> <ol style="list-style-type: none"> 1. If construction activity (which includes clearing, grubbing, or grading) is to commence within 50 feet of nesting habitat between February 1 and August 31, a survey for active migratory bird nests shall be conducted no more than 14 days prior to construction by a qualified biologist. 2. Trees slated for removal shall be removed during the period of September through January, in order to avoid the nesting season. Any trees that are to be removed during the nesting season, which is February through August, shall be surveyed by a qualified biologist and will only be removed if no nesting migratory birds are found. 3. If active nest(s) are found in the survey area, a non-disturbance buffer, the size of which has been determined by a qualified biologist, shall be established and maintained around the nest to prevent nest failure. All construction activities shall be avoided within this buffer area until a qualified biologist determines that nestlings have fledged, or until September 1. 	<p>LTS</p>
<p>The proposed project may conflict with local policies or ordinances protecting biological resources.</p>	<p>PS</p>	<p>BR-8: Prior to approval of permits for any ground disturbing activities, a tree inventory shall be completed which includes all native trees over six (6) inches in diameter at breast height must be inventoried including</p>	<p>LTS</p>

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
		<p>species, size, dripline radius, health condition within the proposed areas of impact. The removal of native trees shall be compensated for by planting in-kind native trees equivalent to the diameter at breast height (dbh) inches lost, based on the ratios listed below, at locations that are authorized by the Environmental Coordinator. On-site preservation of native trees that are less than 6 inches (<6 inches) dbh, may also be used to meet this compensation requirement. Native trees include: valley oak (<i>Quercus lobata</i>), interior live oak (<i>Quercus wislizenii</i>), blue oak (<i>Quercus douglasii</i>), or oracle oak (<i>Quercus morehus</i>), California sycamore (<i>Platanus racemosa</i>), California black walnut (<i>Juglans californica</i>, which is also a List 1B plant), Oregon ash (<i>Fraxinus latifolia</i>), western redbud (<i>Cercis occidentalis</i>), gray pine (<i>Pinus sabiniana</i>), California white alder (<i>Alnus rhombifolia</i>), boxelder (<i>Acer negundo</i>), California buckeye (<i>Aesculus californica</i>), narrowleaf willow (<i>Salix exigua</i>), Gooding’s willow (<i>Salix gooddingii</i>), red willow (<i>Salix laevigata</i>), arroyo willow (<i>Salix lasiolepis</i>), shining willow (<i>Salix lucida</i>), Pacific willow (<i>Salix lasiandra</i>), and dusky willow (<i>Salix melanopsis</i>).</p> <p>Replacement tree planting shall be completed prior to approval of grading or improvement plans, whichever comes first.</p> <p>Equivalent compensation based on the following ratio is required:</p>	

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
		<ul style="list-style-type: none"> • one preserved native tree < 6 inches dbh on-site = 1 inch dbh • one D-pot seedling (40 cubic inches or larger) = 1 inch dbh • one 15-gallon tree = 1 inch dbh • one 24-inch box tree = 2 inches dbh • one 36-inch box tree = 3 inches dbh <p>Prior to the approval of Improvement Plans or Building Permits, whichever occurs first, a Replacement Tree Planting Plan shall be prepared by a certified arborist or licensed landscape architect and shall be submitted to the Environmental Coordinator for approval. The Replacement Tree Planting Plan(s) shall include the following minimum elements:</p> <ol style="list-style-type: none"> 1. Species, size and locations of all replacement plantings and < 6-inch dbh trees to be preserved. 2. Method of irrigation. 3. If planting in soils with a hardpan/duripan or claypan layer, include the Sacramento County Standard Tree Planting Detail L-1, including the 10-foot- deep boring hole to provide for adequate drainage. 4. Planting, irrigation, and maintenance schedules. 5. Identification of the maintenance entity and a written agreement with that entity to provide care and irrigation of the trees for a 3-year establishment 	

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
		<p>period, and to replace any of the replacement trees which do not survive during that period.</p> <p>6. Designation of 20-foot root zone radius and landscaping to occur within the radius of trees <6 inches dbh to be preserved on-site.</p> <p>No replacement tree shall be planted within 15 feet of the driplines of existing native trees or landmark size trees that are retained on-site, or within 15 feet of a building foundation. The minimum spacing for replacement native trees shall be 20 feet on-center. Examples of acceptable planting locations are publicly owned lands, common areas, and landscaped frontages (with adequate spacing). Generally unacceptable locations are utility easements (PUE, sewer, storm drains), under overhead utility lines, private yards of single-family lots (including front yards), and roadway medians.</p> <p>Native trees <6 inches dbh to be retained on-site shall have at least a 20-foot radius suitable root zone. The suitable root zone shall not have impermeable surfaces, turf/lawn, dense plantings, soil compaction, drainage conditions that create ponding (in the case of oak trees), utility easements, or other overstory tree(s) within 20 feet of the tree to be preserved. Trees to be retained shall be determined to be healthy and structurally sound for future growth, by an ISA Certified Arborist subject to Environmental Coordinator approval.</p>	

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
		<p>If tree replacement plantings are demonstrated to the satisfaction of the Environmental Coordinator to be infeasible for any or all trees removed, then compensation shall be through payment into the County Tree Preservation Fund. Payment shall be made at a rate of \$325 per dbh inch removed but not otherwise compensated, or at the prevailing rate at the time payment into the fund is made.</p> <p>BR-9: For the purpose of this mitigation measure, a native tree is defined as a those listed in Mitigation Measure BR-8 having a dbh of at least 6 inches, or if it has multiple trunks of less than 6 inches each, a combined dbh of at least 10 inches.</p> <p>With the exception of the trees removed and compensated for through Mitigation Measure BR-8, above, all native trees on the project site, all portions of adjacent off-site native trees which have driplines that extend onto the project site, and all off-site native trees which may be impacted by utility installation and/or improvements associated with this project, shall be preserved and protected as follows:</p> <ol style="list-style-type: none"> 1. A circle with a radius measurement from the trunk of the tree to the tip of its longest limb shall constitute the dripline protection area of the tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of 	

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
		<p>the tree. Removing limbs which make up the dripline does not change the protected area.</p> <ol style="list-style-type: none"> 2. Chain link fencing or a similar protective barrier shall be installed one foot outside the driplines of the native trees prior to initiating project construction, in order to avoid damage to the trees and their root system. 3. No signs, ropes, cables (except cables which may be installed by a certified arborist to provide limb support) or any other items shall be attached to the native trees. 4. No vehicles, construction equipment, mobile home/office, supplies, materials or facilities shall be driven, parked, stockpiled or located within the driplines of the native trees. 5. Any soil disturbance (scraping, grading, trenching, and excavation) is to be avoided within the driplines of the native trees. Where this is necessary, an ISA Certified Arborist will provide specifications for this work, including methods for root pruning, backfill specifications and irrigation management guidelines. 6. All underground utilities and drain or irrigation lines shall be routed outside the driplines of native trees. Trenching within protected tree driplines is not permitted. If utility or irrigation lines must encroach upon the dripline, they should be tunneled or bored 	

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
		<p>under the tree under the supervision of an ISA Certified Arborist.</p> <ol style="list-style-type: none"> 7. If temporary haul or access roads must pass within the driplines of oak trees, a roadbed of six inches of mulch or gravel shall be created to protect the root zone. The roadbed shall be installed from outside of the dripline and while the soil is in a dry condition, if possible. The roadbed material shall be replenished as necessary to maintain a six-inch depth. 8. Drainage patterns on the site shall not be modified so that water collects or stands within, or is diverted across, the dripline of oak trees. 9. No sprinkler or irrigation system shall be installed in such a manner that it sprays water within the driplines of the oak trees. 10. Tree pruning that may be required for clearance during construction must be performed by an ISA Certified Arborist or Tree Worker and in accordance with the American National Standards Institute (ANSI) A300 pruning standards and the International Society of Arboriculture (ISA) "Tree Pruning Guidelines". 11. Landscaping beneath the oak trees may include non-plant materials such as boulders, decorative rock, wood chips, organic mulch, non-compacted decomposed granite, etc. Landscape materials shall be kept two (2) feet away from the base of the trunk. 	

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
		<p>The only plant species which shall be planted within the driplines of the oak trees are those which are tolerant of the natural semi-arid environs of the trees. Limited drip irrigation approximately twice per summer is recommended for the understory plants.</p> <p>12. Any fence/wall that will encroach into the dripline protection area of any protected tree shall be constructed using grade beam wall panels and posts or piers set no closer than 10 feet on center. Posts or piers shall be spaced in such a manner as to maximize the separation between the tree trunks and the posts or piers in order to reduce impacts to the trees.</p> <p>13. For a project being constructed during the months of June, July, August, and September, deep water trees by using a soaker hose (or a garden hose set to trickle) that slowly applies water to the soil until water has penetrated at least one foot in depth. Sprinklers may be used to water deeply by watering until water begins to run off, then waiting at least an hour or two to resume watering (provided that the sprinkler is not wetting the tree's trunk. Deep water every 2 weeks and suspend watering 2 weeks between rain events of 1 inch or more.</p>	

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
The proposed project would not conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or approved local, regional, or State habitat conservation plan.	LTS	No mitigation is required.	NA
CLIMATE CHANGE			
The proposed project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.	LTS	No mitigation is required.	NA
The proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of GHGs.	LTS	No mitigation is required.	NA
CULTURAL RESOURCES			
The proposed project would not cause a substantial adverse change in the significance of a historical resource.	LTS	No mitigation is required.	NA
The proposed project may cause a substantial adverse change in the significance of an archaeological resource.	PS	CR-1: Cultural Resources Unanticipated Discoveries In the event that human remains are discovered in any location other than a dedicated cemetery, work shall be halted, and the County Coroner contacted. For all other	LTS

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
		<p>unexpected cultural resources discovered during project construction, work shall be halted until a qualified archaeologist may evaluate the resource encountered.</p> <ol style="list-style-type: none"> 1. Unanticipated human remains. 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 the Office of Planning and Environmental Review 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. 2. Unanticipated cultural resources. In the event of an inadvertent discovery of cultural resources (excluding human remains) during construction, all work must halt within a 100-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 	

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
		<p>evaluate the significance of the find. If it is determined due to the types of deposits discovered that a Native American monitor is required, the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites as established by the Native American Heritage Commission shall be followed, and the monitor shall be retained at the Applicant's expense.</p> <p>a. Work cannot continue within the 100-foot radius of the discovery site until the archaeologist and/or tribal monitor conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially eligible for listing on the National Register of Historic Places or California Register of Historical Resources.</p> <p>b. If a potentially-eligible resource is encountered, then the archaeologist and/or tribal monitor, 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.</p>	

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
		<p>3. Tribal cultural resources worker awareness. The County’s Tribal Cultural Resources Awareness Brochure provides a definition and examples of Tribal Cultural Resources that may be encountered during construction. The brochure was developed to assist construction teams with the identification and protection of Tribal Cultural Resources. The brochure shall be shared with construction teams prior to ground disturbance.</p> <p>CR-2: Tribal Monitoring</p> <p>Prior to initiation of ground disturbance, the Sacramento County Department of Airports, or contractor, shall contact the United Auburn Indian Community and the Wilton Rancheria to determine if a Tribal Monitor is required at least two weeks prior to ground disturbance. Provide a copy of Tribal correspondence to the Environmental Coordinator. If a Tribal Monitor is required, the following measures are necessary:</p> <ul style="list-style-type: none"> a. A compensated (paid) Tribal Monitor from a traditionally and culturally affiliated Native American Tribe shall be retained to monitor specified ground disturbing project related activities. b. The duration of the monitoring and construction schedule shall be determined at this time. c. The Tribal Monitor will identify areas requiring monitoring in the project area during vegetation grubbing, stripping, grading or other ground- 	

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
		disturbing activities. All field monitoring activities will be logged by the Tribal Monitor. d. The Tribal Monitor shall wear the appropriate safety equipment and shall have the necessary background training in construction safety protocols. e. Tribal Monitors or Tribal Representatives have the authority to request that work be temporarily stopped, diverted, or slowed within 100 feet of the direct impact area if sites or objects of significance are identified. Only a Tribal Monitor or Representative from a culturally affiliated tribe can recommend appropriate treatment and final disposition of Tribal Cultural Resources.	
The proposed project may disturb human remains, including those interred outside of formal cemeteries.	PS	Mitigation Measure CR-1: Cultural Resources Unanticipated Discoveries	LTS
ENERGY			
The proposed project would not result in inefficient, wasteful, and unnecessary consumption of energy.	LTS	No mitigation is required.	NA
The proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	LTS	No mitigation is required.	NA

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
HAZARDS AND HAZARDOUS MATERIALS			
The proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	LTS	No mitigation is required.	NA
The proposed project would not result in a safety hazard or excessive noise for people residing or working in the project area within an airport land use plan or within two miles of an airport.	LTS	No mitigation is required.	NA
The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	LTS	No mitigation is required.	NA
HYDROLOGY AND WATER QUALITY			
The proposed project would not violate any water quality standards or waste discharge requirements.	LTS	No mitigation is required.	NA

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
The proposed project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantially additional sources of polluted runoff.	LTS	No mitigation is required.	NA
The proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on or offsite.	LTS	No mitigation is required.	NA
The proposed project would not develop in an area that is subject to 200-year urban levels of flood protection area that could not make one of the four required findings.	LTS	No mitigation is required.	NA
LAND USE			
The proposed project would not conflict with Sacramento County's land use plans.	LTS	No mitigation is required.	NA
The proposed project would not conflict with the Sacramento International Airport Land Use Compatibility Plan.	LTS	No mitigation is required.	NA

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
NOISE			
The proposed project would not generate a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	LTS	No mitigation is required.	NA
The proposed project would not generate a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	LTS	No mitigation is required.	NA
The proposed project would not generate excessive groundborne vibration or groundborne noise levels.	LTS	No mitigation is required.	NA
The proposed project would not expose people residing or working in the project area to excessive noise levels.	LTS	No mitigation is required.	NA

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
TRANSPORTATION			
The proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system.	LTS	No mitigation is required.	NA
The proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b), measuring transportation impacts individually or cumulatively, using a vehicle miles traveled standard established by the County.	LTS	No mitigation is required.	NA
The proposed project may substantially increase hazards due to a geometric design feature or incompatible uses.	PS	TR-1: To address potential traffic hazards during construction, prior to the commencement of construction or demolition activities the applicant shall prepare a construction traffic control plan for review and approval by the County Department of Transportation. Typical measures to be included in the construction traffic control plan include signage, traffic cones, and flaggers to help ensure safe and efficient movement of traffic through the affected area. In addition, the construction traffic control plan would provide for notification of emergency responders regarding the planned construction activities.	LTS
The proposed project would not result in inadequate emergency access.	LTS	No mitigation is required.	NA

Impacts	Level of Significance Before Mitigation ¹	Mitigation Measure	Level of Significance After Mitigation
TRIBAL CULTURAL RESOURCES			
The proposed project may cause a substantial adverse change in the significance of a tribal cultural resource.	PS	Implement Mitigation Measures CR-1 and CR-2	LTS
UTILITIES			
The proposed project would not result in adverse physical effects from the construction of infrastructure.	LTS	No mitigation is required.	NA
The proposed project would not result in a project water demand that cannot be met by supply.	LTS	No mitigation is required.	NA
The proposed project would not result in a solid waste disposal demand that cannot be met by landfill capacity.	LTS	No mitigation is required.	NA

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 MMRP fee for this project is \$9,600.00. This fee includes administrative costs of \$1,103.00, which must be paid to the Planning and Environmental Review Division prior to the 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.

TERMINOLOGY USED IN THIS EIR

This Final 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 CEQA Guidelines or can be discerned from the 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. CEQA Guidelines §15370 identifies 5 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 INTRODUCTION

This Supplement to the 2022 Airport Master Plan Update Supplemental Environmental Impact Report (SEIR) has been prepared pursuant to the California Environmental Quality Act (CEQA) of 1970 (as amended) by the County of Sacramento to disclose the potential environmental consequences of implementing the proposed Sacramento County WattEV Innovative Freight Terminal (SWIFT) project, here referred to as the “proposed project.” This Supplement to the 2022 Airport SEIR (SCH# 2023080394) has been prepared in conformance with CEQA (Public Resources Code [PRC] section 21000, et seq.) and the CEQA Guidelines (California Code of Regulations (CCR), Title 14, Chapter 3, section 15000, et seq.) to disclose the environmental impacts associated with the proposed project.

BACKGROUND

On February 16, 2022, Sacramento County adopted an update to the Sacramento International Airport Master Plan Update and certified the 2022 Airport SEIR (State Clearinghouse No. 2005082017) that evaluated the environmental effects of the update. The 2022 Airport Master Plan Update largely consisted of revisions to proposed airport projects and facilities identified in the previous Sacramento International Airport Master Plan (adopted in 2007) that were based on revised aviation forecasts. Many of the updates in the 2022 Airport Master Plan Update centered on the timing of the project components (particularly their placement in various planning phases), along with minor changes to the locations and sizes of facilities identified in the 2007 Airport Master Plan and evaluated in the 2007 Airport Master Plan EIR.

Pertinent to the proposed project and the project site, the previously adopted 2007 Airport Master Plan identified the area south of I-5, which includes the project site, to include future commercial uses and a proposed remote economy parking and rental car overflow facility to accommodate 13,800 automobile parking spaces. The 2022 Airport Master Plan Update relocated the proposed remote economy parking and rental car overflow facility to the north of I-5, within the Airport Master Plan area, and designated the area south of I-5, which includes the project site, solely to commercial uses. In addition, the 2022 Airport Master Plan Update identified proposed commercial uses in the area south of I-5, including the project site, to be developed under a later phase than what was previously proposed under the 2007 Airport Master Plan.

Specifically, in terms of the timing and phasing of development, the 2022 Airport Master Plan Update and 2022 Airport SEIR considered a development and operational horizon of 20 years (2018 through 2038) with four Planning Activity Levels (PALs), or phases of development. The area south of I-5 within the Airport Master Plan area, which includes the project site, was included within PAL 4 (2034-2038) of the 2022 Airport Master Plan Update. Due to the extended 20-year planning horizon, Master Plan projects or facilities

identified in PAL 4 were determined to be beyond the scope of the 2022 Airport SEIR and were not analyzed at the project level.

As discussed in Chapter 8, *Land Use*, of the 2022 Airport Master Plan Update Supplemental EIR (page 8-11), the 2022 Airport Master Plan Update identified future commercial development south of I-5 in PAL 4. The discussion further noted that if PAL 4 were to become ripe for development sooner than anticipated (i.e., prior to 2034) additional environmental review would be necessary. Although the project site is within the boundary of the project addressed in the 2022 Airport SEIR, because of the acceleration of development to a year prior to the anticipated development under PAL 4, this EIR constitutes the required additional environmental review for the project site.

PURPOSE AND USE OF THIS EIR

CEQA requires that, before a decision can be made to approve a plan that would pose potential adverse physical effects, an EIR must be prepared that fully describes the environmental effects of the plan. The EIR is a public information document that identifies and evaluates potential environmental impacts of a proposed project, recommends mitigation measures to lessen or eliminate significant adverse impacts, and examines feasible alternatives to the plan. The information contained in the EIR must be reviewed and considered by the County and by any responsible agencies (as defined in CEQA) prior to a decision to approve, disapprove, or modify the proposed project.

Pursuant to Section 15162 of the CEQA Guidelines, a Subsequent or Supplement EIR is required if the County, as the CEQA Lead Agency, determines on the basis of substantial evidence in light of the whole record that there have been substantial changes to the project and/or the circumstances under which the project is undertaken, or substantial new information has arisen, and that one or more of the foregoing will result in new or substantially more severe impacts and that thus necessitate major revisions to the prior EIR and/or new mitigation measures or alternatives are now applicable.

The County has determined, pursuant to CEQA, that the proposed project will require the preparation of a Supplement to the 2022 Airport SEIR. A Supplement is warranted because the proposed project involves development of a parcel that was analyzed at a program level in the 2022 Airport SEIR and there is reasonable potential that the update may result in new or substantially more severe significant environmental effects than those identified in the certified 2022 Sacramento Airport Master Plan Update SEIR, which only analyzed the project site at a program level.

The information contained in the Supplement to the 2022 Airport SEIR must be reviewed and considered by the County of Sacramento and by any responsible agencies (as defined in CEQA) prior to a decision to approve, disapprove, or modify the project.

CEQA ENVIRONMENTAL REVIEW

The CEQA Guidelines define the role and standards of adequacy of an EIR as follows:

- **Informational Document.** An EIR is an informational document that will inform public agency decision-makers and the public of the significant environmental effect(s) of a proposed project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR along with other information that may be presented to the agency (CEQA Guidelines section 15121[a]).
- **Standards for Adequacy of an EIR.** An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information that enables them to make an informed decision that takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure (CEQA Guidelines section 15151).

CEQA Guidelines section 15382 defines a significant effect on the environment as “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project...” Therefore, in identifying the significant impacts of the proposed project, this Supplement to the 2022 Airport SEIR describes the potential for the proposed project to result in substantial physical effects either onsite or with the vicinity of the project site and identifies mitigation measures that would avoid, reduce, or otherwise alleviate those effects, if necessary.

ENVIRONMENTAL REVIEW

PRELIMINARY PROJECT EVALUATION

Having determined a Supplement to the 2022 Airport SEIR would be required to evaluate changes in the environment that would result from construction and operation of the proposed project, the County elected not to prepare an Initial Study Checklist, as permitted by section 15060(d) of the CEQA Guidelines. This Supplement to the 2022 Airport SEIR will cover all technical issue areas identified in CEQA Guidelines Appendix G.

EIR SCOPING

In August 2023, the County issued a Notice of Preparation (NOP) for the Supplement to the 2022 Airport SEIR (see Appendix INT-1) to governmental agencies and organizations and persons interested in the proposed project. The NOP public review and comment period lasted from August 17, 2023 through September 15, 2023. The

County sent the NOP to agencies with statutory responsibilities in connection with the proposed project with the request for those agencies provide input on the scope and content of the environmental information that should be addressed in the Supplement to the 2022 Airport SEIR. A scoping meeting for service providers and other public agencies as well as a scoping meeting for the public were held on August 30, 2023 to solicit comments and suggestions concerning the analysis in the Supplement to the 2022 Airport SEIR.

The scope of this Supplement to the 2022 Airport SEIR includes environmental issues that have the potential to be significant impacts, as determined through preparation of the NOP; responses to the NOP; scoping meeting feedback; and discussions among the public, consulting staff, other agencies, and the County of Sacramento. This process identified potentially significant impacts associated with implementation of the proposed project in the following technical areas:

- Aesthetics;
- Agricultural and Forestry Resources;
- Air Quality;
- Biological Resources;
- Cultural Resources;
- Climate Change;
- Energy;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Land Use;
- Noise and Vibration;
- Transportation;
- Tribal Cultural Resources; and
- Utilities and Service Systems.

This Supplement to the 2022 Airport SEIR evaluates the direct, indirect, and cumulative impacts that could result from construction and operation of the proposed project in these issue areas in accordance with CEQA.

PUBLIC REVIEW

The Draft Supplement to the 2022 Airport SEIR ~~is~~ **was** available for public review and comment as set forth in the Notice of Availability circulated by the County. During the review and comment period written comments (including email) regarding the Draft Supplement to the 2022 Airport SEIR ~~may be~~ **were** submitted to the County at the address below.

Julie Newton, Environmental Coordinator
 Community Development Department, Division of Planning and Environmental Review
 827 7th Street, Room 225, Sacramento, CA 95814
 Email: CEQA@saccounty.gov

The Draft Supplement to the 2022 Airport SEIR, Notice of Availability and other supporting documents, such as technical reports prepared by the County as part of the EIR process, are available for public review at the Division of Planning and Environmental Review at the address listed above and at the following Sacramento County Public Library locations:

Central Library	North Natomas Branch
828 I Street	4660 Via Ingolia
Sacramento, CA 95814	Sacramento, 95835

In addition, electronic versions of these documents **are** available on the County's website at: <https://planning.saccounty.gov>.

FINAL EIR AND SUPPLEMENT TO THE 2022 AIRPORT SEIR CERTIFICATION

During the public review period for the Draft SEIR, comments were received by the following agencies and organizations:

1. **California Department of Transportation (Caltrans), State of California transportation agency**
2. **California Department of Fish and Wildlife (CDFW), State of California natural resource agency**
3. **City of Sacramento, Community Development Department, incorporated city**
4. **Environmental Council of Sacramento (ECOS), non-profit organization**

Following the public review and comment period for this **the** Draft Supplement to the 2022 Airport SEIR, the County ~~will prepare~~ **prepared** responses that address **addressed** all substantive written and oral comments on this **the** Draft Supplement to the 2022 Airport SEIR's environmental analyses received within the specified review period, **as listed above. The County's responses to the various comments contained in the letters listed above are provided in Chapter 23 of this Final SEIR. The comment letters themselves are contained in Appendix RTC-1.** The responses and any other revisions to this **the** Draft Supplement to the 2022 Airport SEIR initiated by County staff ~~will be prepared~~ **are included** as a **in this** Final Supplement to the 2022 Airport SEIR document. This Draft **Final** Supplement to the 2022 Airport SEIR and its Appendices, ~~together with the Final Supplement to the 2022 Airport SEIR~~ will constitute the Supplement to the 2022 Airport SEIR for the proposed project.

MITIGATION MONITORING PLAN

Throughout this Supplement to the 2022 Airport SEIR, mitigation measures are clearly identified, where applicable, and presented in language that will facilitate establishment of a mitigation monitoring and reporting plan (MMRP). As required under CEQA, a MMRP will be prepared and presented to the County Board of Supervisors at the time of certification of the Final Supplement to the 2022 Airport SEIR for the proposed project and will identify the specific timing and roles and responsibilities for implementation of adopted mitigation measures.

2 PROJECT DESCRIPTION

INTRODUCTION

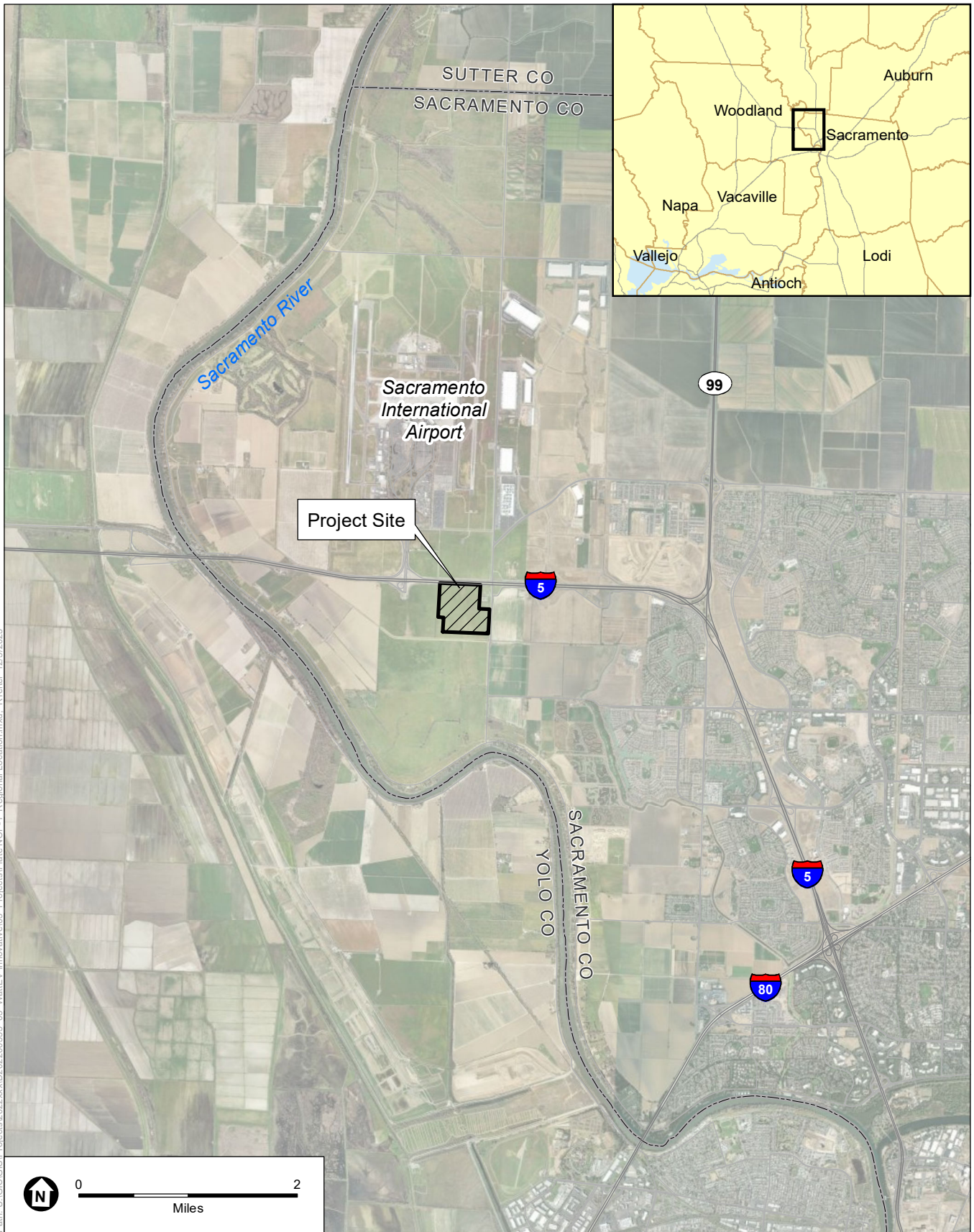
Under CEQA, a project description must contain: (a) the precise location and boundaries of the project area, shown on a detailed map, along with a regional map of the project's location; (b) a statement of the objectives sought by the proposed project, which should include the underlying purpose of the project; (c) a general description of the project's technical, economic, and environmental characteristics; and, (d) a statement briefly describing the intended uses of the EIR (CEQA Guidelines section 15124). A project description need not be exhaustive but should supply the information necessary for the evaluation and review of the project's significant effects on the environment. This project description for the proposed Sacramento County WattEV Innovative Freight Terminal (SWIFT) project provides an overview of the existing environmental setting, the objectives of the proposed project, required entitlements, and detailed information describing the characteristics of the proposed project.

The proposed project would provide a publicly accessible Electric Vehicle (EV) charging facility that would be built on a 110-acre parcel of land adjacent to Interstate 5 (I-5) and proximate to State Route 99 (SR-99), both major freight corridors. Facility development would include the installation of Direct Current Fast Chargers (DCFC) and Megawatt Chargers powered by a new solar array that would support charging for shippers and transporters as well as public transportation and passenger vehicles. In addition, the proposed project would include accessory uses, such as restrooms, resting lounges, a convenience store, and a visitor center.

The project applicant is WattEV, Inc. Sacramento County is the Lead Agency for the purpose of this EIR.

PROJECT LOCATION

The proposed project would be located in the northwest portion of Sacramento County, approximately 7.5 miles from downtown Sacramento (see **Plate PD-1**). Specifically, the project site is located south of I-5 immediately south of Sacramento International Airport (SMF) (see **Plate PD-2**). SR-99 lies two miles to the east. The project site is bounded by Bayou Way and I-5 to the north, fallow farmland and water tanks that are a part of the SMF's water system to the east, the West Drainage Canal and farmland to the south, and fallow farmland to the west. The project site generally covers APNs 225-0010-003, 225-0010-006, 225-0010-009, 225-0010-010, 225-0010-017, 225-0010-021, 225-0010-035, and 225-0010-036.



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SOURCE: ESA, 2023; ESRI Imagery

WattEV Innovative Freight Terminal (SWIFT) Project

Plate PD-1
Regional Location



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SOURCE: ESA, 2023; ESRI Imagery

WattEV Innovative Freight Terminal (SWIFT) Project

Plate PD-2
Project Vicinity

ENVIRONMENTAL SETTING

The project site is flat and consists of land that was previously under agricultural production; the site is currently fallow and consists of grassland. The project site is designated Public/Quasi-Public by the Sacramento County General Plan Land Use Element (County of Sacramento, 2017) and is zoned Agricultural 20 (AG-20) and Agricultural 80 (AG-80) (County of Sacramento, 2020). Furthermore, the project site is located within the southern portion of the Sacramento International Airport Master Plan area and is designated for commercial development under the Airport's Master Plan, which was last updated in 2022.

The area immediately surrounding the project site consists of airport facilities to the north across I-5 and farmland that is both in production and out of production to the east, south, and west. Furthermore, Metro Air Park, a business park zoned for industrial, manufacturing, distribution & high-tech commercial use, is under development approximately a quarter mile to the northeast, residential neighborhoods within the City of Sacramento limits are located about 1.6 miles to the east, and the Sacramento River is located approximately one mile to the west/southwest.

PROJECT BACKGROUND

California Advanced Clean Truck regulations require that manufacturers of commercial vehicles start selling electric trucks in the State starting in 2024 and sell only electric trucks in California by 2045 (ARB, 2023). It is expected that this regulation will result in 100,000 zero-emission trucks on California roadways by 2030, and 300,000 by 2035. Furthermore, California recently adopted a rule requiring that all new automobiles and light trucks sold in the state be zero-emission vehicles, including plug-in electric vehicles, by 2035 (ARB, 2022). While the exact number of zero-emission vehicles on California roadways by 2035 from implementation of this rule is difficult to predict, it is expected to result in a substantial increase in the number of zero-emission vehicles on California roads. Given these mandates, additional electrical charging infrastructure statewide will be required. For example, in 2021, the California Energy Commission estimated that to meet future demand the State will need nearly 1.2 million public and shared charging stations by 2030 (CEC, 2021).

The proposed project would contribute to the infrastructure needed to serve the expected increase in electric trucks and vehicles on California roads in the future. When constructed, the proposed project would be the largest electrical truck charging station in North America.

CALIFORNIA TRANSPORTATION COMMISSION GRANT

The cost of the project would be substantially offset by a \$33.688 million grant (CTC, 2023) from the Trade Corridor Enhancement Program (TCEP), as administered by the California Transportation Commission (CTC). The purpose of the TCEP is to provide funding for infrastructure improvements on federally designated Trade Corridors of

National and Regional Significance, on California's portion of the National Highway Freight Network, as identified in California Freight Mobility Plan, and along other corridors that have a high volume of freight movement. The TCEP also supports the goals of the National Highway Freight Program, the California Freight Mobility Plan, and the guiding principles in the California Sustainable Freight Action Plan.

Grant funds are limited and are distributed competitively. Eligible applicants apply for program funds through the nomination of projects. The project's grant application is included with this EIR in Appendix PD-1. All projects nominated must be identified in a currently adopted regional transportation plan, and the CTC is required to evaluate and select submitted applications based on the following criteria:

- Freight System Factors – Throughput, Velocity, and Reliability;
- Transportation System Factors – Safety, Congestion Reduction/Mitigation, Key Transportation Bottleneck Relief, Multi-Modal Strategy, Interregional Benefits, and Advanced Technology;
- Community Impact Factors – Air Quality Impact, Community Impact Mitigation, and Economic/Jobs Growth;
- The overall need, benefits, and cost of the project
- Project Readiness – ability to complete the project in a timely manner;
- Demonstration of the required 30 percent matching funds;
- The leveraging and coordination of funds from multiple sources; and
- Jointly nominated and/or jointly funded.

The proposed project competed against other applicants using the above criteria and was awarded a grant based on established performance metrics developed by CTC. A significant factor in the project's selection were the specific benefits provided by the project's location. The project site addresses several key factors:

- Sacramento County is serving as the nominating agency and has formed a public/private partnership with the applicant to construct, own, operate, and provide cost-share for the project. The site is on land owned by Sacramento County, in which the County has control over the leasing terms, thus providing reductions in cost and realization of public benefits that would be more difficult to achieve on a private land site.
- The project site is strategically located to serve several high-capacity freight corridors including I-5, I-80, SR-99 and US-50. These routes serve tens of thousands of vehicles per day. Convenient access to fast, high-powered, public charging is critical to achieving wide-spread adoption of battery electric vehicles, particularly in the medium- and heavy-duty (MHD) sector.
- The project site is located along the National Highway Freight Network (NHFN). The goal of the National Highway Freight Program is to improve efficient movement of freight along the National NHFN. The site is directly adjacent to and

would support vehicles traveling along the NHFN. The project in this location would allow for more efficient goods movement by encouraging and supporting electrification and providing MHD electric vehicles a location to charge along this corridor.

- The project site is in proximity to Sacramento International Airport and to the Sacramento Metro Air Park, a 1,900-acre business park, with 1,320 acres of fully entitled land zoned for industrial, manufacturing, distribution, office, R&D and other commercial uses. At least 913 acres of the Sacramento Metro Air Park will be reserved for light manufacturing, distribution, and manufacturing related activities. It is estimated that the ongoing development and buildout of this industrial park will greatly increase MHD freight transportation throughput within the Sacramento region as these companies will need vehicles to transport goods in and out of their facilities. Most of this increased truck transportation throughput will need to be zero emission MHDs to comply with upcoming clean transportation regulations. As such, the project site is ideally located to meet this demand.
- The project site is of sufficient size to accommodate the charging stations, onsite amenities, and administrative functions as well as a solar field of the size needed to provide for a net-zero facility. The solar component is essential to making the project a net-zero emission operation.
- The site's location in proximity to established interchanges on I-5 and SR-99 provides for efficient and safe movements to and from these roadways and to and from the project site.
- The areas immediately adjacent to the project site have some of the highest diesel pollution and environmental burden in the region according to the CalEnviroScreen 4.0 screening tool. Provision of a zero-emissions charging facility on the site will provide greater deployment of zero emissions vehicles in the area, particularly in the MHD sector, with resultant decreases in diesel emissions.
- Per the current and approved Sacramento Area Council of Governments (SACOG) Regional Metropolitan Transportation Plan and Sustainable Communities Strategy (MTP/SCS), the project location is designated and classified primarily as a Center/Corridor Community, with surrounding land being designated as Established Communities and Developing Communities. SACOG's proposed MTP/SCS Land Use Forecast for 2040 has projected that expected employment growth for Center and Corridor Communities will increase by nearly 23 percent from 2016-2040. This growth will provide additional demand for the facility.
- Other critical factors regarding the site's location include proximity to SMUD 69 kV distribution lines which are necessary to transmit power to and from the existing electrical grid. The site's proximity to these existing distribution facilities negates the need to construct lengthy generation tie-lines with a resultant decrease in cost and the environmental impacts associated with constructing such facilities.

PROJECT OBJECTIVES

California Environmental Quality Act (CEQA) Guidelines section 15124(b) requires that an EIR project description include a statement of the objectives intended to be achieved by the proposed project. The objectives describe the purpose of the proposed project and are intended to assist the lead agency in developing a reasonable range of alternatives for consideration in the EIR, and to assist the decision makers in assessing the feasibility of mitigation measures and alternatives.

The project objectives for the proposed project are presented below.

1. Provide a charging facility for electric mobility and freight in the Sacramento area that is accessible and convenient to major freight and transportation corridors and meets the objectives and evaluation criteria of the California Transportation Commission's Trade Corridor Enhancement Program, and supports the goals of the National Highway Freight Program, the California Freight Mobility Program, and the California Sustainable Freight Action Plan.
2. Provide green energy onsite to support a large part of the need for EV charging.
3. Reduce the freight emissions in the Sacramento region.
4. Contribute to the economic development of the region.
5. Create equitable access to zero emission technology for small carriers and independent owner operators.

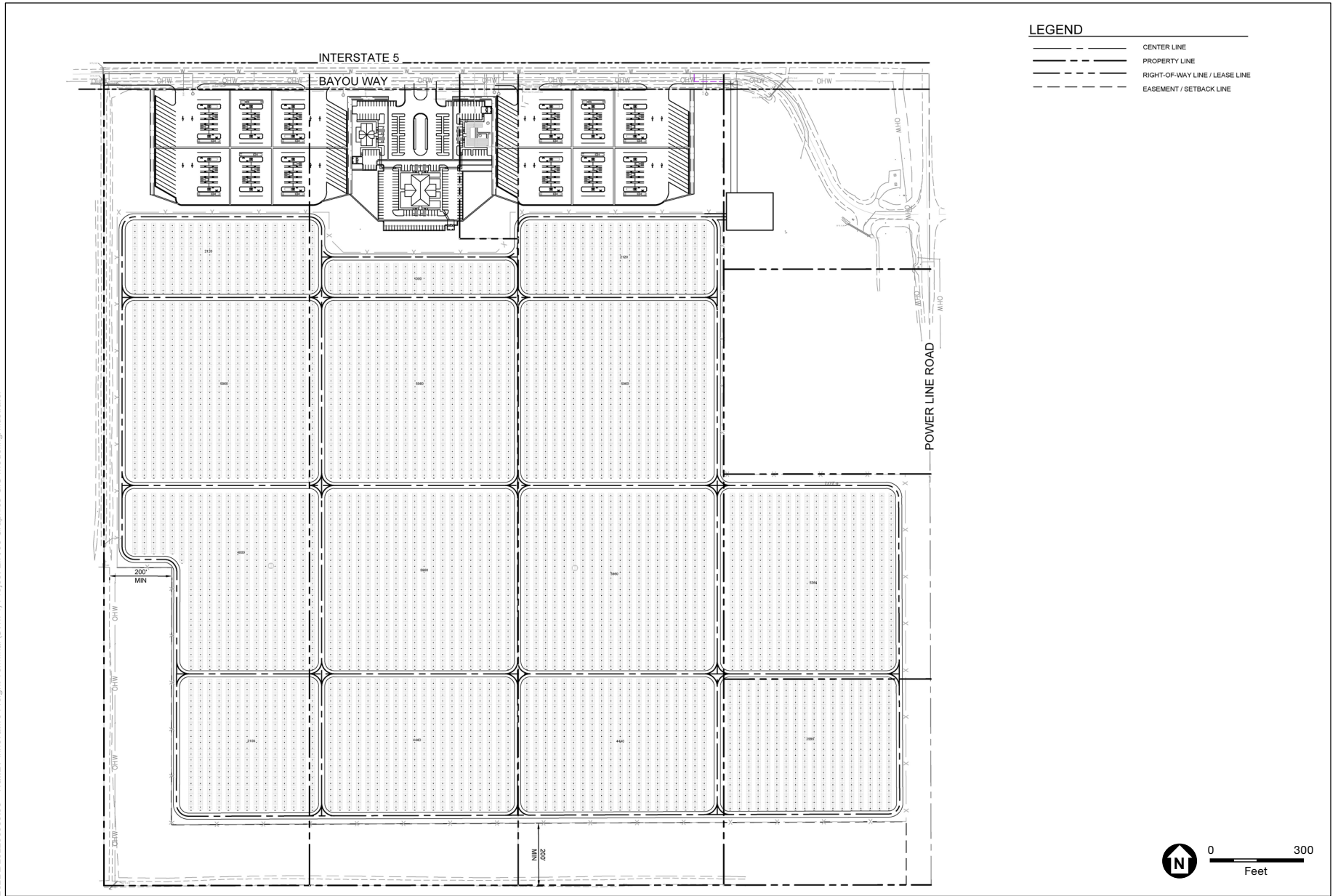
PROJECT CHARACTERISTICS

The proposed project includes deployment of advanced high-powered public charging stations and associated facilities powered by a 18 megawatt alternating current (MWac) solar generation field, with nameplate power of 21 megawatts of direct current (MWdc), to support zero-emissions electric freight movement in Sacramento. The charging areas and associated support facilities would occupy approximately 13.5 acres of land on the northern portion of the project site while the remaining 96.5 acres of the site would be occupied by solar fields and a 200-foot wide buffer area totaling (32.21 acres) along the western and southern borders of the project site (see **Plates PD-3** and **PD-4**).

VEHICLE CHARGING/REST AREA FACILITIES

The vehicle charging area/rest area would be configured with two truck charging areas separated by a publicly accessible central plaza. The truck charging areas would include six 3,600-kilowatt (kW) charger configurations. Each configuration would consist of three Megawatt Charging Standard (MCS) 1,200 kW chargers and fifteen 240 kW Combined Charging Standard (CCS) chargers, for a total of 18 MCS chargers and 90 CCS chargers designed for heavy and medium duty trucks. The truck charging pads are expected to cover 7.8 acres. In addition to the charging pads, a parking lot for trailers would be provided with an average of 53 parking stalls spread over 2.8 acres of

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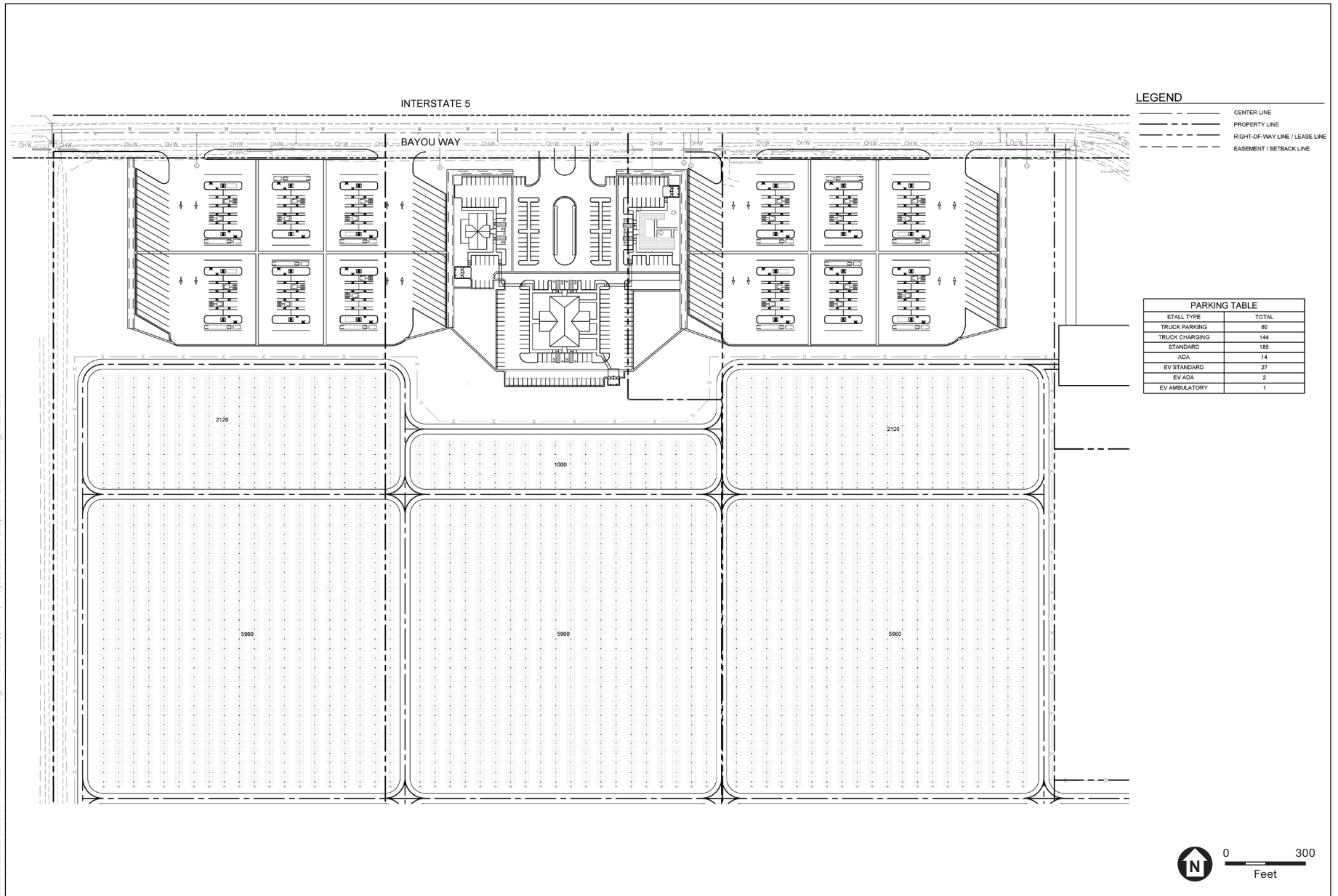
SOURCE: WattEV, 2023

WattEV Innovative Freight Terminal (SWIFT) Project



Plate PD-3
Preliminary Site Plan

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SOURCE: WattEV, 2023

WattEV Innovative Freight Terminal (SWIFT) Project



land. The proposed project would also include the installation of 30 CCS chargers dedicated to passenger vehicle use, which would be located at the central plaza.

Three buildings would be included within the public plaza and a summary of the size, height and use of each building is provided in **Table PD-1**. Building 1 would be located on the east side of the plaza and include site operations and maintenance functions. It would include a single story and provide approximately 3,000 square feet of building space. Building 2 would be located on the south side of the plaza and would include site amenities and a public visitor center. It would include two stories and provide approximately 14,000 square feet of building space. A convenience store would be provided on the first floor along with food outlets, restrooms and showers, a resting lounge for the public, and a refreshment area. The second floor would include the public visitor center that would provide information about California’s progress and milestones towards clean air initiatives and emission reduction. A panoramic view overlooking the solar farm and the truck’s charging pads would be provided from the public visitor center. Building 3 would be located on the west side of the plaza and include offices for site management and administration. It would include a single story and provide approximately 3,000 square feet of building space. Overall, the footprint of the public plaza would be approximately 5.25 acres.

Table PD-1: Building Summary

	Size (Square Feet)	Height (Stories)	Use
Building 1	3,000	One	<ul style="list-style-type: none"> • Site Operations • Maintenance
Building 2	14,000	Two	<ul style="list-style-type: none"> • Convenience Store • Public Visitor Center
Building 3	3,000	One	<ul style="list-style-type: none"> • Office
Source: WattEV, 2023			

A conceptual rendering of the overall project site is shown on **Plate PD-5** with conceptual renderings of the truck charging areas shown on **Plates PD-6** and **PD-7** and a conceptual rendering of the public plaza shown on **Plate PD-8**. Building elevations for the proposed buildings are shown on **Plates PD-9 through PD-13**.

SOLAR FACILITIES

The proposed solar facilities would lie directly south of the vehicle charging area/rest area. The facilities would use Photovoltaic (PV) technology to convert sunlight directly to electricity. The proposed solar facilities would power the proposed project’s electric vehicle charging stations and appurtenant uses expect during nighttime and cloudy weather. Any excess power would be exported to the Sacramento Municipal Utility District (SMUD) via an intertie with its existing 69 kilovolt (kV) distribution line along Power Line Road to the east. Each component of this portion of the project is discussed further below.



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SOURCE: WattEV, 2023

WattEV Innovative Freight Terminal (SWIFT) Project



Plate PD-5
Conceptual Rendering - Project Site



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SOURCE: WattEV, 2023

WattEV Innovative Freight Terminal (SWIFT) Project



Plate PD-6
Conceptual Rendering - West Truck Charging Area



SOURCE: WattEV, 2023

WattEV Innovative Freight Terminal (SWIFT) Project



Plate PD-7
Conceptual Rendering - East Truck Charging Area



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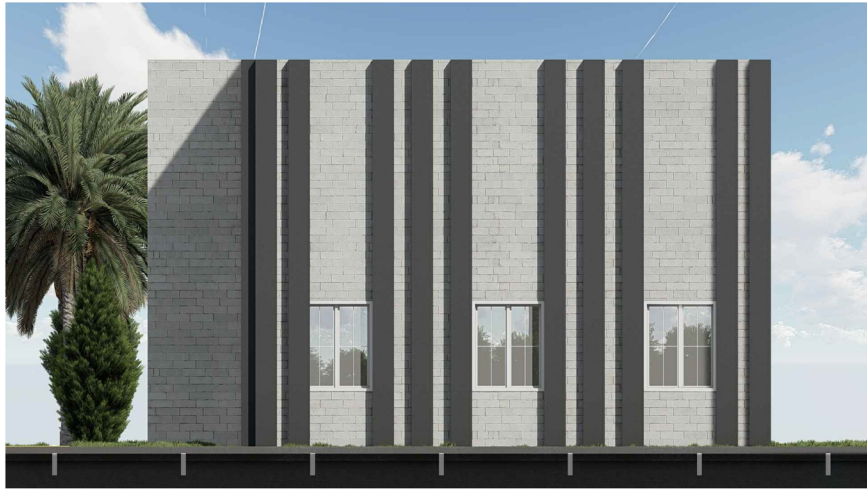
SOURCE: WattEV, 2023

WattEV Innovative Freight Terminal (SWIFT) Project



Plate PD-8
Conceptual Rendering - Public Plaza

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01 WEST ELEVATION
Scale: 1" = 100'



02 EAST ELEVATION
Scale: 1" = 100'



03 SOUTH ELEVATION
Scale: 1" = 100'



04 NORTH ELEVATION
Scale: 1" = 100'

SOURCE: WattEV, 2023

WattEV Innovative Freight Terminal (SWIFT) Project



20221020200555.03 - WattEV Innovative Freight Terminal (SWIFT) Project EIR/05 Graphics-GIS-Modeling/Illustrator



01 WEST ELEVATION
Scale: 1" = 50'



02 EAST ELEVATION
Scale: 1" = 50'

SOURCE: WattEV, 2023

WattEV Innovative Freight Terminal (SWIFT) Project



20221020200655.03 - WattEV Innovative Freight Terminal (SWIFT) Project EIR/05 Graphics-GIS-Modeling/Illustrator



01 NORTH ELEVATION
Scale: 1" = 50'



02 SOUTH ELEVATION
Scale: 1" = 50'

SOURCE: WattEV, 2023

WattEV Innovative Freight Terminal (SWIFT) Project



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SOURCE: WattEV, 2023

WattEV Innovative Freight Terminal (SWIFT) Project

Plate PD-12
Conceptual Elevations - Building 3 (East/South)



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SOURCE: WattEV, 2023

WattEV Innovative Freight Terminal (SWIFT) Project

Plate PD-13
Conceptual Elevations - Building 3 (West/North)



PHOTOVOLTAIC SOLAR MODULES

When sunlight strikes a PV module, the energy absorbed is transferred to electrons in the atoms of the semiconductor causing them to escape from their normal positions and become part of the current in an electrical circuit. The PV modules convert the sunlight directly into low-voltage DC electricity that is subsequently transformed to AC electricity through an inverter. The system only operates when the sun is shining during daylight hours. The system operates at peak output when the sunlight is most intense, though it also produces power in low light conditions. The maximum energy output is dependent on several variables, including the efficiency of the solar cells and the amount of sunlight that the module receives.

TRACKER STRUCTURES

The tracker arrays would be oriented in north-south rows and face in a generally southern orientation with a tilt angle of ± 55 degrees. Structural support elements would consist of hot dip galvanized steel driven H piles. Each rack would hold up to 90 panels (72 Cell Modules) and at its highest edge would have a maximum height of approximately 10 feet above grade. The minimum clearance from the lower edge of each panel to ground level would be about three feet.

INVERTERS AND PAD-MOUNTED TRANSFORMERS

Five 3.6 Megavolt Ampere (MVA) inverters and transformers would be installed on concrete pads located within the solar field. The inverters would take the DC power output and convert it to AC power while the adjacent transformers on the pad would step the voltage up to a medium-voltage level. The medium-voltage outputs from the pad-mounted transformers would then be collected via a combining 34.5 kV switchgear located at discrete locations throughout the project site. The medium-voltage output from the combining switchgear would connect to the project substation, where it would then be stepped up to 69 kV for export to the charging stations in the vehicle charging area. Any remaining power generated would be sent to a Battery Energy Storage System (BESS) (see below) and then exported to the grid during off peak times. A typical inverter would measure approximately 29 feet in width, 9.5 feet in height, and 8 feet in depth.

SUBSTATION AND SWITCHYARD

The substation transformer would step-up the voltage from the collection-level voltage to 69 kV. Additional substation facilities include a circuit breaker, metering units, control building, buswork (overhead line components), Supervisory Control and Data Acquisition (SCADA), and associated substation equipment. The proposed intertie would connect from the substation switchgear to SMUD's existing regional distribution facilities located along Power Line Road. Due to the distance between the proposed substation and point of interconnection, which could be up to 650 feet, depending on final design, a new 69 kV power line would be required to connect the substation to SMUD facilities. The substation would be located within a fenced 200-foot by 200-foot pad in which the electrical gears would occupy an approximately 12,000-square-foot area. The substation's structures would be about 20 feet in height.

ENERGY STORAGE

The proposed project would incorporate a Tesla Megapack for AC-coupled BESS sized for 1.9 MW of power and 3.9 MWh of energy storage. The enclosure would be placed outdoors on a concrete pad near the substation and main switch gear. The BESS enclosure would be approximately 25 feet in width, 8.5 feet in height, and 5.5 feet in depth. The BESS technology would use lithium-ion battery cells.

ANCILLARY FACILITIES

A six-to-eight-foot fence would surround the perimeter of the proposed solar facilities. Controlled access would be provided at secured gates intersecting the new interior access roads. The fence would be monitored periodically to detect any intrusion into the property. Security lighting would be installed, and signs posted on the fence at regular intervals to provide warning of the high-voltage facilities.

OFFSITE IMPROVEMENTS

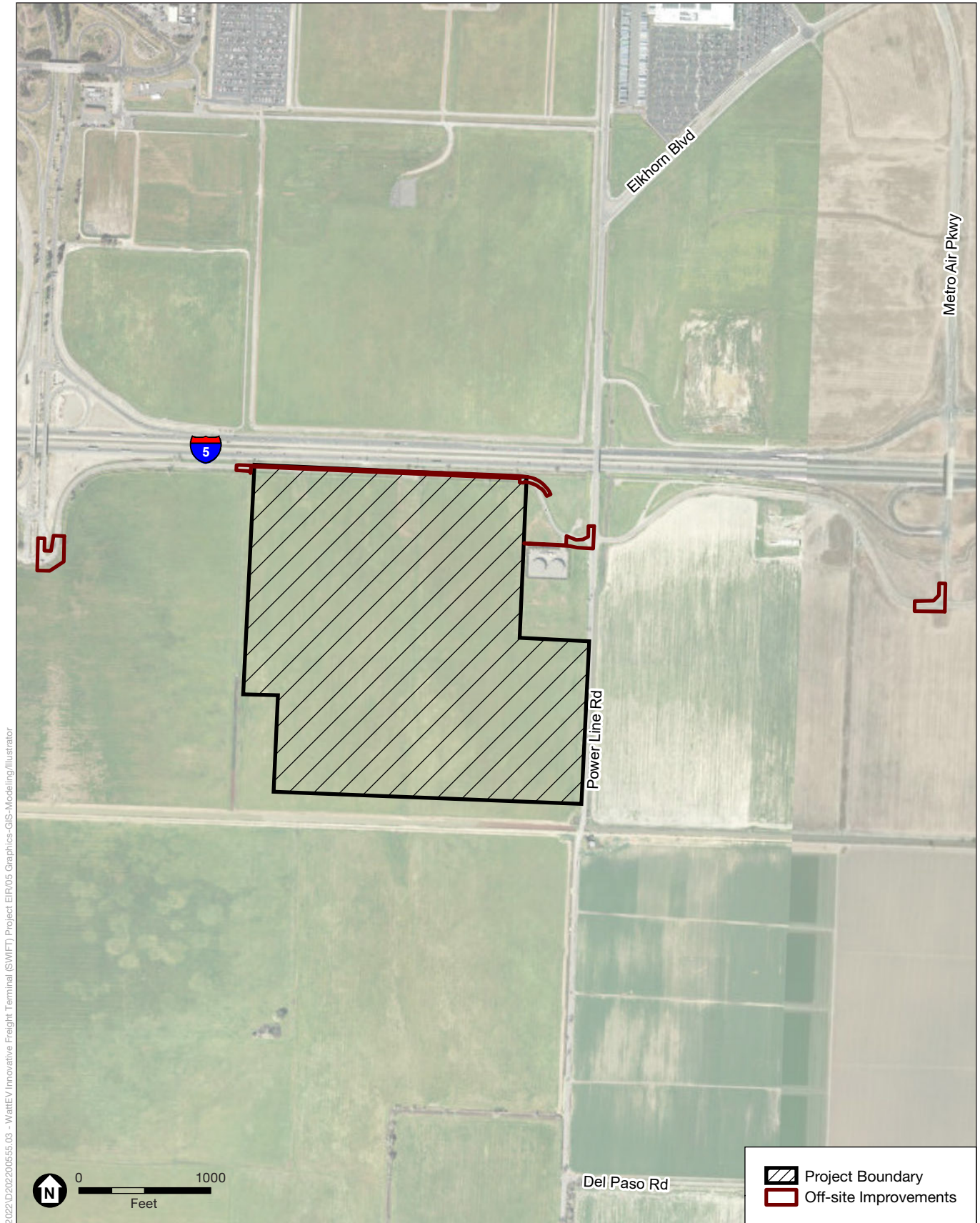
The proposed project would include a variety of offsite improvements (see **Plate PD-14**), including paving and widening at the intersections of Bayou Way and Airport Boulevard and Bayou Way and Power Line Road to facilitate truck turning movements; widening Bayou Way along the project frontage from two to three lanes (one-lane each direction, with a two-way left turn lane); the undergrounding of an existing 12 kV overhead powerline; curb, gutter, and sidewalk improvements along Bayou Way; and an extension of a 69 kV electrical power distribution line between Power Line Road and the proposed substation on the project site.

ACCESS***VEHICLE CHARGING/REST AREA***

Access to the project site would be provided along Bayou Way, which borders the site to the north and is parallel to I-5, via Airport Boulevard and its nearby interchange with I-5, approximately a quarter mile to the west, and Metro Air Park and its nearby interchange with I-5, about a half mile to the east. Direct access to the project site would be provided by three sets of ingress and egress points (six total access points) along Bayou Way. Two sets of ingress and egress points to and from Bayou Way would serve the truck charging areas while the third set of ingress and egress points would serve the public plaza.

SOLAR ARRAYS

The solar field would be accessed via two access gates – one to the south of the east truck charging and storage lot and one to the south of the west truck charging and storage lot. Internal access roads would be unpaved with an aggregate base.



SOURCE: ESA, 2024; ESRI Imagery

WattEV Innovative Freight Terminal (SWIFT) Project

Plate PD-14
Offsite Improvements

LANDSCAPING

Landscaping would cover approximately 60,000 square feet (10 percent) of the approximately 13.5 acres of land on the northern portion of the project site where the vehicle charging/rest area would be located; no landscaping would be provided for the solar facilities. Landscaping would include drought tolerant trees and shrubs, consistent with the County Code.

The ground beneath the solar panels and adjoining disturbed areas would be hydroseeded with native seed mix. As stated previously, the solar panels would be elevated on a single axis tracking system. At its highest edge, each rack would have a maximum height of approximately 10 feet above grade. The minimum clearance from the lower edge of each panel to ground level would be about three feet. These heights would vary during daylight hours as the system tracks the movement of the sun. While it is not anticipated that mowing would be required, sufficient access would be available to allow for mowing should the need arise. Herbicide application would not be required. The resultant vegetation provided by the groundcover would serve to stabilize the soil and manage wind and water erosion. Ultimately the groundcover beneath the solar arrays would be similar to what is present currently, but with a native assemblage of groundcover rather than ruderal grasses. The resultant groundcover would prevent wind erosion and dust, similar to current conditions.

SIGNAGE

The proposed project would have an illuminated pylon sign that would be visible from I-5. The size and height of the sign would conform to County code, which allows a sign with the maximum height of six feet and a maximum area of 24 square feet.

LIGHTING

The project would include onsite lighting, consisting of high-mast light-emitting diode (LED) fixtures and LED canopy lighting around the perimeter of the vehicle charging/rest area, along on-site roadways and pedestrian paths, and in parking areas. The high-mast LED fixtures would be about 25 feet in height while the LED canopy would be about 26 feet in height. All lighting would conform to relevant County requirements.

UTILITIES

WATER

VEHICLE CHARGING/REST AREA

Water service to the proposed project would be provided by the Sacramento County Water Authority (SCWA) via a 2004 purchasing agreement with the City of Sacramento to utilize their supply. During operation, uses associated with the vehicle charging/rest area facilities would have an overall estimated water demand of approximately 13,722 gallons per day (gpd), or about 15.4 acre-feet per year (AFY).

SOLAR ARRAYS

Water would be utilized to wash the solar panels with the panels being cleaned approximately once a year. It is estimated that this process would require 400 gpd of water or 0.45 AFY. The water would be delivered for washing via a tanker truck.

WASTEWATER

Wastewater service for the proposed project would be provided by an onsite septic system, as the nearest existing sewer line connection is approximately 3,400 feet north of the project site at the intersection of Elkhorn Boulevard and Power Line Road. During operation, the proposed project would generate approximately 2,540 gpd of wastewater. Wastewater from the buildings onsite would be conveyed via a six-inch underground sanitary sewer line to a septic tank located approximately 150 east from the parking area of the convenience store/visitor center (Building 2). The septic tank and a pump would be located on a 500 square foot pad. Wastewater would then be pumped from the tank to the proposed leach field located at the eastern edge of the property between the truck changing area and the project boundary.

STORMWATER

Stormwater on the southern portion of the project site would be directed to the existing West Drainage Canal along the southern border of the project site. In the northern portion of the site, the abandoned irrigation ditch that forms the northern boundary of the site along Bayou Way would be eliminated. Stormwater from the northern portion of the site would be directed to a series of culverts that would pass beneath Bayou Way to an existing drainage channel that lies between Bayou Way and I-5. Specifically, surface water from the parking area in the center of the plaza area would be directed via sheet flow to a vegetated strip located in the center of the plaza area. Surface water from the buildings and surrounding parking areas would be conveyed in a valley gutter to vegetative swales on either side of the plaza area, adjacent to the truck charging areas. Similarly, surface water from the truck charging areas would be collected in valley gutters within the charging area and channeled to one of the four vegetative swales adjacent to the truck charging areas. The vegetative swales would flow to underground storm drain culverts that would convey the water under Bayou Way and into an existing drainage channel that lies between Bayou Way and I-5. All drainage infrastructure in the northern 13.5 acres of the project site would conform to established low impact development (LID) and County standards. Drainage on the southern 96.5 acres of the project site would proceed to the West Drainage Canal via sheet flow. No stormwater detention would be provided on either the northern or southern portions of the project site.

ELECTRICITY

At project buildout, on-site PV generation would be deployed first to satisfy EV charging loads. Excess PV generation would be exported to the SMUD grid via the intertie discussed above during the daytime hours of the summer months and energy

for charging would be imported from the SMUD grid during nighttime hours¹ and fall and winter months. Highest export would occur in July. The export of excess generation daily would occur between 6 a.m. and 5 p.m. during the spring and summer months. Import of energy daily would occur between 5 p.m. and 6 a.m. during the spring and summer months and 24 hours a day during the fall and winter months.

The proposed project is anticipated to open in 2025. **Table PD-2** shows peak annual peak import and export between 2025 and 2035. As shown, peak export of energy would exceed peak import energy every year through 2035 with the amount of import and export almost balancing out by the end of the period.

Finally, the proposed project would have an initial demand of 17 gigawatt-hours (GWh) in 2025 and an overall demand of 62 GWh in 2035.

Table PD-2: Charger Demand

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Peak Import MV	2.0	3.2	5.6	5.6	6.9	7.1	7.1	7.2	7.2	7.2	7.3
Peak Export MV	14.2	12.7	11.3	9.9	8.8	8.4	8.3	8.2	8.1	8.1	8.0
Source: WattEV, 2023											

NATURAL GAS

The proposed project would be powered entirely by electricity; natural gas service would not be extended to the project site.

TELECOMMUNICATIONS

Telecommunications service for the proposed project would be provided by satellite as the nearest telecommunications infrastructure is approximately 1.5 miles north of the project site along Power Line Road.

CONSTRUCTION

Construction of the proposed project would occur in two phases. Phase 1 would consist of installation of the vehicle charging areas and public plaza as described above, as well as 48 acres of the solar PV system with nameplate power² of 15.5 MWdc (50 percent of the final solar array power). Phase 2 would consist of the installation of the remaining 15.5 MWdc of solar power for a total nameplate of 21 MWdc. However, for purposes of analysis in this EIR, it will be conservatively assumed that the proposed project would be built in a single phase.

¹ Please note that battery capacity of the BESS is not sufficient to serve the charging needs of the proposed project during the nighttime so some energy from the SMUD grid would still be required.

² For intermittent power sources, such as wind and solar, nameplate power is the source's output under ideal conditions, such as maximum usable wind or high sun on a clear summer day.

Construction would begin in summer 2024 and last approximately 12 months. Phase 1 would commence operation in 2025; there is no timeline for the commencement of Phase 2.

CONSTRUCTION PHASES

As shown in **Table PD-3**, site preparation activities (i.e., vegetation clearance) and grading (i.e., cut/fill of land) would occur first, followed by infrastructure improvements (i.e., installation of water, wastewater, storm drain, electrical, telecommunications facilities, etc.) and paving (i.e., placement of concrete and/or asphalt). Next, project buildings would be constructed, and the solar arrays would be installed followed by the administration of architectural coating (i.e., interior and exterior painting) on the proposed structures.

Table PD-3: Construction Phasing

Phase	Start Date (Month/Year)	End Date (Month/Year)
Site Preparation	June 2024	July 2024
Grading	July 2024	September 2024
Infrastructure Improvements	September 2024	October 2024
Paving	October 2024	November 2024
Building Construction/Solar Panel Installation	November 2024	May 2025
Architectural Coating	May 2025	June 2025
Source: WattEV, 2023		

HOURS

Construction activities would occur Monday through Friday, during daytime hours (typically 7 a.m.–7 p.m.). The schedule may change based on overall construction timing, or worker safety such as avoidance of excessive midday heat. Work at night would be performed occasionally within some areas of the site only if necessary to comply with traffic control permits or weather conditions to meet construction specifications.

WORKFORCE

The on-site construction workforce would consist of laborers, craftspeople, supervisory personnel, and support personnel. The on-site assembly and construction workforce is expected to reach a peak of approximately 23 workers; on average about 10 to 15 workers are expected to be onsite at any given time.

TRAFFIC

Daily trip generation during construction would consist of truck trips to deliver equipment and materials and construction worker vehicle trips. Deliveries of equipment and supplies to the site would consist of four haul trips per day, averaging approximately 20 miles per round trip, while the commute for construction workers would consist of 20 trips per day, averaging about 14 miles per round trip. Parking for construction worker vehicles would be provided onsite.

EQUIPMENT

Construction equipment anticipated to be used throughout the various phases of construction includes:

- air compressors,
- backhoes,
- excavators,
- paving equipment,
- forklifts,
- graders,
- rollers,
- scrapers,
- heavy-duty trucks,
- bulldozers,
- trackers,
- front-end loaders,
- cranes,
- generators,
- welders, and
- mixers.

EXCAVATION

Excavation would occur to an approximate depth of three feet below the ground surface (bgs) for mass grading, two to four feet for building foundations, three to four feet bgs for installing onsite utilities, two to three feet bgs for trenching needed to install the septic system, and five to eight feet bgs for the pilings for the solar mounts.

DUST CONTROL

Water would be required for a variety of construction activities, including dust suppression, earth compaction, the creation of engineered fill, and concrete preparation. Construction-phase water demand would be greatest during site grading. Based on a factor of 0.24 acre-feet per acre, construction of the proposed project would require approximately 28 acre-feet of water. During construction, a water line would be extended from the existing water main in Bayou Way to the project site. A fire hydrant would be installed to provide the water needed for construction activities.

OPERATION***VEHICLE CHARGING/REST AREA***

The proposed project would be open 24 hours per day, seven days per week. The proposed project is designed to charge a maximum of 108 trucks and 30 cars and accommodate the parking of 53 trucks. Overnight truck parking would be allowed.

Table PD-4 shows the expected daily demand for charging sessions for each charger configuration between 2025 and 2030. As shown, demand for MCS and CCS truck chargers would more than double over this period while the demand for CCS passenger vehicle chargers would more than triple over this period.

Table PD-4: Charger Demand

	2025	2026	2027	2028	2029	2030
MCS Truck Chargers	39	57	79	100	123	123
CCS Truck Chargers	50	80	108	135	167	167
CCS Passenger Vehicle Chargers	78	136	170	209	258	326
Source: WattEV, 2023						

For CCS chargers, it takes approximately one hour to charge a car and three hours to charge a truck, while for MCS chargers it takes approximately 30 to 45 minutes to charge a truck. Over the course of a day, the proposed project would generate 1,726 vehicle trips (car and truck). It is conservatively estimated that all these trips would require charging and thus the daily throughput for charging would equal daily trips.

The proposed project would have a total of 10 to 15 employees with a minimum of three employees present on the project site at any given time.

SOLAR FACILITIES

The solar portion of the proposed project would generate two to six trips per day for maintenance personnel. The facility would either be operated remotely through a local solar operations and maintenance company, facilitated by the project SCADA system, or staff onsite.

INTENDED USES OF THE EIR

The EIR is intended to apply to the project approvals listed below, as well as to any other approvals that may be necessary to implement the proposed project. The County of Sacramento is the CEQA lead agency for the project. The Sacramento County Board of Supervisors will use the information contained in the EIR in evaluating the proposed project and rendering a decision to approve or deny approvals of the project. County of Sacramento officials and agencies will use the EIR for other County permits and approvals of the project authorized or required by the County code and/or state law. The EIR will also serve as the CEQA document for approvals of the project by other local and state agencies with discretionary authority regarding the project (i.e., Responsible Agencies). Responsible Agencies pursuant to CEQA Guidelines Section 15381 may include, but are not limited to, the Central Valley Regional Water Quality Control Board, Caltrans, and SMUD.

Table PD-5 below includes information required by Section 15124 of the CEQA Guidelines and summarizes the following intended uses of the EIR:

- A list of agencies that are expected to use the EIR in their decision making.
- A list of permits and other approvals required to implement the project.
- A list of related environmental review and consultation requirements required by federal, state, or local laws, regulations, or policies.

Table PD-5: Subsequent Permits, Approvals, Review, and Consultation Requirements

Agency	Approval
Sacramento County Board of Supervisors	Final Environmental Impact Report Certification
Sacramento County Board of Supervisors	Lease agreement with project applicant
Sacramento Municipal Utility District (SMUD)	Interconnection Agreement
Central Valley Regional Water Quality Control District	Wastewater Discharge Permit
County of Sacramento Site Improvement Section	Grading Permit or Improvement Plans
Public Works Agency of Sacramento County	Land Grading and Erosion Control Permit
County of Sacramento Building Permits Inspection Division	Building Permits
County of Sacramento Department of Transportation	Encroachment Permit
Sacramento County Environmental Management Department	On-site Wastewater Disposal Permit
Sacramento Metropolitan Air Quality Management District	Fugitive Dust Prevention and Control Plan

3 ALTERNATIVES

INTRODUCTION

Pursuant to State CEQA Guidelines section 15126.6, an EIR must describe a range of reasonable alternatives to the proposed project that might feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects of the project. The feasibility of an alternative is determined by the lead agency based on a variety of factors including, but not limited to, site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and site accessibility and control (State CEQA Guidelines section 15126.6(f)(1)).

This chapter discloses the comparative effects of each of the alternatives relative to the proposed project and evaluates the relationship of the alternatives to the objectives of the proposed project. As required under section 15126.6(e) of the State CEQA Guidelines, an environmentally superior alternative is identified at the end of this chapter for the proposed project.

FACTORS IN THE SELECTION OF ALTERNATIVES

PROJECT OBJECTIVES

CEQA Guidelines section 15124(b) requires that an EIR project description include a statement of the objectives intended to be achieved by the proposed project. The objectives describe the purpose of the proposed project and are intended to assist the lead agency in developing a reasonable range of alternatives for consideration in the EIR, and to assist the decision makers in assessing the feasibility of mitigation measures and alternatives.

The project objectives for the proposed project are presented below.

1. Provide a charging facility for electric mobility and freight in the Sacramento area that is accessible and convenient to major freight and transportation corridors and meets the objectives and evaluation criteria of the California Transportation Commission's Trade Corridor Enhancement Program and supports the goals of the National Highway Freight Program, the California Freight Mobility Program, and the California Sustainable Freight Action Plan.
2. Provide green energy onsite to support a large part of the need for EV charging.
3. Reduce the freight emissions in the Sacramento region.
4. Contribute to the economic development of the region.
5. Create equitable access to zero-emission technology for small carriers and independent owner operators.

SIGNIFICANT EFFECTS OF THE PROPOSED PROJECT

Section 15126.2(b) of the CEQA Guidelines requires that an EIR describe any significant impacts that cannot be avoided, even with the implementation of feasible mitigation measures. The environmental effects of the proposed project are discussed in Chapters 4 through 19 of this Supplement to the 2022 Airport SEIR. Project-specific and cumulative impacts that cannot be avoided if the project is approved as proposed are identified below.

PROJECT-SPECIFIC SIGNIFICANT AND UNAVOIDABLE IMPACTS

- Conversion of Important Farmland to Nonagricultural Uses

CUMULATIVE SIGNIFICANT AND UNAVOIDABLE IMPACTS

- Conversion of Important Farmland to Nonagricultural Uses

ALTERNATIVES CONSIDERED BUT DISMISSED FROM FURTHER CONSIDERATION

As required pursuant to CEQA Guidelines section 15126.6(a), in identifying alternatives to the proposed project, consideration was given to alternatives that could avoid or substantially lessen significant impacts resulting from development of the proposed project, especially those impacts determined to be significant and unavoidable, while still achieving the basic objectives of the project. The environmental impact that has been determined to be significant and unavoidable for the proposed project (conversion of agricultural lands to non-agricultural uses) would be due to developing a site that is currently undeveloped and classified as farmland of local importance. This impact would be eliminated by limiting the scale of development allowed under the proposed project and thus converting less farmland to non-agricultural uses. Accordingly, a potential alternative that would reduce the intensity of development allowed under the proposed project is discussed below.

Section 15126.6(c) of the CEQA Guidelines requires the County to disclose alternatives that were considered but eliminated from further analysis in this Supplement to the 2022 Airport SEIR and provide the rationale for dismissal of those alternatives. According to the CEQA Guidelines, “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 objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts.”

ALTERNATIVE PROJECT LOCATION

As described in Chapter 2, *Project Description*, of this Supplement to the 2022 Airport SEIR, the cost of the project would be substantially offset by a \$33.688 million grant from the Trade Corridor Enhancement Program (TCEP), as administered by the California Transportation Commission (CTC) (CTC, 2023). The purpose of the TCEP is to provide funding for infrastructure improvements on federally designated Trade

Corridors of National and Regional Significance, on California's portion of the National Highway Freight Network, as identified in California Freight Mobility Plan, and along other corridors that have a high volume of freight movement. The TCEP also supports the goals of the National Highway Freight Program, the California Freight Mobility Plan, and the guiding principles in the California Sustainable Freight Action Plan.

Grant funds are limited and are distributed competitively. Eligible applicants apply for program funds through the nomination of projects. The project's grant application is included with this EIR in **Appendix PD-1**. All projects nominated must be identified in a currently adopted regional transportation plan, and the CTC is required to evaluate and select submitted applications based on the following criteria:

- Freight System Factors – Throughput, Velocity, and Reliability;
- Transportation System Factors – Safety, Congestion Reduction/Mitigation, Key Transportation Bottleneck Relief, Multi-Modal Strategy, Interregional Benefits, and Advanced Technology;
- Community Impact Factors – Air Quality Impact, Community Impact Mitigation, and Economic/Jobs Growth;
- The overall need, benefits, and cost of the project
- Project Readiness – ability to complete the project in a timely manner;
- Demonstration of the required 30 percent matching funds;
- The leveraging and coordination of funds from multiple sources; and
- Jointly nominated and/or jointly funded.

The proposed project competed against other applicants using the above criteria and was awarded a grant based on established performance metrics developed by CTC. A significant factor in the project's selection were the specific benefits provided by the project's location. The project site addresses several key factors:

- Sacramento County is serving as the nominating agency and has formed a public/private partnership with the applicant to construct, own, operate, and provide cost-share for the project. The site is on land owned by Sacramento County, in which the County has control over the leasing terms, thus providing reductions in cost and realization of public benefits that would be more difficult to achieve on a private land site.
- The project site is strategically located to serve several high-capacity freight corridors including I-5, I-80, SR-99, and US-50. These routes serve tens of thousands of vehicles per day. Convenient access to fast, high-powered, public charging is critical to achieving wide-spread adoption of battery electric vehicles, particularly in the medium- and heavy-duty (MHD) sector.
- The project site is located along the National Highway Freight Network (NHFN). The goal of the National Highway Freight Program is to improve efficient movement of freight along the National NHFN. The site is directly adjacent to and

would support vehicles traveling along the NHFN. The project in this location would allow for more efficient goods movement by encouraging and supporting electrification and providing MHD electric vehicles a location to charge along this corridor.

- The project site is in proximity to Sacramento International Airport and to the Sacramento Metro Air Park, a 1,900-acre business park, with 1,320 acres of fully entitled land zoned for industrial, manufacturing, distribution, office, research and development, and other commercial uses. At least 913 acres of the Sacramento Metro Air Park will be reserved for light manufacturing, distribution, and manufacturing related activities. It is estimated that the ongoing development and buildout of this industrial park will greatly increase MHD freight transportation throughput within the Sacramento region as these companies will need vehicles to transport goods in and out of their facilities. Most of this increased truck transportation throughput will need to be zero-emission MHDs to comply with upcoming clean transportation regulations. As such, the project site is ideally located to meet this demand.
- The project site is of sufficient size to accommodate the charging stations, onsite amenities, and administrative functions as well as a solar field of the size needed to provide for a net-zero facility. The solar component is essential to making the project a net-zero-emission operation.
- The site's location in proximity to established interchanges on I-5 and SR-99 provides for efficient and safe movements to and from these roadways and to and from the project site.
- The areas immediately adjacent to the project site have some of the highest diesel pollution and environmental burden in the region according to the CalEnviroScreen 4.0 screening tool. Provision of a zero-emissions charging facility on the site will provide greater deployment of zero emissions vehicles in the area, particularly in the MHD sector, with resultant decreases in diesel emissions.
- Per the current and approved Sacramento Area Council of Governments (SACOG) Regional Metropolitan Transportation Plan and Sustainable Communities Strategy (MTP/SCS), the project location is designated and classified primarily as a Center/Corridor Community, with surrounding land being designated as Established Communities and Developing Communities. SACOG's proposed MTP/SCS Land Use Forecast for 2040 has projected that expected employment growth for Center and Corridor Communities will increase by nearly 23 percent from 2016-2040. This growth will provide additional demand for the facility.
- Other critical factors regarding the site's location include proximity to SMUD 69kV distribution lines which are necessary to transmit power to and from the existing electrical grid. The site's proximity to these existing distribution facilities negates the need to construct lengthy generation tie-lines with a resultant decrease in cost and the environmental impacts associated with constructing such facilities.

Some of the physical effects of the proposed project are specific to the location of the project site, including loss of farmland and potential effects to biological resources in the Natomas Basin. As such, the County initially considered alternative locations for the proposed project. However, based upon the above description of the key characteristics of the project that were determined to meet the CTC TCEP criteria, the project site provides features that make it uniquely situated to meet the requirements and objectives of the CTC's Trade Corridor Enhancement Program and supports the goals of the National Highway Freight Program, the California Freight Mobility Program, and the California Sustainable Freight Action Plan.

These requirements were established to ensure that grant recipients provided quantified public benefits related to throughput, safety, emissions reductions, cooperative development, and other factors as described above. The proposed project would not be feasible without the grant. The CTC TCEP grant funding is critical to offset the significant infrastructure costs associated with the project's development during this period of transition. The site was specifically chosen over other potential locations because it could provide substantial public benefits that would be difficult to replicate elsewhere. As such, an alternative site location would not meet the basic objectives of the project and was eliminated from further consideration.

No SOLAR ARRAY ALTERNATIVE

As described in Chapter 2, *Project Description*, the proposed project includes deployment of advanced high-powered public charging stations and associated facilities powered by a solar generation field to support zero-emissions electric freight movement in Sacramento. The charging areas and associated support facilities would occupy approximately 13.5 acres of land on the northern portion of the project site while the remaining 96.5 acres of the site would be occupied by solar fields and a 200-foot-wide buffer area along the western and southern borders of the project site. An alternative was considered that would eliminate the onsite solar component of the proposed project and instead power the public charging stations and associated facilities from the existing power grid. Conservatively assuming that non-solar power infrastructure under this alternative would occupy approximately 10 to 12 acres of the portion of the project site identified for 96.5 acres of solar fields under the proposed project, a non-solar project would reduce the project footprint to approximately 25 acres, thus reducing the extent and magnitude of the proposed project's identified significant impact related to conversion of 110 acres of important farmland to nonagricultural uses. However, an alternative that eliminates the proposed onsite solar generation component would not meet the basic objectives of the project, including the objective to provide a charging facility for electric mobility and freight in the Sacramento area that meets the objectives and evaluation criteria of the CTE TCEP (specifically, the solar component and zero emissions technology that were key factors in the project's selection for grant funding); the objective to provide green energy onsite to support a large part of the need for EV charging; and the objective to create equitable access to zero-emission technology for small carriers and independent owner operators. As such, an alternative that eliminates the proposed onsite solar generation component would not meet the basic objectives of the project and was eliminated from further consideration.

ALTERNATIVES SELECTED FOR FURTHER CONSIDERATION

This chapter describes the range of alternatives to the proposed project and examines how specific environmental impacts would differ in severity compared to those associated with the proposed project. CEQA Guidelines section 15126.6(b) notes that a principal purpose of alternatives is to identify alternatives that can avoid or substantially lessen the significant effects of a project. The significant and unavoidable effect of the project identified in this Supplement to the 2022 Airport SEIR is the conversion of important farmland to non-agricultural uses. As noted in the previous discussion, two potential alternatives were considered that would lessen this impact but were dismissed from further consideration due to their infeasibility and their inability to meet the basic objectives of the project. Only one other potentially feasible alternative has been identified, along with the CEQA-required No Project Alternative. Both alternatives are described below.

ALTERNATIVE 1: NO PROJECT

As addressed in CEQA Guidelines Section 15126.6(a), an EIR is required to consider 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 the opportunity to compare the impacts of the project versus no project. The No Project Alternative can take many forms, including doing nothing, depending on what may likely occur if a project is not developed. Based on the direction in CEQA Guidelines Section 15126.6(a)(B), in the case of the proposed project, the No Project Alternative assumes that the proposed project would not proceed.

Under Alternative 1, none of the proposed project's impacts as identified in this Supplement to the 2022 Airport SEIR would occur, at least in the near term. This distinction is made because the site is currently planned for future development in the 2022 Airport Master Plan Update. Specifically, in terms of the timing and phasing of development, the 2022 Airport Master Plan Update and 2022 Airport SEIR considered a development and operational horizon of 20 years (2018 through 2038) with four Planning Activity Levels (PALs), or phases of development. The area south of I-5 within the Airport Master Plan area, which includes the project site, was included within PAL 4 (2034-2038) of the 2022 Airport Master Plan Update. Specifically, the project site is envisioned in the 2022 Airport Master Plan Update to be developed with a travel center/truck stop. As such, even if the site were not developed immediately with the proposed project, it is reasonable to assume that implementation of the 2022 Airport Master Plan Update would result in the site being proposed for development with a similar use later. The environmental analysis of the No Project Alternative follows below.

COMPARATIVE ANALYSIS OF ENVIRONMENTAL EFFECTS

AESTHETICS

While Alternative 1 would not preclude future development of the site consistent with the Airport Master Plan, none of the proposed project's less-than-significant effects related to scenic views, visual character, and new sources of light would occur under this

alternative. However, future development of commercial uses on the project site as identified in the 2022 Airport Master Plan Update would likely result in a greater density and intensity of development of the site when compared to the proposed project. Therefore, the impacts of the proposed project related to aesthetics may only be deferred to a later date rather than eliminated by Alternative 1 and could potentially be of a greater magnitude.

AGRICULTURAL RESOURCES

While Alternative 1 would not preclude future development of the site consistent with the Airport Master Plan, the proposed project's significant effects related to conversion of important farmland to nonagricultural uses would not occur under this alternative. However, future development of commercial uses on the project site as identified in the 2022 Airport Master Plan Update would likely result in a greater intensity of development (e.g., land disturbance) on the 96.5 acres of the site than would be occupied by solar fields and a 200-foot-wide buffer area along the western and southern borders of the site under the proposed project. Therefore, the impacts of the proposed project related to conversion of important farmland to nonagricultural uses may only be deferred to a later date rather than eliminated by Alternative 1 and could also be greater.

AIR QUALITY

While Alternative 1 would not preclude future development of the site consistent with the Airport Master Plan, none of the proposed project's less-than-significant (with mitigation) effects related to air quality would occur under this alternative. However, future development of commercial uses on the project site as identified in the 2022 Airport Master Plan Update would likely result in a greater density and intensity of development of the site and an associated increase in pollutant emissions. Therefore, the impacts of the proposed project related to air quality may only be deferred to a later date rather than eliminated by Alternative 1 and could be of a greater magnitude.

In addition, since the construction and operation of a zero-emissions electric vehicle charging facility would not occur under this alternative, the air quality benefits of such a facility would not be realized. In the absence of the proposed project, there would be less infrastructure supportive of a transition to EV freight and passenger vehicles, and the reductions greenhouse gas (GHG) emissions, diesel particulate emissions, and other criteria emissions that would result from implementation of the proposed project would not occur if Alternative 1 were implemented. In addition, the proposed project's direct contribution to Senate Bill 100 (SB 100) and the California's Renewables Portfolio Standard (RPS) goal of increasing the percentage of electricity procured from renewable sources to 100 percent by 2045 would not be realized. Based upon each of these considerations, Alternative 1 would result in greater impacts related to air quality than the proposed project.

BIOLOGICAL RESOURCES

While Alternative 1 would not preclude future development of the site consistent with the Airport Master Plan, none of the proposed project's less-than-significant (with mitigation) effects related to biological resources, including direct or indirect impacts to sensitive species, jurisdictional waters, or wetlands would occur under this alternative. However,

future development of commercial uses on the project site as identified in the 2022 Airport Master Plan Update would likely result in a greater intensity of development (e.g., land disturbance) on the 96.5 acres of the site that would be occupied by solar fields and a 200-foot-wide buffer area along the western and southern borders of the project site under the proposed project. Therefore, the biological impacts of the proposed project may only be deferred to a later date rather than eliminated by Alternative 1 and could also be greater.

CLIMATE CHANGE

Since the construction and operation of a zero-emissions electric vehicle charging facility would not occur under this alternative, the GHG-reduction benefits of such a facility would not be realized. The project's contribution to the stated goal of the State of California to be net-zero GHG emissions by 2045 would not be realized. In addition, future development of commercial uses on the project site as identified in the 2022 Airport Master Plan Update would likely result in a greater density and intensity of development of the site and an increase in GHG emissions that would not occur under the proposed project. Based upon each of these considerations, Alternative 1 would result in greater impacts related to GHG emissions than the proposed project.

CULTURAL RESOURCES

While Alternative 1 would not preclude future development of the site consistent with the Airport Master Plan, none of the proposed project's less-than-significant (with mitigation) effects related to inadvertent discovery of unknown archaeological resources and/or human remains during ground-disturbing construction activities would occur under this alternative. However, future development of commercial uses on the project site as identified in the 2022 Airport Master Plan Update would likely result in a greater intensity of development (e.g., land disturbance) on the 96.5 acres of the site that would be occupied by solar fields and a 200-foot-wide buffer area along the western and southern borders of the project site under the proposed project. Therefore, the impacts of the proposed project related to cultural resources may only be deferred to a later date rather than eliminated by Alternative 1 and could be of a greater magnitude.

ENERGY

Since the construction and operation of a zero-emissions electric vehicle charging facility would not occur under Alternative 1, the energy-related benefits of such a facility would not be realized. The provision of a zero-emissions electric vehicle charging facility along a major transportation corridor, powered largely by renewable energy generated on the project site, would not occur, and at least some portion of vehicles that could be powered by renewably generated electric energy would continue to be powered by non-renewable fossil fuels. Under Alternative 1, the proposed project's energy storage system that would assist SMUD in achieving its goal to reach zero carbon emissions in its power supply by 2030 and meet its obligations under State energy storage targets and the California Public Utilities Commission (CPUC) energy storage program would not be implemented. Therefore, the proposed project's direct contribution to SB 100 and the RPS goal of increasing the percentage of electricity procured from renewable sources to 100 percent by 2045 would not be realized under Alternative 1. In addition, future development of commercial uses on the project site as identified in the 2022

Airport Master Plan Update would likely result in a greater density and intensity of development of the site and an increase in energy use that would not occur under the proposed project. Based upon each of these considerations, Alternative 1 would result in greater impacts related to energy than the proposed project.

HAZARDS AND HAZARDOUS MATERIALS

While Alternative 1 would not preclude future development of the site consistent with the Airport Master Plan, none of the proposed project's less-than-significant (with mitigation) effects with respect to the routine transport, use, or disposal of hazardous materials, accidental release of hazardous materials, hazardous emissions, or use of hazardous materials near schools, and potential onsite contamination would occur under this alternative. However, future development of commercial uses on the project site as identified in the 2022 Airport Master Plan Update would likely result in a greater intensity of development (e.g., land disturbance) on the 96.5 acres of the site that would be occupied by solar fields and a 200-foot-wide buffer area along the western and southern borders of the project site under the proposed project. Therefore, the impacts of the proposed project related to hazards and hazardous materials may only be deferred to a later date rather than eliminated by Alternative 1 and could be of a greater magnitude.

HYDROLOGY AND WATER QUALITY

While Alternative 1 would not preclude future development of the site consistent with the Airport Master Plan, none of the proposed project's less-than-significant (with mitigation) effects related to violations of water quality standards, changes to stormwater runoff, alteration of drainage patterns, erosion and siltation, or development in a floodplain would occur under this alternative. However, future development of commercial uses on the project site as identified in the 2022 Airport Master Plan Update would likely result in a greater intensity of development (e.g., land disturbance) on the 96.5 acres of the site that would be occupied by solar fields and a 200-foot-wide buffer area along the western and southern borders of the project site under the proposed project. Therefore, the impacts of the proposed project related to hydrology and water quality may only be deferred to a later date rather than eliminated by Alternative 1 and could be of a greater magnitude.

LAND USE AND PLANNING

While Alternative 1 would not preclude future development of the site consistent with the Airport Master Plan, none of the proposed project's less-than-significant impacts related to land use would occur. Future development of the site would be required to be determined consistent with applicable land use policies and regulations.

NOISE

While Alternative 1 would not preclude future development of the site consistent with the Airport Master Plan, none of the proposed project's less-than-significant impacts related to noise would occur under this alternative. However, future development of commercial uses on the project site as identified in the 2022 Airport Master Plan Update would likely result in a greater density and intensity of development of the site. Therefore, the impacts of the proposed project related to noise may only be deferred to a later date rather than eliminated by Alternative 1 and could be of a greater magnitude.

TRANSPORTATION

While Alternative 1 would not preclude future development of the site consistent with the Airport Master Plan, none of the proposed project's less-than-significant (with mitigation) effects related to a conflict with a program, plan, ordinance, or policy addressing the circulation system, VMT, hazards due to design or incompatible uses, and emergency access would occur under this alternative. However, future development of commercial uses on the project site as identified in the 2022 Airport Master Plan Update would likely result in a greater density and intensity of development of the site. Therefore, the impacts of the proposed project related to transportation may only be deferred to a later date rather than eliminated by Alternative 1 and could be of a greater magnitude.

TRIBAL CULTURAL RESOURCES

While Alternative 1 would not preclude future development of the site consistent with the Airport Master Plan, none of the proposed project's less-than-significant (with mitigation) effects related to tribal cultural resources would occur under this alternative. However, future development of commercial uses on the project site as identified in the 2022 Airport Master Plan Update would likely result in a greater intensity of development (e.g., land disturbance) on the 96.5 acres of the site that would be occupied by solar fields and a 200-foot-wide buffer area along the western and southern borders of the project site under the proposed project. Therefore, the impacts of the proposed project related to tribal cultural resources may only be deferred to a later date rather than eliminated by Alternative 1 and could be of a greater magnitude.

UTILITIES AND SERVICE SYSTEMS

While Alternative 1 would not preclude future development of the site consistent with the Airport Master Plan, none of the proposed project's less-than-significant impacts related to utilities and service systems would occur under this alternative. However, future development of commercial uses on the project site as identified in the 2022 Airport Master Plan Update would likely result in a greater density and intensity of development of the site and greater demands on utilities and service systems, including electricity use. Therefore, the impacts of the proposed project related to utilities and service systems may only be deferred to a later date rather than eliminated by Alternative 1 and could be of a greater magnitude.

RELATIONSHIP TO PROJECT OBJECTIVES

Alternative 1 would not meet any of the objectives of the proposed project. Under the No Project Alternative, the project site would not be developed as a charging facility for electric mobility and freight in the Sacramento area that is accessible and convenient to major freight and transportation corridors and meets the goals and policies established in the CTC TCEP grant. The site would not provide green energy to support a large part of the need for EV charging, nor would it reduce freight vehicle emissions in the Sacramento region. The site would not contribute to the economic development of the region, nor would it create equitable access to zero-emission technology for small carriers and independent owner operators. None of the project's objectives would be achieved.

ALTERNATIVE 2: REDUCED DEVELOPMENT FOOTPRINT

As discussed in Chapter 5, *Agricultural Resources*, of this Supplement to the 2022 Airport SEIR, the County considers the conversion of over 50 acres of farmland of local importance a significant impact. Thus, the impact associated with the loss of 110 acres of farmland of local importance on the project site due to the construction of the proposed project would be potentially significant. Implementation of Mitigation Measure AG-1, which is similar to the mitigation measure included in the 2022 Airport SEIR to address the conversion of important farmland to nonagricultural use, would require preservation of farmland of local importance at a 1:1 ratio, consistent with Policy AG-5 of the 2030 General Plan. However, even with this mitigation, it must be recognized that farmland is a finite resource. When an area is permanently taken out of agricultural production, there is a net loss of agricultural lands. Other agricultural lands may be preserved through compliance with mitigation, but new agricultural soils will not be created. Therefore, there would be a substantial net-loss of designated farmland land within Sacramento County because of the proposed project, and like the conclusion reached in the 2022 Airport SEIR, this impact would be significant and unavoidable. In addition, this Supplement to the 2022 Airport SEIR identifies other effects of the proposed project related to land disturbance that would result in less-than-significant impacts or impacts that would be reduced to less than significant with implementation of mitigation measures.

It thus follows that the only way to substantially lessen the identified significant and unavoidable impact of the project on agricultural resources would be to substantially reduce the development footprint on the project site and thus reduce the amount of agricultural land that would be converted. Under such a scenario, and based on County General Plan Policy AG-5, under Alternative 2, no more than 50 acres of agricultural lands would be developed and converted.

Under this alternative, it is assumed that the charging areas and associated support facilities would still occupy approximately 13.5 acres of land on the northern portion of the project site and in the same configuration as under the proposed project, but the 96.5 acres of the site that would be occupied by solar fields under the proposed project would be reduced to approximately 36.5 acres. It is assumed that the smaller solar array would be immediately behind the charging station under Alternative 2, thereby eliminating most of the solar facilities that would occupy the southern half of the project site under the proposed project. It is possible that the charging areas and associated support facilities on the northern portion of the project site under this alternative could be reduced from 13.5 acres, allowing for more solar facilities in the northern portion of the project site and beyond the 36.5 acres identified for solar facilities under this alternative, but this would be determined in the final design. The relative allocation of solar arrays and more land-intensive charging areas and associated support facilities under this alternative is therefore conservative. Regardless of the ultimate configuration of the facility, the reduction of solar facilities and solar energy generation would require a greater reliance on the existing power grid under Alternative 2.

Because no more than 50 acres of agricultural lands would be developed and converted under this alternative, the proposed project's significant impact related to loss of important farmland would be avoided. In addition, the less-than-significant proposed

project impacts related to conversion of land that serves as Swainson's hawk foraging habitat, and disturbance of land that could contain cultural resources or tribal cultural resources would thus be lessened as well. The environmental analysis of such an alternative follows below.

COMPARATIVE ANALYSIS OF ENVIRONMENTAL EFFECTS

AESTHETICS

Impacts related to aesthetics under Alternative 2 would be reduced when compared to the less-than-significant impacts of the proposed project, as the amount of area set aside for new development under this alternative would be reduced from approximately 110 acres to 50 acres. However, despite this reduction, the change to existing views of the project site from surrounding areas and I-5 and the existing visual character of the area itself under Alternative 2 would still be substantial, as a significant portion of the site would be converted to a charging facility and solar field, though the solar field would be smaller than the proposed project. As a result, impacts related to scenic views and visual character under Alternative 2 would still occur, though at a lesser level than the proposed project. Similarly, impacts related to new sources of light under Alternative 2 would also be less than the less-than-significant impacts of proposed project, but development under this alternative would still introduce new light sources to an area that is currently rural and contains minimal lighting.

AGRICULTURAL RESOURCES

As discussed in Chapter 5, *Agricultural Resources*, of this Supplement to the 2022 Airport SEIR, the entirety of the project site is designated as farmland of local importance by the California Department of Conservation. Pursuant to County General Plan Policy AG-5, conversion of over 50 acres of farmland of local importance is considered a significant impact and is required to be mitigated at a 1:1 ratio. As no more than 50 acres of farmland of local importance would be developed and converted under this alternative, the proposed project's significant and unavoidable impact related to conversion of 110 acres of important farmland to nonagricultural uses would not occur under Alternative 2. Mitigation Measure AG-1 to address the conversion of important farmland to nonagricultural use would not be required under Alternative 2. The proposed project's less-than significant impacts related to conflict with existing zoning for agricultural use or a Williamson Act contract¹ or other changes in the existing environment which could result in conversion of farmland to non-agricultural use would also be reduced under Alternative 2.

AIR QUALITY

Since less development on the project site would occur, Alternative 2 would have less direct air quality impacts than the proposed project related to emissions of criteria pollutants or other air quality effects associated with construction. The proposed project's less-than-significant (with mitigation) construction effects related to air quality

¹ As discussed on page 5-2 of Chapter 5, *Agricultural Resources*, of this Supplement to the 2022 Airport SEIR, none of the parcels on the project site are under a Williamson Act contract.

would therefore be less under Alternative 2. However, since Alternative 2 would not be a net-zero-emissions facility and would therefore be reliant upon supplemental power generated elsewhere, Alternative 2 would have a reduced contribution to SMUD's goal to reach zero carbon emissions in its power supply by 2030. Therefore, the direct contribution to SB 100 and the RPS goal of increasing the percentage of electricity procured from renewable sources to 100 percent by 2045 would be reduced under Alternative 2 in comparison to the proposed project.

BIOLOGICAL RESOURCES

Since less development on the project site would occur, Alternative 2 would have reduced impacts on biological resources, including reduced direct or indirect impacts to sensitive species, jurisdictional waters, or wetlands, in comparison to the less-than-significant and less-than-significant (with mitigation) impacts of the proposed project. Under Alternative 2, the proposed project's total of 110 acres of existing agricultural foraging habitat for Swainson's hawk that would be functionally considered converted to non-habitat would be reduced by 60 acres to 50 acres.

CLIMATE CHANGE

Since Alternative 2 would not be a net-zero-emissions facility and would therefore be reliant upon supplemental power generated elsewhere, the GHG reduction benefits of Alternative 2 would be substantially less than those under the proposed project. Under Alternative 2, the contribution to the stated goal of the State of California to be net-zero GHG emissions by 2045 would be reduced in comparison to the proposed project.

CULTURAL RESOURCES

As no more than 50 acres would be developed on the project site under Alternative 2, construction and grading activities on the project site would be reduced by approximately 60 acres (or 55 percent) in comparison to the proposed project, and thus there would be less potential to uncover unknown archaeological resources and/or human remains that may be located on the project site. Consequently, the proposed project's less-than-significant (with mitigation) effects related to inadvertent discovery of unknown archaeological resources and/or human remains during ground-disturbing construction activities would be reduced under Alternative 2.

ENERGY

The energy-related benefits of Alternative 2 would be less than the proposed project. The provision of an electric vehicle charging facility along a major transportation corridor would still occur, but the 96.5 acres of the site that would be occupied by solar fields under the proposed project would be reduced to approximately 36.5 acres, which would result in an approximately 62 percent reduction of solar facilities and solar energy generation under Alternative 2. This reduction of solar facilities and solar energy generation would require a greater reliance on the existing power grid under Alternative 2. Consequently, the ability to assist SMUD in achieving its goal to reach zero carbon emissions in its power supply by 2030 and meet its obligations under State energy storage targets and the CPUC energy storage program would be reduced under Alternative 2. In addition, the direct contribution to SB 100 and the RPS goal of

increasing the percentage of electricity procured from renewable sources to 100 percent by 2045 would also be reduced under Alternative 2.

HAZARDS AND HAZARDOUS MATERIALS

As no more than 50 acres would be developed on the project site under Alternative 2, construction and grading activities on the project site would be reduced by approximately 60 acres (or 55 percent) in comparison to the proposed project, and thus the proposed project's less-than-significant impacts (with mitigation) with respect to the routine transport, use, or disposal of hazardous materials, accidental release of hazardous materials, hazardous emissions, or use of hazardous materials near schools, and potential onsite contamination would also be less than the proposed project. While there is a greater potential for operational impacts related to hazards associated with charging areas and associated support facilities, which would remain largely the same under Alternative 2 as the proposed project, the overall reduction of development under Alternative 2 would reduce the proposed project's less-than-significant impacts (with mitigation) related to hazards and hazardous materials.

HYDROLOGY AND WATER QUALITY

As no more than 50 acres would be developed on the project site under Alternative 2, construction and grading activities on the project site would be reduced by approximately 60 acres (or 55 percent) in comparison to the proposed project, and thus the proposed project's less than significant (with mitigation) impacts related to violations of water quality standards, changes to stormwater runoff, alteration of drainage patterns, erosion and siltation, or development in a floodplain would occur at a lesser intensity under Alternative 2.

LAND USE AND PLANNING

Under Alternative 2, the project site would still be developed with public charging stations and associated facilities powered by a solar generation field. However, the solar generation field would be smaller than that proposed under the project. Regardless, the developed use of the property under Alternative 2 would still be consistent with the planned use for the area. As with the proposed project, no conflicts with any of the County's land use policies would occur under Alternative 2.

NOISE

Under Alternative 2, the project site would still be developed with public charging stations and associated facilities powered by a solar generation field. However, the solar generation field would be smaller than that proposed under the project. Under Alternative 2, less land would be developed with a resultant decrease in the longevity of construction noise during the construction phases of the project. It is assumed that the smaller solar array would be immediately behind the charging station under Alternative 2 and would not extend to the southeastern end of the project site near the adjacent home as would occur under the proposed project. The reduced extent of solar facilities in the southern portion of the project site under Alternative 2 would therefore reduce the amount of construction noise and operational noise (e.g., noise associated with occasional washing, maintenance, and monitoring of solar panels) on this sensitive

receptor. Regardless, the proposed project's less-than-significant impacts (with mitigation) related to noise would still occur under Alternative 2, but at a lesser intensity.

TRANSPORTATION

Under Alternative 2, the project site would still be developed with public charging stations and associated facilities powered by a solar generation field. However, the solar generation field would be smaller than that proposed under the project. As no more than 50 acres would be developed on the project site under Alternative 2, construction and grading activities on the project site would be reduced by approximately 60 acres (or 55 percent) in comparison to the proposed project, thus reducing construction-related transportation impacts. While construction-related transportation impacts under Alternative 2 would be reduced when compared to the proposed project, the amount of vehicular traffic generated by operation of Alternative 2 would be similar to that of the proposed project. Concerning vehicle miles traveled (VMT), as with the proposed project, the amount of building space associated with Alternative 2 would meet the screening criteria for local serving retail found in the County's Transportation Analysis Guidelines for projects that are expected to result in less-than-significant VMT impacts. For the same reasons described for the proposed project in Chapter 15, *Transportation and Circulation*, of this Supplement to the 2022 Airport SEIR, the VMT impact associated with the Alternative 2 would be less than significant.

TRIBAL CULTURAL RESOURCES

As no more than 50 acres would be developed on the project site under Alternative 2, construction and grading activities on the project site would be reduced by approximately 60 acres (or 55 percent) in comparison to the proposed project, and thus there would be less potential to uncover unknown archaeological resources, tribal cultural resources, and/or human remains that may be located on the project site. Consequently, the proposed project's less-than-significant (with mitigation) effects related to tribal cultural resources would be reduced under Alternative 2.

UTILITIES AND SERVICES SYSTEMS

Since there would be less development on the project site with Alternative 2, there would be correspondingly less need for utility infrastructure to serve the site. Specifically, impacts related to water supply, wastewater disposal, and solid waste disposal would remain less than significant under Alternative 2, similar to the proposed project. However, the reduction of solar facilities and solar energy generation under Alternative 2 would require a greater reliance on the existing power grid compared to the proposed project and thus could require more energy infrastructure than the proposed project.

RELATIONSHIP TO PROJECT OBJECTIVES

Some of the project objectives would be met under Alternative 2, but to a lesser extent. Provision of a charging facility for electric mobility and freight in the Sacramento area that is accessible and convenient to major freight and transportation corridors would occur, but the amount of electricity generated onsite would be less, and the project would be reliant upon supplemental electric power from SMUD using power generated elsewhere. Consequently, the ability to assist SMUD in achieving its goal to reach zero

carbon emissions in its power supply by 2030 and meet its obligations under State energy storage targets and the CPUC energy storage program would be reduced under Alternative 2. In addition, the direct contribution to SB 100 and the RPS goal of increasing the percentage of electricity procured from renewable sources to 100 percent by 2045 would also be reduced under Alternative 2.

Most importantly, the project under Alternative 2 would not meet the performance metrics established in the CTC grant. The proposed project qualified for the grant based on it being a net zero-emissions facility, with all the associated public benefits that would be derived from such a facility. A significant factor in the project's selection were the specific benefits provided by the project's location. Specifically, it was determined that the project site is of sufficient size to accommodate the charging stations, onsite amenities, and administrative functions as well as a solar field of the size needed to provide for a net-zero facility. It was determined that the solar component of the proposed project is essential to making the project a net-zero-emission operation.

The project would not be feasible without the CTC grant as all-electric cargo trucks are a developing market, and provision of the necessary infrastructure is in the beginning stages. The CTC grant funding is critical to offset the significant infrastructure costs associated with the project's development during this period of transition. It is also likely that the project's operation would not be economically viable under Alternative 2 since the facility would be reliant upon purchased power from a third party.

Moreover, development of a substantially smaller project raises questions related to feasibility. The proposed project is faced with several constraints that make a substantially smaller project problematic. These constraints relate to the economic viability of such an alternative, particularly as related to the conditions placed on the project's development by the terms of the CTC TCEP grant, as described previously.

These constraints relate to the probable economic nonviability of a reduced footprint project. The project is being developed with the intent of realizing specific public benefits related to criteria emissions reductions, GHG emissions reductions, and the efficient and safe transport of persons and goods. The longer-term economic viability of the project is largely made possible by its self-sustaining nature which would generate enough electric power on site to meet the charging and operational demands of the project and to make it not reliant upon the purchase of power generated elsewhere and sold by SMUD. The project's solar component at the size proposed is required to make the project a self-sustaining operation. A reduction in the development footprint and the resultant decrease in solar power generation would eliminate that possibility and could make the project economically infeasible.

In summary, Alternative 2 would meet some of the basic objectives of the project, but to a substantially lesser extent than the proposed project. In addition, Alternative 2 may be infeasible for the factors described above.

OVERALL COMPARISON OF ALTERNATIVES

The analysis of the alternatives is summarized and compared in two tables:

Table ALT-1 provides a summary of impact levels within all environmental topic areas. With regard to Alternative 1, the No Project Alternative, as discussed in the analysis of Alternative 1 in this chapter, none of the specific impacts of the proposed project would occur under this alternative, as the proposed project would not be implemented.

However, as discussed in the analysis of Alternative 1, future development of commercial uses on the project site as identified in the 2022 Airport Master Plan Update would likely result in a greater density and intensity of development of the site when compared to the proposed project. Therefore, the impacts of the proposed project related to several environmental resource categories may only be deferred to a later date rather than eliminated by Alternative 1 and could potentially be of a greater magnitude. Accordingly, the comparative impacts for the No Project Alternative summarized in Table ALT-1 reflect impacts that could be expected to occur with future development of commercial uses on the project site as identified in the 2022 Airport Master Plan Update as discussed in this chapter.

Table ALT-1: Alternative Impact Summary and Comparison

Impact	Alternative 1: No Project	Alternative 2: Reduced Development Footprint
Aesthetics	Less than Significant ↑	Less than Significant ↓
Agricultural Resources	Significant and Unavoidable ↑	Less than Significant ↓
Air Quality	Less than Significant ↑	Less than Significant ↑
Biological Resources	Less than Significant ↑	Less than Significant ↓
Climate Change	Less than Significant ↑	Less than Significant ↑
Cultural Resources	Less than Significant ↑	Less than Significant ↓
Energy	Less than Significant ↑	Less than Significant ↑
Hazards and Hazardous Materials	Less than Significant ↑	Less than Significant ↓
Hydrology and Water Quality	Less than Significant ↑	Less than Significant ↓
Land Use and Planning	Less than Significant ↑/↓	Less than Significant ↑/↓
Noise	Less than Significant ↑	Less than Significant ↓
Transportation	Less than Significant ↑	Less than Significant ↓
Tribal Cultural Resources	Less than Significant ↑	Less than Significant ↓
Utilities and Service Systems	Less than Significant ↑	Less than Significant ↓
NOTES: ↓ - The impact is less than the proposed project. ↑ - The impact is greater than the proposed project. ↑/↓ - The impact is about the same as the proposed project.		

Both alternatives would either reduce or negate the project's benefits related to reductions in air pollutants and greenhouse gas emissions, as well as the proposed project's beneficial energy effects related to its net-zero use of energy. Under Alternative 1 those benefits would be eliminated entirely, and under Alternative 2 those benefits would be reduced by a substantial amount, with a resultant increase in overall effects to air quality, greenhouse gas emissions, and energy use relative to the proposed project.

Table ALT-2 summarizes the ability of each alternative to meet the project sponsor's objectives for the proposed project. The tables provide a ready means for the reader to review and compare the alternatives with each other.

Table ALT-2: Ability of Alternatives to Satisfy Project Objectives

Project Objectives	Alternative 1: No Project	Alternative 2: Reduced Development Footprint
Provide a charging facility for electric mobility and freight in the Sacramento area that is accessible and convenient to major freight and transportation corridors and meets the objectives and evaluation criteria of the California Transportation Commission's Trade Corridor Enhancement Program and supports the goals of the National Highway Freight Program, the California Freight Mobility Program, and the California Sustainable Freight Action Plan.	Does not meet objective	Partially meets objective ↓
Provide green energy onsite to support a large part of the need for EV charging.	Does not meet objective	Partially meets objective ↓
Reduce the freight emissions in the Sacramento region.	Does not meet objective	Partially meets objective ↓
Contribute to the economic development of the region.	Does not meet objective	Partially meets objective ↓
Create equitable access to zero-emission technology for small carriers and independent owner operators.	Does not meet objective	Partially meets objective ↓
NOTE: ↑/↓ - The alternative is more/less aligned with the objective.		

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Based on the evaluation described in this chapter, Alternative 2, Reduced Development Footprint, would be the Environmentally Superior Alternative for the purpose of this analysis. As no more than 50 acres of farmland of local importance would be developed and converted under this alternative, the proposed project's significant and unavoidable impact related to conversion of 110 acres of important farmland to nonagricultural uses would not occur under Alternative 2. In addition, several of the proposed project's less-

than-significant or less-than-significant (with mitigation) impacts would be lessened under the Reduced Development Footprint Alternative, including less-than-significant or less-than-significant (with mitigation) impacts related to aesthetics, biological resources, cultural and tribal cultural resources, hazards and hazardous materials, construction-related air quality impacts, hydrology and water quality, and noise. However, some effects would be worsened under Alternative 2, such as effects related to GHG emissions and energy use. This is because the beneficial reductions in GHG emissions and energy consumption of the proposed project would not be realized to the same extent as the proposed project due to the decrease in solar power generation under Alternative 2.

In addition, the Reduced Development Footprint Alternative is faced with several constraints that make such an alternative problematic to implement and potentially infeasible. These constraints relate to the economic challenges associated with a reduced footprint project, particularly as related to the conditions placed on the project's development by the terms of the CTC grant. The project would be developed with the intent of realizing specific public benefits related to criteria emissions reductions, GHG emissions reductions, net-zero energy use, and the efficient and safe transport of persons and goods. The longer-term economic viability of the proposed project is largely made possible by its self-sustaining nature which would generate enough electric power on site to meet the charging and operational demands of the project and to make it not reliant upon the purchase of power generated elsewhere and sold by a third-party purveyor. The project's solar component at the size proposed is required to make the project a net-zero-emissions operation. A reduction in the development footprint and the resultant decrease in solar power generation would eliminate that possibility and render the project potentially infeasible.

4 AESTHETICS

INTRODUCTION

This chapter evaluates the effects of the proposed project on aesthetics, focusing on changes to the 2022 Airport SEIR that may result in new or more severe impacts, and describes any mitigation measures needed to address any such impacts.

FINDINGS OF THE AIRPORT MASTER PLAN UPDATE SEIR

The 2022 Airport SEIR did not include a chapter discussing aesthetics but identified that impacts related to aesthetics from implementation of the 2022 Master Plan Update would be less than significant (see pages 2 and 13-3 of the 2022 Airport SEIR).

NOTICE OF PREPARATION COMMENTS

The Notice of Preparation (NOP) for this Supplement to the 2022 Airport SEIR was circulated on August 17, 2023. One comment related to aesthetics was received. The Sacramento Area Council of Governments, acting in its role as the Airport Land Use Commission for Sacramento County, recommended that a detailed glare analysis be conducted for the proposed project. Since the project site is located within the boundary of the Sacramento International Airport (SMF), similar requirements are in place from the Federal Aviation Administration (FAA). The results of that analysis are presented later in this chapter.

INFORMATION SOURCES

The information and analysis included in this chapter was developed based on a reconnaissance photographic survey of the project site and vicinity, the description of the proposed project and its physical components as discussed in Chapter 2 of this document, and a review of the 2022 Airport SEIR, the Sacramento County 2030 General Plan, the Sacramento County Zoning Code, the Sacramento International Airport Land Use Compatibility Plan, and the solar glare analysis conducted for the proposed project (ForgeSolar, 2023).

ENVIRONMENTAL SETTING

VISUAL RESOURCE EVALUATION CONCEPTS AND TERMINOLOGY

Both natural and created features in a landscape contribute to its visual character. Landscape characteristics that influence the visual character include geologic, hydrologic, botanical, wildlife, recreation, and urban features. The basic elements that comprise the visual character of landscape features are form, line, color, and texture. The appearance of the landscape is described in terms of the dominance of each of these elements.

Several sets of criteria have been developed for defining and evaluating visual quality. The criteria developed by the Federal Highway Administration (FHWA) (FHWA, 1988) and the U.S. Forest Service (USFS) (USFS, 1995), which are used in this analysis, include the concepts of vividness, intactness, and unity. According to these criteria, none of these is itself equivalent to visual quality; all three must be considered high to indicate high quality visual resources. These terms are defined as follows:

- “Vividness” is the visual power or memorability of landscape components as they combine in striking and distinctive visual patterns.
- “Intactness” is the visual integrity of the natural and human-built landscape and its freedom from encroaching elements.
- “Unity” is the visual coherence and compositional harmony of the landscape considered as a whole.

Viewer sensitivity, also considered in relation to visual quality, depends on the number and type of viewers and the frequency and duration of views. Visual sensitivity is also affected by viewer activity, awareness, and expectations in combination with the number of viewers and the duration of the view. The viewer’s distance from landscape elements plays an important role in the determination of an area’s visual quality. Landscape elements are considered higher or lower in visual importance based on their proximity to the viewer. Generally, the closer a resource is to the viewer, the more dominant, and therefore visually important, it is to the viewer.

EXISTING VISUAL CONDITIONS

VISUAL CHARACTER OF THE REGION

Sacramento County lies near the center of California’s Central Valley, at the southern end of the Sacramento Valley. Views within the valley region are generally characterized by broad sweeping panoramas of flat agricultural lands and open space dotted with trees, divided by numerous rivers and creeks, with scattered towns and cities. To the east, the Sierra Nevada and their foothills form a visual background, and the Coast Range provides a visual backdrop on the western horizon.

VISUAL CHARACTER OF THE PROJECT SITE AND VICINITY

The project site is located in the northwest portion of Sacramento County, approximately 7.5 miles from downtown Sacramento. Specifically, the project site is located south of Interstate 5 (I-5) immediately south of SMF. The project site is bounded by Bayou Way and I-5 to the north, fallow farmland and two water tanks that are a part of the airport’s water system lie to the east adjacent to Power Line Road, the West Drainage Canal and farmland lie to the south, and fallow farmland lies to the west.

The area immediately surrounding the project site provides views of airport facilities to the north across I-5 and farmland that is both in production and out of production to the east, south, and west. Furthermore, Metro Air Park, with views of large-scale industrial, manufacturing, distribution, and high-tech commercial buildings, is located approximately a quarter mile to the northeast. Low-rise residential buildings and

neighborhoods within the City of Sacramento limits are visible about 1.6 miles to the east, and the tree-lined Sacramento River can be seen approximately 1.5 miles to the west/southwest.

The project site is flat and is recognizable as land that was previously under agricultural production. The site is currently fallow and is visible as grassland from all directions. **Plate AE-1** shows the locations of photographic views of the project site area from publicly accessible locations. The photographic views are provided on **Plate AE-2**. As shown on Plate AE-2, grassland on the project site fills the viewshed in the foreground, middle ground, and background. Trees and vegetation along Garden Highway and the Sacramento River to the south are visible in the distant background. Viewer sensitivity from publicly accessible locations is low. Bayou Way and Power Line Road are lightly traveled, and there are no publicly accessible recreational uses that provide views of the project site. Largely unobstructed views of the project site are available from vehicles traveling northbound and southbound on I-5 in the vicinity of the project site. Because motorists on I-5 travel at speeds up to 65 miles per hour, they do not have as high a degree of sensitivity to visual character and quality due to the relatively short duration of their views. The viewsheds from publicly accessible locations exhibit a low degree of vividness and unity, and a moderate degree of intactness. The visual quality of the project site is therefore considered low and is generally indistinct from similar areas in the vicinity.

LIGHT AND GLARE

Nighttime lighting and glare can create issues for motorists when driving and for aircraft pilots departing and approaching the airport. In addition, nighttime lighting can create “skyglow,” which results in an artificially bright nighttime sky from man-made lighting, which obscures views of the night sky. Daytime glare can result in hazards for nearby motorists and for aircraft pilots following low-level flight paths.

The project site is undeveloped grassland with no existing sources of lighting or glare. Much of the area to the south, east, and west of the project site consists of farm fields that are devoid of nighttime lighting and are dark at night. Principal sources of nighttime lighting and illumination in the vicinity of the project site include SMF and Metro Air Park to the north, headlights from vehicles traveling on nearby I-5, and residential and other urban uses within the City of Sacramento to the east.



SOURCE: ESA, 2023; ESRI Imagery

WattEV Innovative Freight Terminal (SWIFT) Project

Plate AE-1
Key Observation Points (KOPs)



Photo Viewpoint KOP 1. Looking south from Bayou Way. Grassland on the project site fills the viewshed in the foreground, middle ground, and background. A large block of hay on the project site is visible in the middle ground (left). Trees and vegetation along Garden Highway and the Sacramento River to the south are visible in the distant background.



Photo Viewpoint KOP 2. Looking west from Power Line Road. Grassland on the project site fills the viewshed in the foreground, middle ground, and background. A large block of hay on the project site is visible in the middle ground. Trees and vegetation along Garden Highway and the Sacramento River to the west are visible in the distant background.

D:\2022\05\55_03 - wattEV innovative freight terminal (swift) project\project_eir\05_Graphics-GIS-Modeling-USE_AZURE\Illustrator

SOURCE: ESA, 2023

WattEV Innovative Freight Terminal (SWIFT) Project

Plate AE-2
KOPs 1 and 2



REGULATORY SETTING

FEDERAL

FEDERAL AVIATION REGULATIONS, PART 77

Federal Aviation Regulations (FAR) (U.S. Code Title 14) Part 77, “Safe, Efficient Use, and Preservation of the Navigable Airspace” has been adopted as a means of monitoring and protecting the airspace required for safe operation of aircraft and airports. Part 77 recognizes that certain safety hazards to aircraft and airport operations may occur where a land use would, among other criteria, reflect light or generate electronic interference.

Part 77 establishes the following:

- the requirements to provide notice to the Federal Aviation Administration (FAA) of certain proposed construction activities, or the alteration of existing structures;
- the standards used to determine obstructions to air navigation, and navigational and communication facilities; and,
- the process for aeronautical studies of obstructions to air navigation or navigational facilities to determine the effect on the safe and efficient use of navigable airspace, air navigation facilities, or equipment.

STATE

PUBLIC USE AIRPORTS AND AIRSPACE REGULATION

The creation of airport land use commissions (ALUCs) and the preparation of airport land use compatibility plans are requirements of the California State Aeronautics Act (Public Utilities Code [PUC] Section 21670 et seq.). Enacted in 1967, this law is implemented through individual ALUCs, which are required in every county with a public use airport or with an airport served by a scheduled airline. Under the provisions of the law, each ALUC has certain responsibilities conferred upon it and specific duties to perform. Among these are preparing an airport land use plan for each airport within its jurisdiction (PUC Sections 21674[c] and 21675[a]). State law gives the Caltrans Division of Aeronautics and local agencies the authority to enforce the FAA standards at public use airports.

LOCAL

SACRAMENTO INTERNATIONAL AIRPORT LAND USE COMPATIBILITY PLAN

The Sacramento International Airport Land Use Compatibility Plan (ALUCP) was first adopted in October 1984 and last amended in 2013. The ALUCP contains land use compatibility guidelines for height, noise, and safety. The ALUCP was prepared by the Sacramento Area Council of Governments (SACOG) ALUC. The ALUC is responsible for adopting basic airport land use policies, adopting ALUCPs for area airports, incorporating land use compatibility guidelines established in the ALUCPs into the

general plans of the jurisdictions that have land use authority in areas subject to the ALUCPs, and reviewing development proposals and land use plans for areas around the airports. The ALUC has adopted FAR Part 77, “Safe, Efficient Use, and Preservation of the Navigable Airspace” (see the description of Federal airspace safety regulations, above) for protection of persons in the air and on the ground related to airport safety.

SACRAMENTO COUNTY GENERAL PLAN

The following policies from the Land Use and Public Facilities elements of the Sacramento County 2030 General Plan are applicable to the proposed project with respect to aesthetic impacts.

LAND USE

LU-31 Strive to achieve a natural nighttime environment and an uncompromised public view of the night sky by reducing light pollution.

PUBLIC FACILITIES

PF-78 Large multi-megawatt solar and other renewable energy facilities should be sited at locations that will minimize impacts. The following guidelines should be considered, though it [sic] recognized that each project is different and must be analyzed individually, and that other factors may affect the suitability of a site. Locational criteria for wind turbines should be determined on a case-by-case basis and referred to the Sacramento County Airport System and the FAA for review and comment.

- Desirable sites are those which will minimize impacts to county resources and will feed into the electrical grid efficiently, including:
 - Lands with existing appropriate land use designations, e.g., industrial.
 - Brownfield or other disturbed properties (e.g., former mining areas, mine tailings) or land that has been developed previously and has lost its natural values as open space, habitat or agricultural land.
 - Sites close to existing facilities necessary for connection to the electrical grid to minimize the need for additional facilities and their impacts, and to improve system efficiency.
- Other sites may be used for siting renewable energy facilities after consideration of important natural and historic values of the land, including:
 - Farmlands. Site on farmlands of the lowest quality, e.g., land classified by the DOC as “other land” or “grazing land”, then consider farmlands of local, unique, or statewide importance. Avoid high-quality farmlands, especially land classified by the DOC as prime and lands under active Williamson Act contracts.
 - Habitat and Other Open Space Lands. Site on lands with the lowest habitat and open space values, and consider how a site will affect conservation planning, e.g., the Conservation Strategy in the South

Sacramento HCP. Avoid areas containing vernal pool complexes and associated uplands.

- Scenic Values. Site in areas of lowest scenic values and avoid visually prominent locations e.g., ridges, designated scenic corridors and designated historic sites.
- Cultural Resources. Site in areas that are known to have limited potential for containing cultural resources. Otherwise, avoid sites with known cultural resources.

PF-80 Locate solar facilities, and design and orient solar panels in a manner that addresses potential problems of glare consistent with optimum energy and capacity production.

SACRAMENTO COUNTY ZONING CODE

Sacramento County Zoning Code Section 6.3, Design and Site Plan Review, sets forth the provisions of the County's Design Review Program, in which discretionary and non-discretionary projects are reviewed to determine a project's compliance with the Countywide Design Guidelines. Most commercial, industrial, residential, mixed-use, institutional, or public works projects, regardless of zoning district, requiring discretionary entitlement(s) or approval(s) are subject to the Design Review Program, including solar energy facilities such as the proposed project.

IMPACTS AND ANALYSIS

The analysis in this Supplement to the 2022 Airport Master Plan Update SEIR describes impacts identified in the 2022 Airport SEIR and describes how the impacts of the proposed project would differ, as applicable.

SIGNIFICANCE CRITERIA

For purposes of this Supplement to the 2022 Airport SEIR and consistent with the criteria presented in the 2022 Airport SEIR, which is based on Appendix G of the CEQA Guidelines, impacts related to aesthetics may be considered significant if implementation of the proposed project would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality; or

- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

ISSUES NOT DISCUSSED IN IMPACTS

Substantial adverse effect on a scenic vista – A scenic vista is a public viewpoint that provides expansive views of highly valued scenery or landscapes. Sacramento County has not designated any scenic vistas at the project site or the surrounding lands. The project site consists of flat grassland, which is brown for most of the year and does not contain any unique geologic features, waterfalls, rock outcroppings, gorges, mountains, large stands of native trees, or other features that could be regarded as outstanding scenic features. Views of agricultural land at the project site from the surrounding area are typical of agricultural land throughout Sacramento County. The project site does not contain or include any scenic vistas. Thus, **no impact** would occur, and this issue is not evaluated further in this Supplement to the 2022 Airport SEIR.

Scenic resources within a designated scenic highway – There are no designated or eligible state scenic highways adjacent to or in the vicinity of the project site. The nearest designated state scenic highway is State Route 160, approximately 14 miles to the south, and the nearest eligible state scenic highway is State Route 128, approximately 22 miles to the southwest (Caltrans, 2023). The project site is not visible from either of these roadways. Therefore, development of the project site would not affect scenic resources within a state scenic highway. Thus, no impact would occur, and this issue is not evaluated further in this Supplement to the 2022 Airport SEIR.

METHODOLOGY AND ASSUMPTIONS

The analysis included in this chapter was developed based on a reconnaissance photographic survey of the project site and vicinity, the description of the proposed project and its physical components, and a review of the 2022 Airport SEIR, the Sacramento County 2030 General Plan, the Sacramento County Zoning Code, the Sacramento International Airport Land Use Compatibility Plan, and the solar glare analysis conducted for the proposed project.

IMPACT: SUBSTANTIALLY DEGRADE THE EXISTING VISUAL CHARACTER OR QUALITY OF THE PROJECT SITE

Chapter 14, *Aesthetics*, of the 2007 Airport Master Plan EIR (pages 14-1 to 14-9) determined that parking facilities and commercial development south of I-5 would result in the greatest visual change to the regional landscape with implementation of the Airport Master Plan. The 2007 Airport Master Plan EIR determined that this development would replace existing agricultural fields adjacent to I-5, changing the character of foreground and middle-ground views of the area around the I-5/Airport Boulevard interchange from rural to urban. The analysis determined that the introduction of new facilities south of I-5 would be a departure from the present view of open fields and newly constructed water tanks, but the overall development in this area of the County has been relatively rapid and viewers may be more accustomed to the changing

landscape than they would be in a more rural part of the County. The 2007 Airport Master Plan EIR determined that aesthetic impacts associated with implementation of the Airport Master Plan may be perceived differently by various affected individuals but are not considered significantly adverse due to compliance with County visual standards, proposed architectural design concepts, the low visibility of project facilities to the general public, and the visual continuity between existing airport facilities and new facilities proposed by the Airport Master Plan. The 2007 Airport Master Plan EIR concluded that impacts related to aesthetics from implementation of the 2007 Airport Master Plan would be less than significant (Sacramento County, 2007).

The 2022 Airport SEIR did not include a chapter discussing aesthetics but, like the 2007 Airport Master Plan EIR, identified that impacts related to aesthetics from implementation of the 2022 Master Plan Update would be less than significant. In accordance with the required project-level evaluation described in Chapter 1, *Introduction*, of this Supplement to the 2022 Airport SEIR, the following analysis addresses proposed project impacts related to degradation of visual character or quality.

As discussed above in the *Environmental Setting*, the project site is flat and is recognizable as land that was previously under agricultural production. The site is currently fallow and is visible as grassland from all directions. Plate AE-1 shows the locations of photographic views of the project site area from publicly accessible locations. The photographic views are provided on Plate AE-2. As shown on Plate AE-2, grassland on the project site fills the viewshed in the foreground, middle ground, and background. Trees and vegetation along Garden Highway and the Sacramento River to the south are visible in the distant background. Viewer sensitivity from publicly accessible locations is low. Bayou Way and Power Line Road are lightly traveled, and there are no residential or recreational uses in the vicinity of the project site. Views of the project site from vehicles traveling on I-5 are largely obscured by concrete barriers, vegetation, and elevated landforms. The viewsheds from publicly accessible locations exhibit a low degree of vividness and unity, and a moderate degree of intactness. The visual quality of the project site is therefore considered low.

As described in Chapter 2, *Project Description*, buildout of the proposed project would convert 110 acres of undeveloped grassland on the project site to a publicly accessible Electric Vehicle (EV) charging facility with related structures. The charging areas and associated support facilities would occupy approximately 13.5 acres of land on the northern portion of the project site while the remaining 96.5 acres of the site would be occupied by solar fields and a 200-foot wide buffer area along the western and southern borders of the project site (see Plate PD-3).

The proposed project would include a variety of offsite improvements, including paving and widening at the intersections of Bayou Way and Airport Boulevard and Bayou Way and Power Line Road to facilitate truck turning movements; widening Bayou Way between Airport Boulevard and Power Line Road from two to three lanes (one-lane each direction, with a two-way left turn lane); the undergrounding of an existing 12 kilovolt (kV) overhead powerline; curb, gutter, and sidewalk improvements along

Bayou Way; and an extension of a 69 kV electrical power distribution line between Power Line Road and the proposed substation on the project site.

A conceptual rendering of the overall project site is shown on Plate PD-4, with conceptual renderings of the truck charging areas shown on Plates PD-5 and PD-6, and a conceptual rendering of the public plaza shown on Plate PD-7. Building elevations for the proposed buildings are shown on Plates PD-8 through PD-12.

At full buildout, views of the project site from Bayou Way, Power Line Road, and from vehicles traveling on I-5, would change from open grassland to paved parking areas, charging pads, landscaping, and concrete and glass buildings up to two stories within the public plaza on the northern portion of the project site, and a large expanse of pole-mounted dark grey solar panels at maximum height of approximately 10 feet above grade on the southern portion of the project site. Because motorists on I-5 travel at speeds up to 65 miles per hour, they would experience changes to the visual character and quality for a relatively short duration. Nonetheless, given the existing undeveloped condition of the project site, the visual change that would occur with implementation of the proposed project would be substantial, regardless of the low visual quality of the project site.

However, the proposed project would be subject to County development standards adopted and implemented to ensure high-quality design and visual compatibility. Specifically, the proposed project would be required to undergo the County's Design Review process as set forth in County Zoning Code Section 6.3. The Design Review process is intended to, among other objectives, promote high-quality design and visual compatibility. Because the County's Design Review process would result in a design that substantially complies with the Countywide Design Guidelines, the proposed project would not conflict with adopted plans or policies related to visual quality.

The low visual quality of the project site combined with the required implementation of County development standards and design guidelines to ensure high-quality design and visual cohesion would ensure that, like the conclusion reached in the 2007 Airport Master Plan EIR and the 2022 Airport SEIR, this impact would be **less than significant**.

MITIGATION MEASURES

None required.

IMPACT: CREATE SUBSTANTIAL NEW SOURCES OF LIGHT AND GLARE

Chapter 14, *Aesthetics*, of the 2007 Airport Master Plan EIR determined that new facilities, including parking facilities and commercial development south of I-5, proposed by the Airport Master Plan would increase lighting at SMF. The analysis identified that exterior lighting would have directional shielding to reduce glare to the public. The 2007 Airport Master Plan EIR concluded that compliance with County visual standards, the proposed architectural design concepts, the low visibility of project facilities to the general public, and the visual continuity between existing airport facilities and new

facilities proposed by the Airport Master Plan would ensure that impacts related to aesthetics from implementation of the 2007 Airport Master Plan would be less than significant (Sacramento County, 2007).

The 2022 Airport SEIR did not include an aesthetics chapter but, like the 2007 Airport Master Plan EIR, identified that impacts related to aesthetics from implementation of the 2022 Master Plan Update would be less than significant. In accordance with the required project-level evaluation described in Chapter 1, *Introduction*, of this EIR, the following analysis addresses proposed project impacts related to creation of substantial new sources of light and glare.

As previously discussed, the project site is undeveloped grassland with no existing sources of lighting or glare. Much of the area to the south, east, and west of the project site consists of farm fields that are devoid of nighttime lighting and are dark at night. Principal sources of nighttime lighting and illumination in the vicinity of the project site include SMF and Metro Air Park to the north, headlights from vehicles traveling on I-5, and residential and other urban uses within the City of Sacramento to the east.

GLARE ANALYSIS

Because the proposed project is located on SMF property, ForgeSolar was retained to prepare a Glare Analysis Report for the proposed project (ForgeSolar, 2023), which is included as Appendix AE-1. The glare analysis was conducted in accordance with the FAA's policy for Review of Solar Energy System Projects on Federally Obligated Airports (FAA, 2021). By inputting the proposed solar panel locations and characteristics, as well as the locations and elevations of existing receptors (e.g., the SMF air traffic control tower and flight paths which can receive and be impacted by glare), ForgeSolar modeled the potential glare that could be caused by the proposed project's solar arrays. The modeling results demonstrated that the proposed solar facilities would not result in hazardous glare at any of the modeled receptors. The glare analysis is currently undergoing FAA review, and the FAA's concurrence with the analysis would necessarily be a condition of project construction and operation, per FAA's regulatory oversight of aeronautical uses on SMF. In addition, as required in Section 4.4.5 of the Countywide Design Guidelines, lighting fixtures on the project site would be designed to minimize glare.

NIGHTTIME LIGHTING

Since the charging facilities and public amenities on the site would be operational and available for public use 24 hours per day, operational lighting would be provided to meet security, safety, and general operational requirements. The site would generally appear similar to a typical travel center or truck stop, and the lighting associated with the project would also be similar. Security lighting would be provided in the non-public areas of the site (i.e., the solar facilities). As required in Section 4.4.5 of the Countywide Design Guidelines, lighting on the site would be designed to provide the minimum illumination needed to achieve safety and security objectives and would be shielded and oriented to focus illumination on the desired areas, minimizing light spillover.

IMPACT CONCLUSION

Because the proposed solar arrays at the project site would not result in hazardous glare for SMF operations, the proposed project would not result in a substantial new source of daytime glare that would result in a hazard for aircraft pilots or people on the ground. Additionally, operation of the proposed solar facilities would result in only minor new sources of nighttime security lighting, which would not result in substantial nighttime glare or skyglow effects. The public areas of the site (i.e., the charging areas and travel center) would be lit in accordance with County requirements formulated to minimize adverse lighting effects. Therefore, like the conclusion reached in the 2007 Airport Master Plan EIR and the 2022 Airport SEIR, the proposed project would not create substantial new sources of light and glare, and this impact would be **less than significant**.

MITIGATION MEASURES

None required.

5 AGRICULTURAL RESOURCES

INTRODUCTION

This chapter evaluates the effects of the proposed project related to agricultural resources, focusing on changes to the 2022 Airport SEIR that may result in new or more severe impacts, and describes any mitigation measures needed to address any such impacts.

FINDINGS OF THE AIRPORT MASTER PLAN UPDATE SEIR

Impacts of the 2022 Airport Master Plan Update related to agricultural resources were analyzed in Chapter 8, *Land Use*, of the 2022 Airport Draft SEIR. The 2022 Airport SEIR determined that implementation of the 2022 Airport Master Plan Update would have the following impacts with respect to agricultural resources:

- Implementation of the Airport Master Plan Update would convert Farmland of Local Importance to non-agricultural uses (*Significant and Unavoidable Impact*)
- Implementation of the Airport Master Plan Update would not conflict with existing zoning for agricultural use or a Williamson Act contract (*Less than Significant Impact*)

NOTICE OF PREPARATION COMMENTS

The Notice of Preparation (NOP) for the Supplement to the 2022 Airport SEIR was circulated on August 17, 2023. No comments were received related to agricultural resources.

INFORMATION SOURCES

The information and analysis included in this chapter was developed based on a review of the 2022 Airport SEIR, relevant policies of the Sacramento County 2030 General Plan, the Natural Resources Conservation Service's Web Soil Survey, relevant data from the California Department of Conservation, and relevant data from Sacramento County.

ENVIRONMENTAL SETTING

IMPORTANT FARMLAND

Sacramento County has undergone significant urbanization in recent decades. Between 1988 and 2020, Sacramento County lost 39,731 net acres of Prime Farmland and 35,997 net acres of Farmland of Statewide Importance and gained 3,560 net acres of Unique Farmland and 24,454 net acres of Farmland of Local Importance (DOC, 2020). The resulting total acreage of Important Farmland in 2020 was approximately 200,426 net acres, which represents a 19 percent decrease from the total acreage in 1988.

According to the California Important Farmland Finder, published by the California Department of Conservation (DOC, 2020), the entirety of the project site is designated as farmland of local importance (see *Regulatory Setting* discussion below for a detailed description of this category).

EXISTING AND PLANNED USES

The project site consists of grassland and is fallow or not currently under agricultural production. However, over the last 25 years, the project site does appear to have been cultivated with row crops at various times. However, current FAA requirements restrict land uses that could attract wildlife (specifically, birds) that could pose a hazard to aviation. Many agricultural crops create such an attractant, and therefore the only potential agricultural use allowed on the site is the harvesting of grass by local farmers to keep the grass height limited to minimize wildlife attractants.

The current General Plan land use designation for the project site is Public/Quasi-Public Public. This designation identifies public and quasi-public areas under County jurisdiction.

The project site is currently zoned Agricultural 20 (AG-20) and Agricultural 80 (AG-80). These agricultural zoning designations are intended to eliminate the encroachment of land uses incompatible with the long-term agricultural use of the land; discourage the premature and unnecessary conversion of agricultural land to urban uses; and to assure the preservation and sustainability of agricultural lands that have a definite value as open space and for the production of agricultural products (Sacramento County, 2015). However, the 2022 Airport Master Plan Update identified the site for future commercial development. As discussed in Chapter 1, *Introduction*, and under *Methodology and Assumptions* below, due to the extended 20-year planning horizon, Master Plan projects or facilities in the area south of I-5 within the Airport Master Plan area, which includes the project site, were determined to be beyond the scope of the 2022 Airport SEIR.

WILLIAMSON ACT PARCELS

As of 2023, there are approximately 1,933 total parcels under Williamson Act contracts in Sacramento County. None of the parcels on the project site are under a Williamson Act contract (Sacramento County, 2023).

AGRICULTURAL SOILS

NATURAL RESOURCES CONSERVATION SOIL SURVEY

The U.S. Department of Agriculture provides the Natural Resources Conservation Service (NRCS) Soil Survey which contains a wide range of information on soils in an area. Soils are classified by type and how they can be used for agricultural uses.

STORIE INDEX

The Storie Index is a semi-quantitative method of rating soils used mainly for irrigated agriculture based on crop productivity data collected from major California soils in the 1920s and 1930s. The Storie Index assesses the productivity of a soil from the following

characteristics: the degree of soil profile development, surface texture, slope, and other conditions. A score ranging from 1 to 100 percent is determined for each factor, and the scores are then multiplied together to generate an index rating. Ratings range from Grade 1: Excellent (81-100) to Grade 6: Nonagricultural (10 or less). About half of the soil on the project site is rated Good (61 to 80 percent), and about half of the soil on the project site is rated Poor (21 to 40 percent).

LAND CAPABILITY

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. In the capability system, soils are generally grouped at three levels: capability class, subclass, and unit. Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use, with Class 1 soils having few limitations that restrict their use to Class 8 soils and miscellaneous areas having limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or aesthetic purposes. The entire project site consists of Class 3 soils under the land capability system.

REGULATORY SETTING

FEDERAL

There are no federal plans, policies, regulations, or laws related to agriculture and forestry resources that apply to the proposed project.

STATE

CALIFORNIA FARMLAND MAPPING AND MONITORING PROGRAM

The Farmland Mapping and Monitoring Program (FMMP) was established by the State of California in 1982 to continue the important farmland mapping efforts begun in 1975 by the U.S. Soil Conservation Service (now called the Natural Resources Conservation Service, under the U.S. Department of Agriculture). The intent was to produce agricultural resource maps based on soil quality and land use across the nation. The Department of Conservation (DOC) sponsors the FMMP and is also responsible for establishing agricultural easements, in accordance with California Public Resources Code (PRC) Sections 10250-10255.

The DOC FMMP maps are updated every two years with the use of aerial photographs, a computer mapping system, public review, and field reconnaissance. The following list provides a comprehensive description of all the categories mapped by the DOC (DOC, 2023):

- **Prime Farmland** — Land that has the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields.

- **Farmland of Statewide Importance** — Land similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture.
- **Unique Farmland** — Land of lesser quality soils used for the production of the state’s leading agricultural cash crops. This land is usually irrigated but may include non-irrigated orchards or vineyards as found in some climatic zones in California.
- **Farmland of Local Importance** — Land that is of importance to the local agricultural economy, as defined by each county’s local advisory committee and adopted by its board of supervisors. The Sacramento County Board of Supervisors has defined Farmland of Local Importance as lands which do not qualify as Prime, Statewide, or Unique designation, but are currently irrigated crops or pasture or non-irrigated crops; lands that would be Prime or Statewide designation and have been improved for irrigation but are now idle; and lands which currently support confined livestock, poultry operations, and aquaculture (DOC, 2018).
- **Grazing Land** — Land with existing vegetation that is suitable for grazing.
- **Urban and Built-Up Lands** — Land that is used for residential, industrial, commercial, institutional, and public utility structures and for other developed purposes.
- **Other Lands** — Land that does not meet the criteria of any of the previously described categories and generally includes low-density rural developments, vegetative and riparian areas not suitable for livestock grazing, confined-animal agriculture facilities, strip mines, borrow pits, and vacant and non-agricultural land surrounded on all sides by urban development.

CALIFORNIA LAND CONSERVATION ACT OF 1965

The Williamson Act, also known as the California Land Conservation Act of 1965, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space uses. When the County enters into a contract with the landowners under the Williamson Act, the landowner agrees to limit the use of the land to agriculture and compatible uses for a period of at least ten years and the County agrees to tax the land at a rate based on the agricultural production of the land, rather than its real estate market value. The County has designated areas as agricultural preserves within which the County will enter into contracts for the preservation of the land in agriculture.

CALIFORNIA PUBLIC RESOURCES CODE

Public Resources Code section 21060.1 defines “agricultural land” as: prime farmland, farmland of statewide importance, or unique farmland, as defined by the United States Department of Agriculture land inventory and monitoring criteria, as modified for California.

LOCAL

SACRAMENTO COUNTY GENERAL PLAN

The following policies from the Agricultural element of the Sacramento County 2030 General Plan are applicable to the proposed project.

AG-5 Projects resulting in the conversion of more than fifty (50) acres of farmland shall be mitigated within Sacramento County, except as specified in the paragraph below, based on a 1:1 ratio, for the loss of the following farmland categories through the specific planning process or individual project entitlement requests to provide in-kind or similar resource value protection (such as easements for agricultural purposes):

- Prime, statewide importance, unique, local importance, and grazing farmlands located outside the USB;
- Prime, statewide importance, unique, and local importance farmlands located inside the USB.

The Board of Supervisors retains the authority to override impacts to Unique, Local, and Grazing farmlands, but not with respect to Prime and Statewide farmlands. However, if that land is also required to provide mitigation pursuant to a Sacramento County endorsed or approved Habitat Conservation Plan (HCP), then the Board of Supervisors may consider the mitigation land provided in accordance with the HCP as meeting the requirements of this section including land outside of Sacramento County.

Note: This policy is not tied to any maps contained in the Agricultural Element; instead, the most current Important Farmland map from the Department of Conservation should be used to calculate mitigation.

IMPACTS AND ANALYSIS

The analysis in this Draft **Final** Supplement to the 2022 Airport SEIR describes impacts identified in the 2022 Airport SEIR and describes how the impacts of the proposed project would differ, as applicable.

SIGNIFICANCE CRITERIA

For purposes of this Draft **Final** Supplement to the 2022 Airport SEIR and consistent with the criteria presented in the 2022 Airport SEIR, which is based on Appendix G of the CEQA Guidelines, impacts on agricultural resources may be considered significant if implementation of the proposed project would:

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

- Conflict with existing zoning for agricultural use or a Williamson Act contract;
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use.

In addition to the CEQA Guidelines criteria for significance of farmland loss, General Plan Policy AG-5 defines a substantial farmland loss as 50 acres. The CEQA Guidelines indicate that that Prime, Statewide Importance, and Unique Farmland loss may be a significant impact, but the General Plan further includes Farmland of Local Importance and Grazing Land — though in the case of Grazing Land, the threshold specifically applies only to such lands which occur outside of the Urban Services Boundary.

METHODOLOGY AND ASSUMPTIONS

As discussed in Chapter 1, *Introduction*, the 2022 Airport Master Plan Update and the 2022 Airport SEIR considered a development and operational horizon of 20 years (2018 through 2038) with four Planning Activity Levels (PALs), or phases. The area south of I-5 within the Airport Master Plan area, which includes the project site, was included within PAL 4 (with anticipated development within the 2034-2038 time period) of the 2022 Airport Master Plan Update. Due to the extended 20-year planning horizon, Master Plan projects or facilities identified in PAL 4 were determined to be beyond the scope of the 2022 Airport SEIR. As discussed in Chapter 8, *Land Use*, of the 2022 Airport Draft SEIR (page 8-11), the 2022 Airport Master Plan Update identified future commercial development south of I-5 (to include the project area) in PAL 4. The discussion further noted that if PAL 4 becomes ripe for development additional environmental review will be necessary. Accordingly, the proposed project's impacts related to agricultural resources on the project site are evaluated at a project level below.

The evaluation of potential impacts associated with agricultural resources was based on a review of applicable documents, including the 2022 Airport SEIR, the Sacramento County General Plan, and other state regulations as presented above.

IMPACT: CONVERSION OF IMPORTANT FARMLAND TO NONAGRICULTURAL USES

The conversion of important farmland to nonagricultural use due to the implementation of the 2022 Airport Master Plan Update was discussed on pages 8-14 to 8-17 of the 2022 Airport Draft SEIR. The analysis determined that implementation of the 2022 Airport Master Plan Update would convert approximately 135 acres of farmland of local importance north of Elverta Road in PAL 3 to urban uses. The analysis determined that, pursuant to County General Policy AG-5, conversion of over 50 acres of farmland of local importance is considered a significant impact and is required to be mitigated at a 1:1 ratio. However, even with mitigation requiring the preservation of farmland at a 1:1 ratio, the analysis concluded that this impact would remain significant and unavoidable.

As discussed in Chapter 2, *Project Description*, the proposed project includes the construction and operation of a publicly accessible Electric Vehicle (EV) charging facility on the northern portion of the project site (approximately 13.5 acres) and the

construction and operation of a solar array consisting of PV modules on the remainder of the project site to the south (approximately 96.5 acres). The proposed project also would include a variety of offsite improvements, including paving and widening at the intersections of Bayou Way and Airport Boulevard and Bayou Way and Power Line Road to facilitate truck turning movements; widening Bayou Way between Airport Boulevard and Power Line Road from two to three lanes (one-lane each direction, with a two-way left turn lane); the undergrounding of an existing 12 kilovolt (kV) overhead powerline; curb, gutter, and sidewalk improvements along Bayou Way; and an extension of a 69 kV electrical power distribution line between Power Line Road and the proposed substation on the project site.

Construction of the charging facility would result in the permanent loss of 13.5 acres of farmland of local importance while the construction of the solar array would result in the permanent loss of 96.5 acres of farmland of local importance, although if advances in clean energy technology in the future make solar technology obsolete, the southern portion of the site could be restored to its original condition. However, for the purpose of this analysis, it is assumed that construction of the proposed project would result in the permanent loss of 110 acres of farmland of local importance.

As discussed above, the County considers the conversion of over 50 acres of farmland of local importance a significant impact. Thus, the impact associated with the loss of 110 acres of farmland of local importance on the project site due to the construction of the proposed project would be potentially significant.

Implementation of Mitigation Measure AG-1, which is similar to the mitigation measure included in the 2022 Airport SEIR to address the conversion of important farmland to nonagricultural use, would require preservation of farmland of local importance at a 1:1 ratio, consistent with Policy AG-5 of the 2030 General Plan. However, even with this mitigation, it must be recognized that farmland is a finite resource. When an area is permanently taken out of agricultural production, there is a net loss of agricultural lands. Other agricultural lands may be preserved through compliance with mitigation, but new agricultural soils will not be created. Therefore, there would be a substantial net-loss of designated farmland land within Sacramento County because of the proposed project, and like the conclusion reached in the 2022 Airport SEIR, this impact would be **significant and unavoidable**.

MITIGATION MEASURES

AG-1 Prior to approval of a grading permit, improvement plans, or building permits (whichever comes first) for the project and its associated conversion of approximately 110 acres of farmland of local importance on the project site, an equal amount of identified airport land of like classification will be set aside via a deed restriction.

IMPACT: CONFLICT WITH EXISTING ZONING FOR AGRICULTURAL USE OR A WILLIAMSON ACT CONTRACT

Conflicts with existing zoning for agricultural use or a Williamson Act contract due to the implementation of the 2022 Airport Master Plan Update were discussed on page 8-17 of the 2022 Airport Draft SEIR. The analysis concluded that implementation of the 2022 Airport Master Plan Update would not conflict with existing zoning for agricultural use or a Williamson Act contract as most of the agricultural land on airport property is owned by the Sacramento County Department of Airports, managed to reduce wildlife attractants, and none of the parcels on airport property are under Williamson Act contract. For these reasons, the 2022 Airport SEIR concluded that impacts associated with potential conflicts with existing agricultural uses or Williamson Act contracts would be less than significant. That same conclusion would apply to the project site.

The project site is currently designated Public/Quasi-Public and zoned AG 20 and AG-80. According to the Zoning Consistency Matrix in the General Plan Land Use Element (Table 8), the Public/Quasi-Public land use designation is consistent with nearly all zoning designations (except Food Processing Combining Zone and Recreation Reserve). Therefore, as the proposed project is located on property that is designated Public/Quasi-Public, its proposed uses are consistent with the underlying AG-20 and AG-80 zoning designations. In addition, none of the parcels on the project site are under a Williamson Act contract. For these reasons, the proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act contract, and like the conclusion reached in the 2022 Airport SEIR, this impact would be **less than significant**.

IMPACT: OTHER CHANGES WHICH COULD RESULT IN CONVERSION OF FARMLAND TO NONAGRICULTURAL USE

The 2022 Airport SEIR did not include a separate impact statement for this specific criterion, but this topic was addressed in the discussion of conversion of farmland to nonagricultural use. As discussed on page 8-17 of the 2022 Airport Draft SEIR, the Sacramento County Department of Airports owns approximately 6,000 acres of land in and around SMF. The discussion in the 2022 Airport SEIR states that agricultural practices on these lands are generally limited to dry land crops that are not wildlife attractants. The discussion states that the County leases the lands to local farmers, so when development occurs, the leasing contracts are not renewed. The discussion states that the conversion of the land to urban uses would not conflict with surrounding agricultural uses, as most of the land is owned by the County and managed to reduce wildlife attractants and is thus unavailable for agricultural production. For these reasons, the 2022 Airport SEIR concluded that impacts associated with potential conflicts with existing agricultural uses would be less than significant. The following analysis addresses whether the proposed project would indirectly result in changes in the physical environment that could result in the conversion of agricultural land.

As previously discussed, the project site consists of grassland located within the southern portion of the Sacramento International Airport Master Plan area and is

designated for commercial development under the Airport's Master Plan. The area immediately surrounding the project site consists of airport facilities to the north across I-5 and farmland to the east, south, and west kept as annual grasslands to reduce the potential for conflicts between aircraft and wildlife, or under cultivation for rice, corn, safflower, and other crops.

With regard to indirect effects related to proposed project construction, all construction staging, equipment storage, and construction areas for the proposed project would be sited within the project site. Construction of the proposed project would result in a temporary increase in construction equipment, worker vehicles, and vendor and haul trucks on project area roadways, including Airport Boulevard, Bayou Way, and Power Line Road. As discussed in Chapter 15, *Transportation and Circulation*, proposed project construction activities would be temporary and would not substantially impact project area roadways or affect existing agricultural operations. Therefore, construction of the proposed project would not indirectly result in conversion of farmland to non-agricultural use.

Operation of the proposed project would occur within the project site. Agricultural operations outside of the project site boundary would not be encroached upon or made less feasible as a result of the proposed project. Regionally, access to the project site would be provided primarily by I-5. Local access to the project site would be from Bayou Way via Airport Boulevard and Power Line Road. While some traffic may access the facility from the south along Power Line via Garden Highway, project operations would not substantially increase vehicular traffic in areas where agricultural equipment uses roads. Therefore, the proposed project would not indirectly result in other changes in the physical environment that could result in the conversion of agricultural land, and like the conclusion reached in the 2022 Airport SEIR, this impact would be **less than significant**.

6 AIR QUALITY

INTRODUCTION

This chapter evaluates the effects of the proposed project on air quality, focusing on changes to the 2022 Airport SEIR that may result in new or more severe impacts, and describes any mitigation measures needed to address any such impacts.

FINDINGS OF THE AIRPORT MASTER PLAN UPDATE SEIR

Impacts of the 2022 Airport Master Plan Update related to air quality were analyzed in Chapter 3, *Air Quality*, of the 2022 Airport Draft SEIR. The 2022 Airport SEIR determined that implementation of the 2022 Airport Master Plan Update would have the following impacts with respect to air quality:

- Implementation of the Airport Master Plan Update would conflict with or obstruct implementation of the applicable air quality plan (*Less than Significant Impact with Mitigation*)
- Implementation of the Airport Master Plan Update would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment (*Less than Significant Impact with Mitigation*)
- Implementation of the Airport Master Plan Update would expose sensitive receptors to substantial pollutant concentrations (*Less than Significant Impact*)
- Implementation of the Airport Master Plan Update would result in other emissions (e.g., odors) adversely affecting a substantial number of people (*Less than Significant Impact*)

NOTICE OF PREPARATION COMMENTS

The Notice of Preparation (NOP) for the Supplement to the 2022 Airport SEIR was circulated on August 17, 2023. The County received comments on the NOP from the Sacramento Metropolitan Air Quality Management District (SMAQMD) related to the analysis of air quality impacts. The NOP comments from SMAQMD include requests for the County to evaluate construction and operational air quality impacts, and to include an Air Quality Mitigation Plan (AQMP) to address operational emissions, consistent with guidance from the SMAQMD. These comments have been addressed in the analyses below.

INFORMATION SOURCES

The information analysis included in this chapter was developed based on a review of the 2022 Airport SEIR, an Air Quality Assessment and Health Risk Assessment, both of which were prepared by Kimley-Horn in 2024 (Appendices AQ-1 and AQ-2) and peer reviewed by ESA and Sacramento County and determined to be accurate and adequate for inclusion in this Supplement to the 2022 Airport SEIR, and relevant data from

Sacramento County. The impacts were assessed consistent with the guidance provided by the SMAQMD's Guide to Air Quality Assessment in Sacramento County (SMAQMD, 2020a). Additionally, this chapter describes the most recent developments in the County's climate action planning process.

ENVIRONMENTAL SETTING

Air quality is affected by the rate, type, and location of pollutant emissions and the associated meteorological conditions that influence pollutant movement and dispersal. Wind speed, wind direction, barometric pressure, and air temperature combined with geographic features such as mountains and valleys determine how air pollutant emissions affect local air quality.

CLIMATE AND TOPOGRAPHY

The project site is located within the County of Sacramento, which lies within the Sacramento Valley Air Basin (SVAB) and is within the jurisdictional boundaries of the SMAQMD. The SVAB includes topographic features that regulate the climate including the Coast Range to the west, the Sierra Nevada to the east, and the Cascade Range to the north. These mountain ranges channel winds through the SVAB but also inhibit the dispersion of pollutant emissions. The SVAB, including Sacramento, is characterized by a Mediterranean climate that includes mild, rainy winter weather from November through March and warm to hot, dry weather from May through September.

During the summer, the Sacramento Valley has an average high temperature of 92 degrees Fahrenheit (°F) and an average low temperature of 58°F. In the winter, the average high temperature is 58°F and the average low is 40°F. The average annual rainfall is approximately 20 inches.

The predominant annual and summer wind pattern in the Sacramento Valley is the full sea breeze, commonly referred to as Delta breezes. These cool winds originate from the Pacific Ocean and flow through the Carquinez Strait, a sea-level gap in the Coast Range. In the winter (December to February), northerly winds predominate. Wind directions in the Sacramento Valley are influenced by the predominant wind flow pattern associated with each season. During about half the days from July through September, however, a phenomenon called the "Schultz Eddy," a large isotropic vertical-axis eddy on the north side of the Carquinez Strait, prevents the Delta breezes from transporting pollutants north and out of the Sacramento Valley and causes the wind pattern to circle back to the south, all of which tends to keep air pollutants in the Sacramento Valley. The effect of this phenomenon exacerbates the pollutant levels in the area and increases the likelihood of violations of state and federal air quality standards during this period.

The vertical and horizontal movement of air is an important atmospheric component involved in the dispersion and subsequent dilution of air pollutants. Without atmospheric movement, air pollutants can collect and concentrate in a single area, increasing the associated health hazards. For example, inversions, where warm air sits over lower cool

air, occur frequently in the SVAB, especially during the fall and early winter, and restrict the vertical dispersion of pollutants released near ground level.

AIR POLLUTANTS OF CONCERN

Air pollutants of concern within the SVAB include criteria air pollutants and toxic air contaminants (TACs), each discussed further below.

CRITERIA AIR POLLUTANTS

Criteria air pollutants are a group of six common air pollutants for which the U.S. Environmental Protection Agency (USEPA) has set ambient air quality standards. Criteria air pollutants include ground-level ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter (PM) in size fractions of 10 microns or less in diameter (PM₁₀) and 2.5 microns or less in diameter (PM_{2.5}), and lead. Most of the criteria air pollutants are primary pollutants and are directly emitted from sources. Ozone, however, is a secondary pollutant that is formed in the atmosphere by a chemical reaction between nitrogen oxides (NO_x), reactive organic gases (ROG), and sunlight. In addition to the criteria air pollutants identified by the USEPA, California regulates four additional criteria air pollutants (visibility reducing particulates, sulfates, hydrogen sulfide, and vinyl chloride).

Criteria air pollutants of concern in the SVAB include ozone, PM₁₀, and PM_{2.5}, as concentrations of these pollutants are above state and national ambient air quality standards. Nitrogen dioxide, carbon monoxide, sulfur dioxide, lead, visibility reducing particulates, sulfates, hydrogen sulfide, and vinyl chloride concentrations are well below state and national ambient air quality standards and are not air pollutants of concern in the SVAB. **Table AQ-1** lists the health effects associated with the criteria air pollutants of concern.

Table AQ-1: Health Effects of Main Criteria Pollutants

Pollutant	Adverse Effects
Ozone	<ul style="list-style-type: none"> • People most at risk from breathing air containing ozone include people with asthma, children, older adults, and people who are active outdoors, especially outdoor workers. In addition, people with certain genetic characteristics, and people with reduced intake of certain nutrients (such as vitamins C and E) are at greater risk from ozone exposure. • Breathing ozone can trigger a variety of health problems including chest pain, coughing, throat irritation, and airway inflammation. It also can reduce lung function and harm lung tissue. Ozone can worsen bronchitis, emphysema, and asthma, leading to increased medical care. • Ozone affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges, and wilderness areas. In particular, ozone harms sensitive vegetation during the growing season.

Pollutant	Adverse Effects
Carbon Monoxide	<ul style="list-style-type: none"> • When inhaled at high concentrations, CO combines with hemoglobin in the blood and reduces the oxygen-carrying capacity of the blood. This results in reduced oxygen reaching the brain, heart, and other body tissues and is especially dangerous for people with cardiovascular diseases, chronic lung disease, or anemia, as well as for fetuses. • The most common effects of CO exposure are fatigue, headaches, confusion, and dizziness due to inadequate oxygen delivery to the brain. • At very high concentrations, which are possible indoors or in other enclosed environments, CO can cause dizziness, confusion, unconsciousness, and death.
Nitrogen Dioxide	<ul style="list-style-type: none"> • Breathing air with a high concentration of NO₂ can irritate airways in the human respiratory system. Such exposures over short periods can aggravate respiratory diseases, particularly asthma, leading to respiratory symptoms (such as coughing, wheezing, or difficulty breathing), hospital admissions, and visits to emergency rooms. Longer exposures to elevated concentrations of NO₂ may contribute to the development of asthma and potentially increase susceptibility to respiratory infections. People with asthma, as well as children and the elderly, are generally at greater risk for the health effects of NO₂. • NO₂, along with other oxides of nitrogen (NO_x), reacts with other chemicals in the air to form both PM and ozone. Both of these are also harmful when inhaled due to effects on the respiratory system.
Sulfur Dioxide	<ul style="list-style-type: none"> • Short-term exposures to SO₂ can harm the human respiratory system and make breathing difficult. Health effects are those of asthma exacerbation, including bronchoconstriction accompanied by symptoms of respiratory irritation such as wheezing, shortness of breath and chest tightness, especially during exercise or physical activity. • Exposure at elevated levels of SO₂ (above 1 ppm) results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality (CARB, 2019d).
Particulate Matter (PM ₁₀ and PM _{2.5})	<ul style="list-style-type: none"> • Particulate matter (PM) contains microscopic solids or liquid droplets that are so small that they can be inhaled and cause serious health problems. Particles less than 10 micrometers in diameter pose the greatest problems, because they can get deep into your lungs, and some may even enter the bloodstream. Of these, particles less than 2.5 micrometers in diameter, also known as fine particles or PM_{2.5}, pose the greatest risk to health. • Exposure to such particles can affect both your lungs and your heart. Numerous scientific studies have linked particle pollution exposure to a variety of problems, including: premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing. • Fine particles (PM_{2.5}) are the main cause of reduced visibility (haze) in parts of the United States, including many national parks and wilderness areas.

Pollutant	Adverse Effects
Lead	<ul style="list-style-type: none"> • Lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems and the cardiovascular system, and affects the oxygen carrying capacity of blood. • The lead effects most commonly encountered in current populations are neurological effects in children, such as behavioral problems and reduced intelligence, anemia, and liver or kidney damage. • Excessive lead exposure in adults can cause reproductive problems in men and women, high blood pressure, kidney disease, digestive problems, nerve disorders, memory and concentration problems, and muscle and joint pain.
SOURCES: CARB, 2023a; 2023b, 2023c; USEPA, 2021a, 2021b, 2021c, 2021d, 2022a, 2022b.	

GROUND-LEVEL OZONE

As discussed in Table AQ-1, above, ground-level ozone is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving the ozone precursors, which are reactive organic gases (ROG), also referred to as volatile organic compounds (VOC), oxides of nitrogen (NO_x), and sunlight. The main sources of ROG in the SVAB are the evaporation of solvents, paints, and fuels; the main sources of NO_x are combustion processes (including motor vehicle engines). Ozone is a regional air pollutant because its precursors are transported and diffused by wind concurrently with ozone production through a photochemical reaction process. Ozone causes eye irritation, airway constriction, and shortness of breath, and can aggravate existing respiratory diseases such as asthma, bronchitis, and emphysema.

CARBON MONOXIDE

Carbon monoxide (CO) is an odorless, colorless gas usually formed as the result of the incomplete combustion of fuels. The single largest source of CO is motor vehicle engines; the highest emissions occur during low travel speeds, stop-and-go driving, cold starts, and hard acceleration. Exposure of humans to high concentrations of CO reduces the oxygen-carrying capacity of the blood and can cause headaches, nausea, dizziness, and fatigue; impaired central nervous system function; and angina (chest pain) in persons with serious heart disease. Very high concentrations of CO can be fatal.

PARTICULATE MATTER

Particulate matter (PM) is frequently classified by particle size, where PM₁₀ consists of PM that is 10 microns or less in diameter and PM_{2.5} consists of the subset of PM₁₀ that is 2.5 microns or less in diameter (a micron is one-millionth of a meter). PM₁₀ and PM_{2.5} represent the fractions of PM that can be inhaled into air passages and the lungs and can cause adverse health effects. Some sources of PM (such as wood burning in fireplaces, demolition, and construction activities) are more local in nature, while others (such as vehicular traffic) have a more regional effect. Very small particles of certain substances (e.g., sulfates and nitrates) can cause lung damage directly, or can contain adsorbed gases (e.g., chlorides or ammonium) that may be injurious to health. Particulates also can damage materials, such as statues and monuments, and reduce visibility.

Large dust particles (diameter greater than 10 microns) settle out rapidly and are easily filtered by human breathing passages. This large dust is of more concern as a soiling nuisance rather than a health hazard. The remaining fine particulate matter, PM₁₀ and PM_{2.5}, is a health concern, particularly at levels above the federal and state ambient air quality standards. PM_{2.5} (including diesel exhaust particles) has greater effects on health because these particles are small enough to penetrate to the deepest parts of the lungs.

Short-term (up to 24 hours' duration) exposure to PM₁₀ has been associated primarily with worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency department visits. The effects of long-term (months or years) exposure to PM₁₀ are less clear, although studies suggest a link between long-term PM₁₀ exposure and respiratory mortality, and the International Agency for Research on Cancer published a review in 2015 that concluded that particulate matter in outdoor air pollution causes lung cancer (IARC, 2015).

Mortality studies since the 1990s have shown a statistically significant direct association between mortality (premature deaths) and daily concentrations of particulate matter in the air. Despite important gaps in scientific knowledge and continued reasons for some skepticism, a comprehensive evaluation of the research findings provides persuasive evidence that exposure to fine particulate air pollution has adverse effects on cardiopulmonary health and can lead to premature death (Pope & Dockery, 2006).

VISIBILITY REDUCING PARTICLES

Visibility-reducing particles are any particles in the atmosphere that obstruct the range of visibility by creating haze (CARB, 2016a). These particles vary in shape, size and chemical composition, and come from a variety of natural and manmade sources including windblown metals, soil, dust, salt, and soot. Other haze-causing particles are formed in the air from gaseous pollutants (e.g., sulfates, nitrates, organic carbon particles), which are the major constituents of fine PM, such as PM_{2.5} and PM₁₀, and are caused from the combustion of fuel. CARB's standard for visibility reducing particles is not based on health effects, but rather on welfare effects, such as reduced visibility and damage to materials, plants, forests, and ecosystems. The health impacts associated with PM_{2.5} and PM₁₀ are discussed above under Particulate Matter.

NITROGEN DIOXIDE

Nitrogen dioxide (NO₂) is a reddish-brown gas that is a byproduct of combustion processes. Automobiles and industrial operations are the main sources of NO₂. Aside from its contribution to ozone formation, NO₂ can increase the risk of acute and chronic respiratory disease and reduce visibility. NO₂ may be visible as a coloring component on high pollution days, especially in conjunction with high ozone levels.

OTHER CRITERIA AIR POLLUTANTS

Other criteria air pollutants include SO₂ and lead, which are not air pollutants of concern in the SVAB. SO₂ is a combustion product of sulfur or sulfur-containing fuels such as coal and diesel. SO₂ is also a precursor to the formation of particulate matter, atmospheric sulfate, and atmospheric sulfuric acid formation that could precipitate

downwind as acid rain. The maximum SO₂ concentrations recorded in the vicinity of the project site are well below federal and state standards.

Leaded gasoline (phased out in the United States beginning in 1973), lead-based paint (on older houses and cars), smelters (metal refineries), and manufacture of lead storage batteries have been the primary sources of lead released into the atmosphere. Lead has a range of adverse neurotoxic health effects, which puts children at special risk. Some lead-containing chemicals cause cancer in animals. Lead levels in the air have decreased substantially since leaded gasoline was eliminated. Ambient lead concentrations are only monitored on an as-warranted, site-specific basis in California.

TOXIC AIR CONTAMINANTS

Toxic air contaminants (TACs) are State of California-designated airborne substances that are capable of causing short-term (acute) and long-term (chronic or carcinogenic, i.e., cancer causing) adverse human health effects (i.e., injury or illness). TACs include both organic and inorganic chemical substances and may be emitted from a variety of common sources including gasoline stations, automobiles, diesel engines, dry cleaners, industrial operations, and painting operations. TACs of concern for the proposed project include diesel particulate matter (DPM) and asbestos. DPM would occur from construction equipment and on-road diesel construction trucks, operational on-road diesel trucks, and operations of emergency back-up diesel generators.

DIESEL PARTICULATE MATTER

The exhaust from diesel engines includes hundreds of different gaseous and particulate components, many of which are toxic carcinogens. Mobile sources such as trucks and buses are among the primary sources of diesel emissions, and concentrations of DPM are higher near heavily traveled highways and rail lines with diesel locomotive operations.

The California Air Resources Board (CARB) identified DPM as a TAC in 1998, primarily based on evidence demonstrating cancer effects in humans (CARB, 2023e). It is estimated that about 70 percent of total known cancer risk related to air toxics in California is attributable to DPM (CARB, 2023e). More than 90 percent of DPM is less than 1 microgram (µm) in diameter and thus is largely a subset of PM_{2.5}; therefore, DPM also contributes to the same non-cancer health effects as PM_{2.5} exposure (see Table AQ-1). DPM may also facilitate the development of new allergies.

Regulation of diesel engines and fuels has decreased DPM levels by 68 percent since 1990. Furthermore, CARB estimates that emissions of DPM in 2035 will be less than half those in 2010, even with increasing vehicle miles traveled (VMT) (CARB, 2023e). Nonetheless, based on 2012 estimates of statewide exposure, DPM is estimated to increase statewide cancer risk by 520 cancers per million residents exposed over a lifetime.

ASBESTOS

Asbestos is a fibrous mineral and used as a processed component of building materials. Because asbestos has been proven to cause serious adverse health effects, including asbestosis and lung cancer, it is strictly regulated based on its natural widespread occurrence and its use as a building material. When building materials containing asbestos are disturbed, asbestos fibers may be released and suspended in ambient air. Asbestos is also naturally occurring in ultramafic rock (a rock type commonly found in California), but its occurrence within the vicinity of the project site has a low probability (CARB, 2005).

EXISTING CONDITIONS

The project site is in the Sacramento International Airport Master Plan area in the northwest portion of Sacramento County. The 110-acre site is just south of Sacramento International Airport and Interstate 5 (I-5). This area is approximately 7.5 miles from downtown Sacramento and predominantly agricultural land.

EXISTING AMBIENT AIR QUALITY

Air quality is monitored by CARB at various locations to determine which air quality standards are being violated, and to direct emission reduction efforts, such as developing attainment plans and rules, incentive programs, etc. The nearest local air quality monitoring station to the project site is the Sacramento-T Street (1309 T Street) monitoring station. The Sacramento-T Street station provides the nearest representative measurement of NO₂, ozone, PM_{2.5}, and PM₁₀ and is approximately 8.5 miles south of the project site.

Table AQ-2 presents a three-year summary of air pollutant concentration data collected at this monitoring station for ozone, PM₁₀, PM_{2.5}, and NO₂, as well as the number of days the applicable standards were exceeded during the given year. National and state regulatory standards are discussed in detail in the *Regulatory Setting* below.

As described in Table AQ-2, ozone levels in the vicinity of the project site have resulted in numerous violations of ambient air quality standards from 2020-2022. During the most recent three-year period, concentrations of ozone in the vicinity of the project site have only exceeded the one-hour State standard twice from 2020-2022 but have exceeded the eight-hour State and national standards seven times from 2020-2022.

Monitoring data for PM₁₀ in the vicinity of the project site recorded the 24-hour national standard was exceeded four times in 2020. In 2021 and 2022 the PM₁₀ 24-hour national standard was not exceeded. For PM_{2.5}, the study area was estimated to have exceeded the 24-hour national standard approximately seventeen times in 2020 and four times in 2021. In 2022 the PM_{2.5} 24-hour national standard was not exceeded.

Table AQ-2: Summary of Air Quality Monitoring Data (2020-2022)

Pollutant	National/ State Standard	2020	2021	2022
OZONE				
Maximum 1-hour concentration, ppm	0.09 ¹	0.112	0.091	0.106
Number of days above state 1-hour standard		1	0	1
Maximum 8-hour concentration, ppm	0.070/0.070	0.076	0.08	0.079
Number of days above national 8-hour standard		3	1	3
CARBON MONOXIDE				
Maximum 1-hour concentration, ppm	35/20	1.4	1.0	2.1
Number of days above national or state 1-hour standard		0	0	0
NITROGEN DIOXIDE				
Annual average concentration, ppm	0.053/0.030	*	*	*
Maximum 1-hour concentration, ppm	0.100/0.18	0.054	0.056	0.050
Number of days above national 1-hour standard		0	0	0
Number of days above state 1-hour standard		0	0	0
PARTICULATE MATTER (PM10)				
Annual average concentration, µg/m ³	20 ¹	31.2	23.5	21.0
Maximum 24-hour concentration (national/state), µg/m ³	150/50	298.7/292.8	132.6/142.6	60.2/61.3
Estimated number of days above national 24-hour standard ³		4.0	0.0	0.0
Estimated number of days above state 24-hour standard ³		59.0	13.3	6.1
PARTICULATE MATTER (PM2.5)				
Annual average concentration, µg/m ³	12.0/12.0	13.1/13	9.3/9.4	8.5/8.6
Maximum 24-hour concentration, µg/m ³	35 ²	111.0/150.4	89.1	33.1
Estimated number of days above national 24-hour standard ³		17.1	4.0	0.0
NOTES: Number of days exceeded is for all days in a given year, except for particulate matter. PM ₁₀ and PM _{2.5} are monitored every six days. 2019-2021 monitoring data for ozone and PM ₁₀ are from the Sacramento-T Street station (CARB, 2022). 2019-2021 monitoring data for nitrogen dioxide, and PM _{2.5} are from the Sacramento-Bercut station (CARB, 2022; USEPA, 2022). CARB and USEPA use different methods to calculate the emissions for certain criteria air pollutants for comparisons to the state and national standards.				

Pollutant	National/ State Standard	2020	2021	2022
<p>Bold values are in excess of applicable standard.</p> <p>* indicates there was insufficient data available to determine the value.</p> <ol style="list-style-type: none"> 1. State standard, not to be exceeded 2. National standard, not to be exceeded 3. Particulate matter sampling schedule of one out of every six days, for a total of approximately 60 samples per year. Estimated days exceeded mathematically estimates of how many days concentrations would have been greater than the level of the standard had each day been monitored. <p>SOURCES: CARB, 2023d; USEPA, 2022b</p>				

ODORS

Odors are generally regarded as an annoyance rather than a health hazard. Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The ability to detect odors varies considerably among the population and overall is quite subjective.

People may have different reactions to the same odor. An odor that is offensive to one person may be perfectly acceptable to another (e.g., coffee roaster). An unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. Known as odor fatigue, a person can become desensitized to almost any odor, and recognition only occurs with an alteration in the intensity. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source, wind speed and direction, and the sensitivity of receptors.

Odiferous compounds could be generated from a variety of source types including both construction and operational activities. Examples of common land use types that typically generate significant odors include, but are not limited to, wastewater treatment plants; sanitary landfills; composting/green waste facilities; recycling facilities; petroleum refineries; chemical manufacturing plants; painting/coating operations; rendering plants; and food packaging plants. The area in the vicinity of the project site does not include any land use types that are known to generate significant odors.

SENSITIVE RECEPTORS

Air quality does not affect individuals or groups within the population in the same way, and some groups are more sensitive to adverse health effects caused by exposure to air pollutants than others. Population subgroups considered sensitive to the health effects of air pollutants include the elderly and the young, those with higher rates of respiratory disease such as asthma and chronic obstructive pulmonary disease, and with other environmental or occupational health exposures (e.g., indoor air quality) that affect cardiovascular or respiratory diseases.

Land uses such as schools, children's day care centers, hospitals, and nursing and convalescent homes are the most sensitive to poor air quality because the population groups associated with these uses have increased susceptibility to respiratory distress. Parks and playgrounds are considered moderately sensitive to poor air quality because persons engaged in strenuous work or exercise also have increased sensitivity to poor air quality; however, exposure times are generally far shorter in parks and playgrounds than in residential locations and schools, which typically reduces the overall health risk associated with exposure to pollutants. Residential areas are considered more sensitive to air quality conditions compared to commercial and industrial areas because people generally spend longer periods of time at their residences, with associated greater exposure to ambient air quality conditions. Workers are not considered sensitive receptors because all employers are required to follow regulations set forth by the Occupational Safety and Health Administration (OSHA) to ensure the health and well-being of their employees. There is one sensitive residential receptor located on Power Line Road, approximately 400 feet to the southeast of the project site. In addition, there are two single-family residential communities located 3,830 feet and 5,240 feet southeast and an elementary school located 6,680 feet east of the project site.

REGULATORY SETTING

FEDERAL

CRITERIA AIR POLLUTANTS

The USEPA is required by the federal Clean Air Act (CAA) to identify and establish National Ambient Air Quality Standards (NAAQS) to protect public health and the environment. The federal CAA identifies two types of NAAQS: primary and secondary. Primary standards provide public health protection, including protecting the health of sensitive populations such as those with pre-existing respiratory conditions, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

The USEPA has set NAAQS for six principal pollutants, called criteria air pollutants. These criteria air pollutants include ozone, NO₂, SO₂, CO, PM, and lead. As discussed previously, PM is separated into two different criteria pollutants based on particle fraction size; these separate standards are in terms of PM₁₀ and PM_{2.5}. **Table AQ-3** presents the current NAAQS (and state ambient air quality standards) and provides a brief discussion of the principal sources for each pollutant.

Table AQ-3: National and California Ambient Air Quality Standards and Major Sources

Pollutant	Averaging Time	State Standard	National Standard	Major Pollutant Sources
Ozone	1 hour	0.09 ppm	---	Formed when reactive organic gases (ROG) and nitrogen oxides (NO _x) react in the presence of sunlight. Major sources include on-road motor vehicles, solvent evaporation, and commercial/ industrial mobile equipment.
	8 hour	0.070 ppm	0.070 ppm	
Carbon Monoxide	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hour ¹	9.0 ppm	9 ppm	
Nitrogen Dioxide	1 hour	0.18 ppm	100 ppb	Motor vehicles, petroleum refining operations, industrial sources, aircraft, ships, and railroads.
	Annual Avg.	0.030 ppm	0.053 ppm	
Sulfur Dioxide	1 hour	0.25 ppm	75 ppb	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	3 hour	---	0.5 ppm ²	
	24 hour	0.04 ppm	0.14 ppm	
	Annual Avg.	---	0.030 ppm	
Respirable Particulate Matter (PM ₁₀)	24 hour	50 µg/m ³	150 µg/m ³	Dust and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	Annual Avg.	20 µg/m ³	---	
Fine Particulate Matter (PM _{2.5})	24 hour	---	35 µg/m ³	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning; also formed from photochemical reactions of other pollutants, including NO _x , sulfur oxides, and organics.
	Annual Avg.	12 µg/m ³	12.0 µg/m ³	
Lead	Monthly Avg.	1.5 µg/m ³	---	Present source: lead smelters, battery manufacturing, and recycling facilities. Past source: combustion of leaded gasoline.
	Quarterly	---	1.5 µg/m ³	
Hydrogen Sulfide	1 hour	0.03 ppm	No National Standard	Geothermal power plants, petroleum production, and refining
Sulfates	24 hour	25 µg/m ³	No National Standard	Produced by the reaction in the air of SO ₂ .
Visibility Reducing Particles	8 hour	Extinction of 0.23/km; visibility of 10 miles or more	No National Standard	See PM _{2.5} .

Pollutant	Averaging Time	State Standard	National Standard	Major Pollutant Sources
Vinyl chloride	24 hour	0.01 ppm	No National Standard	Polyvinyl chloride and vinyl manufacturing.
<p>NOTES: ppb = parts per billion; ppm = parts per million; $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter. “---” means there is no standard</p> <ol style="list-style-type: none"> 1. A more stringent 8-hour carbon monoxide state standard exists around Lake Tahoe (6 ppm). 2. Secondary national standard. <p>SOURCE: CARB, 2016b</p>				

The USEPA classifies air basins (or portions thereof) as “attainment” or “nonattainment” for each criteria air pollutant, based on whether or not the NAAQS had been achieved. The classification is determined by comparing monitoring data with the standards (please refer to Table AQ-3 above). “Unclassified” is defined by the CAA as any area that cannot be classified, on the basis of available information, as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant. Furthermore, an area may be designated attainment with a maintenance plan (also known as a maintenance area), which means that an area was previously classified as nonattainment for a criteria air pollutant but has since been redesignated as attainment. These areas have demonstrated through modeling that they have sufficient controls in place to meet and maintain the NAAQS.

The Sacramento region’s attainment status for the criteria air pollutants is summarized in **Table AQ-4** (state designations are also provided). The Sacramento region is considered a federal nonattainment area for ozone and $\text{PM}_{2.5}$ and an attainment-maintenance area for the federal CO and PM_{10} standards. Sacramento County has been designated nonattainment for the state one-hour ozone, state eight-hour ozone, and state PM_{10} standards. The County is designated attainment or unclassified for all other state and federal standards.

The CAA requires each state to prepare an air quality control plan, referred to as a State Implementation Plan (SIP). The SIP is a living document that is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The USEPA has responsibility to review all state SIPs to determine if they conform to the mandates of the federal CAA and will achieve air quality goals when implemented.

HAZARDOUS AIR POLLUTANTS

Federal laws use the term “hazardous air pollutants” (HAPs) to refer to the same types of compounds that are referred to as TACs under State law. Currently, 187 substances are regulated as HAPs. The CAA requires the USEPA to identify National Emission Standards for Hazardous Air Pollutants (NESHAPs) to protect public health and welfare. NESHAPs potentially applicable to the proposed project include the National Emission Standard for Asbestos (40 Code of Federal Regulations [CFR] 61, Subpart M).

Table AQ-4: Sacramento County Attainment Status

Pollutant and Averaging Time	Designation/Classification	
	State Standards	Federal Standards
Ozone (1-hour)	Nonattainment	No federal standard ¹
Ozone (8-hour)	Nonattainment	Nonattainment/Serious²
Carbon Monoxide ³	Attainment	Attainment/Maintenance
Nitrogen Dioxide (1-hour)	Attainment	Unclassified/Attainment
Nitrogen Dioxide (Annual)	Attainment	Unclassified/Attainment
Sulfur Dioxide (1-hour)	Attainment	Unclassified/Attainment
Sulfur Dioxide (24-hour)	Attainment	No Federal Standard
Respirable Particulate Matter (PM ₁₀) (24-hour)	Nonattainment	Attainment
Respirable Particulate Matter (PM ₁₀) (Annual)	Nonattainment	No Federal Standard
Fine Particulate Matter (PM _{2.5}) (24-hour)	Attainment	Attainment ²
Fine Particulate Matter (PM _{2.5}) (Annual)	Attainment	Attainment
Lead	Attainment	Unclassified/Attainment
Visibility Reducing Particles	Unclassified	No Federal Standard
Sulfates	Attainment	No Federal Standard
Hydrogen Sulfide	Unclassified	No Federal Standard
Vinyl Chloride	Unclassified	No Federal Standard

NOTES: CARB makes area designations for ten criteria pollutants (O₃, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, lead, visibility reducing particles, sulfates, and hydrogen sulfide). CARB does not designate areas according to the vinyl chloride standard.

1. The federal, one-hour ozone standard was replaced with the 8-hour ozone standard in 1997.
2. EPA Green Book 8-Hour Ozone and PM-2.5 Area Information, <https://www.epa.gov/green-book>. Accessed December 27, 2023.
3. The entire state meets both the one-hour and eight-hour carbon monoxide standards (both state and federal).

SOURCE: California Air Resources Board, 2022. *Area Designation Maps*. Available: <http://www.arb.ca.gov/desig/adm/adm.htm>. Accessed December 27, 2023.

STATE

CRITERIA AIR POLLUTANTS

At the State level, the CARB oversees California's air quality policies and regulations. California had adopted its own air quality standards (California Ambient Air Quality Standards, or CAAQS), as shown in Table AQ-3. California's ambient standards are required to be at least as protective as NAAQS and in some cases are more stringent.

In 1988, California passed the California Clean Air Act (CCAA) (California Health and Safety Code Sections 39600 et seq.), which, like its federal counterpart, called for the designation of areas as attainment or nonattainment, based on State ambient air quality standards rather than the federal standards. The CCAA requires each air district in which State air quality standards are exceeded to prepare a plan that documents reasonable progress toward attainment. If an air basin (or portion thereof) exceeds the CAAQS for a particular criteria air pollutant, it is considered to be nonattainment for that criteria air pollutant until the area can demonstrate compliance. As indicated in Table AQ-4, Sacramento County is classified as nonattainment and moderate nonattainment for the 8-hour and 1-hour State ozone standards, respectively, and is nonattainment for the 24-hour and annual State PM₁₀ standard.

TOXIC AIR CONTAMINANTS

The State Air Toxics Program was established in 1983 under Assembly Bill (AB) 1807. A total of 243 substances have been designated TACs under California law; they include the 187 (federal) HAPs adopted in accordance with State law. The Air Toxics “Hot Spots” Information and Assessment Act of 1987 (AB 2588) seeks to identify, quantify, and evaluate risk from air toxics sources; however, AB 2588 does not regulate air toxics emissions.

In 2000, CARB approved a comprehensive Diesel Risk Reduction Plan to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines. Further regulations of diesel emissions by the CARB include the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, the On-Road Heavy Duty (New) Vehicle Program, the In-Use Offroad Diesel Vehicle Regulation, and the New Offroad Compression Ignition Diesel Engines and Equipment Program. All of these regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel-powered equipment.

In 2004, CARB adopted a measure to limit idling of diesel-fueled commercial motor vehicles. Heavy-duty diesel vehicles with a Gross Vehicle Weight Rating (GVWR) of 10,000 lbs. or heavier are prohibited from idling for more than two (2) minutes within California’s borders. Exceptions to the rule apply for certain circumstances.

CARB AIR QUALITY AND LAND USE HANDBOOK

The *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB, 2005) (CARB Handbook) which is advisory rather than regulatory, includes the following recommendations that may apply to the proposed project:

- Avoid siting new sensitive land uses within 500 feet of urban roads carrying 100,000 vehicles per day.
- Avoid siting new sensitive land uses within 300 feet of a large gasoline station (GDF) (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50-foot separation is recommended for typical gasoline-dispensing facilities.

- Avoid siting new sensitive land uses within 300 feet of any dry-cleaning operation using perchloroethylene. For operations with two or more machines, provide 500 feet. For operations with three or more machines, consult the local air district. Do not site new sensitive land uses in the same building with dry-cleaning operations that use perchloroethylene.
- Obtain facility-specific information where there are questions about siting a sensitive land use close to an industrial facility, including the amount of pollutant emitted and its toxicity, distance to nearby receptors, and types of emissions controls in place.

TITLE 24 – CALIFORNIA ENERGY EFFICIENCY STANDARDS

Energy consumption for new residential and nonresidential buildings is regulated by California Code of Regulations (CCR) Title 24, Part 6, Building Energy Efficiency Standards (California Energy Code), which was established in 1978 in response to a legislative mandate to reduce California’s energy consumption and make for development of healthier buildings. The standards are updated periodically (typically every three years) to allow for consideration and possible incorporation of new energy-efficiency technologies and cleaner building methods. The current standards became effective on January 1, 2023, and requires that all new residential construction now install Minimum Efficiency Reporting Value (MERV) 13 filters to reduce particulate impacts on indoor air quality.

SB 350 - CLEAN ENERGY AND POLLUTION REDUCTION ACT OF 2015

Senate Bill (SB) 350, the Clean Energy and Pollution Reduction Act of 2015, was enacted on October 7, 2015 and provides a new set of objectives in clean energy, clean air, and pollution reduction by 2030. The objectives include the following:

- To increase from 33 percent to 50 percent, the procurement of our electricity from renewable sources.
- To double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.

CALIFORNIA AIR RESOURCES BOARD ADVANCED CLEAN CAR PROGRAM

The Advanced Clean Cars emissions-control program was approved by CARB in 2012 and is closely associated with the Pavley regulations. The program requires a greater number of zero-emission vehicle models for years 2015 through 2025 to control mobile sources emissions, smog, soot, and greenhouse gas (GHG) emissions. This program includes the Low-Emissions Vehicle (LEV) regulations to reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles; and the Zero-Emissions Vehicle (ZEV) regulations to require manufactures to produce an increasing number of pure ZEVs (meaning battery and fuel cell electric vehicles) with the provision to produce plug-in hybrid electric vehicles (PHEV) between 2018 and 2025. The Advanced Clean Cars II Regulations require that all new passenger cars, trucks, and SUVs sold in California will be zero emissions by 2035. CARB adopted the ACC II regulations on August 25, 2022.

CALIFORNIA AIR RESOURCES BOARD MOBILE SOURCE STRATEGY

The Mobile Source Strategy (2016) includes an expansion of the Advanced Clean Cars program (which further increases the stringency of emissions for all light-duty vehicles, and 4.2 million zero-emission and plug-in hybrid light-duty vehicles by 2030). It also calls for more stringent GHG requirements for light-duty vehicles beyond 2025 as well as GHG reductions from medium-duty and heavy-duty vehicles and increased deployment of zero-emission trucks primarily for classes 3 through 7 “last mile” delivery trucks in California. Statewide, the Mobile Source Strategy would result in a 45 percent reduction in GHG emissions, and a 50 percent reduction in the consumption of petroleum-based fuels and associated criteria pollutants. CARB’s Mobile Source Strategy includes measures to reduce total light-duty VMT by 15 percent compared to business-as-usual in 2050.

CARB is developing the 2020 Mobile Source Strategy to take an integrated planning approach to identify the level of transition to cleaner mobile source technologies needed to achieve all of California’s targets. The 2020 Mobile Source Strategy was heard by the Board on October 28, 2021, and will be forwarded to the appropriate policy and fiscal committees of the California Legislature as required by California Senate Bill 44. The programs and concepts in the 2020 Mobile Source Strategy will be incorporated in other planning efforts, including the State Implementation Plans (SIP), the 2022 Climate Change Scoping Plan Update, and community emissions reduction plans developed as a part of Assembly Bill 617’s Community Air Protection Program. CARB will translate the concepts in the 2020 Mobile Source Strategy into federally-enforceable SIP measures and commitments to be included in the 2022 State SIP Strategy to support attainment of federal ozone standards across the State.

CALIFORNIA AIR RESOURCES BOARD ADVANCED CLEAN TRUCKS REGULATION

The Advanced Clean Trucks regulation was approved on June 25, 2020, and has two main components: a manufacturer’s ZEV sales requirement, and a one-time reporting requirement for large entities and fleets. Manufacturers who certify Class 2b–8 chassis or complete vehicles with combustion engines are required to sell zero-emissions trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emissions truck/chassis sales need to be 55 percent of Class 2b–3 truck sales, 75 percent of Class 4–8 straight truck sales, and 40 percent of truck tractor sales.

PORTABLE EQUIPMENT REGISTRATION PROGRAM (PERP)

The Portable Equipment Registration Program (PERP) is a statewide program created by the CARB to register portable equipment designed to move from one location to another throughout California. PERP registered equipment may operate in multiple local air districts, including the SVAB. CARB is responsible for the PERP and issues PERP registrations for eligible equipment, such as portable engines and portable equipment powered by engines rated 50 horsepower or greater, and portable equipment units that emit particulate matter greater than 2 pounds per day. The SMAQMD enforces the requirements of the program at the local level.

LOCAL

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

The SMAQMD is the regional agency responsible for air quality regulation within Sacramento County. The agency regulates air quality through its planning and review activities and has permit authority over most types of stationary emission sources and can require operators of stationary sources to obtain permits, can impose emission limits, set fuel or material specifications, and establish operational limits to reduce air emissions. The SMAQMD regulates new or modified stationary sources of criteria air pollutants and TACs.

All areas designated as nonattainment are required to prepare plans showing how the area would meet the air quality standards by its attainment dates. The following are the most recent air quality plans applicable to the area of the proposed project:

- Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (SMAQMD, 2013a)
- SMAQMD's Triennial Report and Air Quality Plan Revision (SMAQMD, 2015)
- PM₁₀ Implementation/Maintenance Plan and Redesignation Request for Sacramento County (SMAQMD, 2010).
- PM_{2.5} Maintenance Plan and Redesignation Request (SMAQMD, 2013b).
- 2004 Revision to the California State Implementation Plan for CO (SMAQMD, 2004).

The construction phase of the proposed project would be subject to the applicable SMAQMD regulations with regards to construction and stationary equipment, particulate matter generation, architectural coatings, and paving materials. Equipment used during construction would be subject to the applicable requirements of SMAQMD Regulation 2 (Permits), Rule 201 (General Permit Requirements); and Regulation 4 (Prohibitory Rules), Rule 401 (Ringelmann Chart/Opacity), Rule 402 (Nuisance), Rule 403 (Fugitive Dust), Rule 404 (Particulate Matter), Rule 405 (Dust and Condensed Fumes), Rule 420 (Sulfur Content of Fuels), and construction practices would be subject to Rule 442 (Architectural Coatings), and Rule 453 (Cutback and Emulsified Asphalt Paving Materials). Demolition activities would be subject to all SMAQMD rules associated with demolition and construction.

The operational phase of the proposed project would be subject to SMAQMD Rule 201, which requires any business or person to obtain an authority to construct and a permit to operate prior to installing or operating new equipment or processes that may release or control air pollutants to ensure that all SMAQMD rules and regulations are considered. Potentially applicable stationary pollutant sources that would be installed as part of the proposed project include multiple new boilers, natural gas burning fire pits, diesel emergency generators, and potentially other equipment. A permit is required for all boilers, process heaters, and steam generators with a rated heat input capacity of 1 million British thermal units (Btu) per hour or greater, or boilers, process heaters, and

steam generators of any size that are not fired exclusively on purchased quality natural gas, liquid petroleum gas, or any combination thereof. A permit is required if the aggregate rated heat input capacity of all boilers, process heaters, and steam generators used in the same process is 1 million Btu per hour or greater. SMAQMD Rule 414 applies to boilers rated less than 1 million Btu per hour.

SACRAMENTO COUNTY GENERAL PLAN

The following goals and policies from the Air Quality, Circulation, Energy, and Land Use elements of the Sacramento County 2030 General Plan are applicable to the proposed project.

AIR QUALITY

- AQ-1 New development shall be designed to promote pedestrian/bicycle access and circulation to encourage community residents to use alternative modes of transportation to conserve air quality and minimize direct and indirect emission of air contaminants.
- AQ-3 Buffers and/or other appropriate mitigation shall be established on a project-by-project basis and incorporated during review to provide for protection of sensitive receptors from sources of air pollution or odor. The California Air Resources Board's "Air Quality and Land Use Handbook: A Community Health Perspective," and the [SMAQMD's] approved Protocol (Protocol for Evaluating the Location of Sensitive Land uses Adjacent to Major Roadways) shall be utilized when establishing these buffers.
- AQ-4 Developments which meet or exceed thresholds of significance for ozone precursor pollutants, and/or Greenhouse Gases (GHG) as adopted by the Sacramento Metropolitan Air Quality Management District (SMAQMD), shall be deemed to have a significant environmental impact. An Air Quality Mitigation Plan and/or a Greenhouse Gas Reduction Plan shall be submitted to the County of Sacramento prior to project approval, subject to review and recommendation as to technical adequacy by the Sacramento Metropolitan Air Quality Management District.
- AQ-5 Reduce emissions associated with vehicle miles travelled and evaporation by reducing the surface area dedicated to parking facilities; reduce vehicle emissions associated with "hunting" for on-street parking by implementing innovative parking solutions including shared parking, elimination of minimum parking requirements, creation of maximum parking requirements, and utilize performance pricing for publicly owned parking spaces both on- and off-street, as well as creating parking benefit districts.
- AQ-6 Provide incentives for the use of transportation alternatives, including a program for the provision of financial incentives for builders that construct ownership housing within a quarter mile of existing and proposed light rail stations.

- AQ-8 Promote mixed-use development and provide for increased development intensity along existing and proposed transit corridors to reduce the length and frequency of vehicle trips.
- AQ-10 Encourage vehicle trip reduction and improved air quality by requiring development projects that exceed the SMAQMD's significance thresholds for operational emissions to provide on-going, cost-effective mechanisms for transportation services that help reduce the demand for existing roadway infrastructure.
- AQ-11 Encourage contractors operating in the county to procure and to operate low-emission vehicles, and to seek low emission fleet status for their off-road equipment.
- AQ-12 Minimize air pollutant emissions from Sacramento County facilities and operations.
- AQ-13 Use California State Air Resources Board (ARB) and SMAQMD guidelines for Sacramento County facilities and operations to comply with mandated measures to reduce emissions from fuel consumption, energy consumption, surface coating operations, and solvent usage.
- AQ-14 Support SMAQMD's development of improved ambient air quality monitoring capabilities and the establishment of standards, thresholds and rules to more adequately address the air quality impacts of plans and proposals proposed by the County.
- AQ-16 Prohibit the idling of on- and off-road engines when the vehicle is not moving or when the off-road equipment is not performing work for a period of time greater than five minutes in anyone-hour period.
- AQ-17 Promote optimal air quality benefits through energy conservation measures in new development.
- AQ-19. Require all feasible reductions in emissions for the operation of construction vehicles and equipment on major land development and roadway construction projects.
- AQ-20 Promote Cool Community strategies to cool the urban heat island, reduce energy use and ozone formation, and maximize air quality benefits by encouraging four main strategies including, but not limited to: plant trees, selective use of vegetation for landscaping, install cool roofing, and install cool pavements.
- AQ-21 Support SMAQMD's particulate matter control measures for residential wood burning and fugitive dust.

CIRCULATION

- CI-40 Whenever possible, the applicant/developer of new and infill development projects shall be conditioned to fund, implement, operate and/or participate in TSM programs to manage travel demand associated with the project.
- CI-41 Consider TSM programs that increase the average occupancy of vehicles and divert automobile commute trips to transit, walking, and bicycling.
- CI-43 The County shall promote transit-supportive programs in new development, including employer-based trip-reduction programs (employer incentives to use transit or non-motorized modes), “guaranteed ride home” for commute trips, and car-share or bike-share programs.
- CI-67 When feasible, incorporate lighter colored (higher albedo) materials and surfaces, such as lighter-colored pavements, and encourage the creation of tree canopy to reduce the built environment’s absorption of heat to reduce the urban “heat island” effect.

ENERGY

- EN-5 Reduce travel distances and reliance on the automobile and facilitate increased use of public transit through appropriate land use plans and regulations.

LAND USE

- LU-27 Provide safe, interesting and convenient environments for pedestrians and bicyclists, including inviting and adequately-lit streetscapes, networks of trails, paths and parks and open spaces located near residences, to encourage regular exercise and reduce vehicular emissions.
- LU-37 Provide and support development of pedestrian and bicycle connections between transit stations and nearby residential, commercial, employment or civic uses by eliminating physical barriers and providing linking facilities, such as pedestrian overcrossings, trails, wide sidewalks and safe street crossings.
- LU-40 Employ appropriate traffic calming measures in areas where pedestrian travel is desirable but made unsafe by a high volume or excessive speed of automobile traffic. Preference shall be given to measures that slow traffic and improve pedestrian safety while creating the least amount of conflict with emergency responders.

The proposed project would be consistent with policies AQ-3, AQ-4, AQ-10, AQ-13, AQ-14, and AQ-21 because all recommended SMAQMD mitigation measures would be implemented during construction and operation, and development pursuant to the proposed project would comply (if applicable) with the SMAQMD’s 35 percent emissions reduction/mitigation guideline through the preparation of an AQMP as discussed below.

SACRAMENTO COUNTY CLIMATE ACTION PLAN

On November 9, 2011, the County of Sacramento adopted the Climate Action Plan – Strategy and Framework document, which presented a framework for reducing GHG emissions and developing a second phase of the Climate Action Plan (CAP). On September 11, 2012, the Board of Supervisors adopted the Climate Action Plan – Government Operations, which identifies GHG emissions associated with government operations and develops sector-level measures to reduce these GHG emissions. While the County of Sacramento CAP focuses specifically on reducing greenhouse gases, many of the plan’s measures have the potential to improve air quality as well. Sacramento County will be preparing a Subsequent Environmental Impact Report to analyze the potential impacts of the revised CAP and it is anticipated that a draft of the report will be distributed for public review in 2024.

IMPACTS AND ANALYSIS

The analysis in this Supplement to the 2022 Airport SEIR describes impacts identified in the 2022 Airport SEIR and describes how the impacts of the proposed project would differ, as applicable.

SIGNIFICANCE CRITERIA

For purposes of this Supplement to the 2022 Airport SEIR and consistent with the criteria presented in the 2022 Airport SEIR, which is based on Appendix G of the CEQA Guidelines, impacts related to air quality may be considered significant if implementation of the proposed project would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Result in other emissions (e.g., odors) adversely affecting a substantial number of people.

SMAQMD has developed significance thresholds to help lead agencies determine whether a project may have a significant air quality impact. Projects whose emissions are expected to exceed the recommended significance criteria will have a potentially significant adverse impact on air quality. SMAQMD is delegated by CARB to manage air quality in the SVAB and the recommended thresholds are considered reasonable and appropriate for this project.

SMAQMD has established mass emissions thresholds for ozone precursors (i.e., NO_x and ROG), PM₁₀, and PM_{2.5} as the Sacramento region does not meet the state and federal ozone and state particulate matter (PM₁₀ and PM_{2.5}) ambient air quality standards.

For purposes of this SEIR, and consistent with SMAQMD guidance, impacts related to air quality may be considered significant if the proposed project would result in the following:

- Result in short-term (construction) emissions of NO_x above 85 pounds per day;
- Result in short-term (construction) emissions of PM₁₀ above zero pounds per day without implementation of all best management practices and above 80 pounds per day or 14.6 tons per year after implementation of all best management practices;
- Result in short-term (construction) emissions of PM_{2.5} above 0 pounds per day without implementation of all best management practices and above 82 pounds per day or 15 tons per year after implementation of all best management practices;
- Result in long-term (operational) emissions of NO_x or ROG above 65 pounds per day;
- Result in long-term (operational) emissions of PM₁₀ above 0 pounds per day without implementation of all best management practices and above 80 pounds per day or 14.6 tons per year after implementation of all best management practices;
- Result in long-term (operational) emissions of PM_{2.5} above 0 pounds per day without implementation of all best management practices and above 82 pounds per day or 15 tons per year after implementation of all best management practices;
- Result in CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm); or
- Create objectionable odors affecting a substantial number of people.

IMPACTS NOT DISCUSSED FURTHER

Expose sensitive receptors to substantial pollutant concentrations of CO - Due to the designation of the SVAB as an attainment/maintenance area with respect to the CO standards, SMAQMD no longer requires modeling of project CO emissions for comparison with the ambient air quality standard. According to SMAQMD guidance, in general, land use development projects do not typically have the potential to result in localized concentrations of criteria air pollutants, including CO, that expose sensitive receptors to substantial pollutant concentrations. This is because these emissions are predominantly generated in the form of mobile-source exhaust from vehicle trips associated with the land use development project that occur throughout a paved network of roads. Associated exhaust emissions therefore are not generated in a single location where high concentrations could be formed (SMAQMD, 2009). Therefore, CO impacts that could occur under the proposed project would be considered less than significant, and this issue is not evaluated further in this Supplement to the 2022 Airport SEIR.

Health Implications of Significant Impacts from Ozone Precursors (“Friant Ranch” case) – Because the incremental increase in ozone precursors (NO_x and ROG) from

the proposed project would be less than significant, a discussion or analysis of health impacts from significant emissions of ozone precursors is not discussed.

Fugitive Dust During Project Operation – The ground beneath the solar panels and adjoining disturbed areas would be hydroseeded with native seed mix. The resultant vegetation provided by the groundcover would stabilize the soil and manage wind and water erosion during project operation. Ultimately the groundcover beneath the solar arrays would be similar to what is present currently, but with a native assemblage of groundcover rather than ruderal grasses. The resultant groundcover would prevent wind erosion and dust, similar to current conditions. Based upon these considerations, effects related to fugitive dust during project operation are not evaluated further in this Supplement to the 2022 Airport SEIR.

METHODOLOGY AND ASSUMPTIONS

As discussed in Chapter 1, *Introduction*, the 2022 Airport Master Plan Update and the 2022 Airport SEIR considered a development and operational horizon of 20 years (2018 through 2038) with four Planning Activity Levels (PALs). The area south of I-5 within the Airport Master Plan area, which includes the project site, was included within PAL 4 (with anticipated development within the 2034-2038 time period) of the 2022 Airport Master Plan Update. Due to the extended 20-year planning horizon, Master Plan projects or facilities identified in PAL 4 were determined to be beyond the scope of the 2022 Airport SEIR. As discussed in Chapter 8, *Land Use*, of the 2022 Airport Draft SEIR (page 8-11), the 2022 Airport Master Plan Update identifies future commercial development south of I-5 in PAL 4. The discussion further notes that if PAL 4 becomes ripe for development additional environmental review will be necessary. Accordingly, proposed project impacts related to air quality on the project site are evaluated at a project level below.

The following analysis is based on guidance for air quality impact assessments of projects provided in the *Guide to Air Quality Assessment in Sacramento County* (SMAQMD, 2020). The SMAQMD guidelines identify different approaches to analyzing plans versus projects. Methodology for emissions calculations and determination of impacts were quantified by Kimley-Horn in their technical report and inform the analysis for this Supplement to the 2022 Airport SEIR chapter.

Project-related air quality impacts fall into two categories: short-term impacts due to construction, and long-term impacts due to project operation. During construction of the proposed project, activities would generate criteria air pollutants primarily from the combustion of fuel in construction equipment and vehicle trips associated with worker commute, material delivery, and hauling. In addition, the proposed project construction would affect local particulate concentrations due to fugitive dust generated from ground disturbance activities and vehicle travel on unpaved surfaces. Once the proposed project is constructed, operational emissions would be predominantly associated with staff motor vehicle use. Vehicles using the EV charging would not be a source of emissions as they would be non-emitting electric vehicles. Operational emissions would

also be generated from onsite sources such as fugitive refrigerants, electricity and water consumption, and landscape maintenance.

Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2022.1.0. Project-specific assumptions and default CalEEMod settings used to estimate emissions can be found in the CalEEMod outputs included in the Kimley-Horn report. Estimated construction-related emissions of criteria air pollutants are then compared to SMAQMD's applicable regional significance thresholds to determine significance of impacts.

AIR QUALITY MITIGATION PLAN

Sacramento County General Plan Policy AQ-4 requires that projects exceeding the SMAQMD operational threshold for ozone precursors (i.e., ROG and NO_x) prepare an Air Quality Mitigation Plan (AQMP), as recommended by SMAQMD. For projects that are included in the current State Implementation Plan (SIP), SMAQMD recommends a 15 percent reduction of ozone precursors from mobile-source emissions. For projects not included in the current SIP, SMAQMD recommends a 35 percent reduction of ozone precursors from mobile-source emissions.

IMPACT: CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF AN APPLICABLE AIR QUALITY PLAN

This impact evaluation was discussed on page 3-13 to 3-14 of the 2022 Airport Draft SEIR. The analysis concluded that implementation of the 2022 Airport Master Plan Update would not conflict with applicable air quality plans, and it was concluded that no further General Conformity review is necessary. For this reason, the 2022 Airport SEIR concluded that impacts associated with potential conflicts with an applicable air quality plan would be less than significant.

The Sacramento Regional 2008 8-Hour Ozone Attainment and Reasonable Further Progress Plan (SMAQMD, 2017b) addresses attainment of the federal 8-hour ozone standard, while the Triennial Report and Air Quality Plan Revision (SMAQMD, 2015) and the 2016 Annual Progress Report (SMAQMD, 2017c) address attainment of the California 1-hour and 8-hour ozone standards. These are the latest plans issued by the SMAQMD, and they incorporate land use assumptions and travel demand modeling from SACOG.

According to the SMAQMD, land use development projects that exceed emissions of 85 lbs/day of NO_x or 65 lbs/day of ROG during construction would have the potential to obstruct the success of the regional ozone attainment plans and would therefore be considered significant and require mitigation.

Emissions of ROG, NO_x, PM₁₀, and PM_{2.5} from construction and operation are discussed below. As is further discussed below, construction and operation of the proposed project would not result in the generation of criteria air pollutants that would exceed SMAQMD established significance thresholds. Therefore, the proposed project

would not conflict with the attainment plans, and similar to the conclusion reached in the 2022 Airport SEIR, the impact would be **less than significant**.

IMPACT: CONSTRUCTION EMISSIONS OF CRITERIA AIR POLLUTANTS AND PRECURSORS

The emissions associated with construction of development addressed in the 2022 Airport Master Plan Update were discussed on pages 3-14 to 3-19 of the 2022 Airport Draft SEIR. The analysis concluded that implementation of the 2022 Master Plan Update would generate construction-related NO_x emissions that may have a significant impact on the environment, so mitigation was required to minimize the generation of PM₁₀ and pay applicable air quality mitigation fees, making this impact less than significant with mitigation.

CONSTRUCTION ACTIVITY EMISSIONS

Construction activities associated with the proposed project have the potential to create air quality impacts through the use of heavy-duty construction equipment, construction workers' vehicle trips, truck hauling trips, and vendor truck trips. In addition, fugitive dust emissions would result from site disturbance activities such as grading and excavation and vehicle travel on unpaved roads. Fugitive ROG emissions would result from the application of architectural coatings and paving. Construction equipment such as excavators, graders, backhoes, loaders, crushing equipment, pavers, water trucks, and forklifts would be used for demolition, excavation, and grading, as well as for building construction. Construction of the proposed project is estimated to last approximately 12 months. Site preparation and grading are anticipated to start in June 2024 and last three months, followed by construction of the vehicle charging facility and installation of the solar facilities over an eight-month timeframe between September 2024 and June 2025. See Appendix AQ-1 for additional information regarding the construction assumptions used in this analysis prepared by Kimley-Horn.

The proposed project would be required to comply with the following SMAQMD rules and regulations for construction:

- Rule 403 related to Fugitive Dust;
- Rule 404 related to Particulate Matter;
- Rule 407 related to Open Burning;
- Rule 442 related to Architectural Coatings;
- Rule 453 related to Cutback and Emulsified Asphalt Paving Materials; and
- Rule 460 related to Adhesives and Sealants.

Construction emissions were estimated for the proposed project using the methods contained in SMAQMD's *Guide to Air Quality Assessment in Sacramento County* (SMAQMD, 2020a). The CalEEMod model was used to quantify construction ROG, NO_x, PM₁₀, and PM_{2.5} emissions from off-road equipment, haul trucks associated with

demolition and imported soils, on-road worker vehicle emissions, and vendor delivery trips.

The worst-case unmitigated construction emissions are presented in **Table AQ-5**. The table also compares estimated emissions to SMAQMD's NO_x, PM₁₀, and PM_{2.5} construction thresholds. Even though SMAQMD does not have a significance threshold for construction ROG emissions, they were modeled and shown in Table AQ-5 for informational purposes only.

Table AQ-5: Unmitigated Maximum Project Construction Emissions

	ROG (ppd)	NO _x (ppd)	PM ₁₀ (ppd)	PM _{2.5} (ppd)
Year 2024	3.9	49.2	9.4	5.5
Year 2025	9.6	10.9	0.5	0.4
SMAQMD Threshold ¹	N/A	85	80	82
Significant (Yes or No)?	N/A	No	No	No

NOTES:

1. SMAQMD Rule 403 Fugitive Dust is applied. The Rule 403 reduction/credits include the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stockpiles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. Refer to Appendix AQ-1 for Model Data Outputs.
2. Total values are from CalEEMod and may not add up 100% due to rounding.
3. Included additional paving equipment to represent emissions associated with the project's off-site improvements.
4. Maximum daily emissions shown would not occur on the same day.
5. Sacramento Metropolitan Air Quality Management District, SMAQMD Thresholds of Significance Table, 2020.

SOURCE: Kimley-Horn, 2024a.

As shown in Table AQ-5, unmitigated NO_x emissions would not exceed the applicable significance threshold, and thus unlike 2022 Airport SEIR, mitigation is not required. However, Mitigation Measures AQ-1 through AQ-3 from the 2022 Airport SEIR would be incorporated for the proposed project, further reducing emissions from construction. Therefore, consistent with the conclusion reached in the 2022 Airport SEIR, and with mitigation, the impact associated with construction emissions would be **less than significant**.

MITIGATION MEASURES

AQ-1 All future construction projects which exceed the SMAQMD construction ozone precursor screening thresholds in effect at the time of project submittal shall include an ozone precursor analysis. If the analysis results indicate that the project will generate ozone precursors that exceed the current Sacramento Metropolitan Air Quality Management District thresholds, this mitigation shall

apply. This mitigation may be modified if guidance from the Sacramento Metropolitan Air Quality Management District changes in the future.

- a. The project applicant, or its designee, shall provide a plan for approval by the Sac Metro Air District that demonstrates the heavy-duty off-road vehicles (50 horsepower or more) to be used 8 hours or more during the construction project will achieve a project wide fleet-average 10% NO_x reduction compared to the most recent California Air Resources Board (CARB) fleet average. The plan shall have two components: an initial report submitted before construction and a final report submitted at completion. (Acceptable options for reducing emissions may include use of cleaner engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.)
- b. Submit the initial report at least four (4) business days prior to construction activity using the Sac Metro Air District's Construction Mitigation Tool (<http://www.airquality.org/businesses/ceqa-land-use-planning/mitigation>).
- c. Provide project information and construction company information.
- d. Include the equipment type, horsepower rating, engine model year, projected hours of use, and the CARB equipment identification number for each piece of equipment in the plan. Incorporate all owned, leased and subcontracted equipment to be used.
- e. Submit the final report at the end of the job, phase, or calendar year, as pre-arranged with Sac Metro Air District staff and documented in the approval letter, to demonstrate continued project compliance.

The SMAQMD may conduct periodic site inspections to determine compliance. Nothing in this mitigation shall supersede other air district, state or federal rules or regulations.

This mitigation will sunset on January 1, 2028, when full implementation of the CARB In Use Off-Road Regulation is expected.

AQ-2 To mitigate the additional construction emissions that cannot be offset through implementation of Mitigation Measure AQ-1, above, the following shall apply: Prior to construction activities, SCDA or the project proponent will submit proof that the off-site air quality mitigation fee has been paid to SMAQMD, and that the construction air quality mitigation plan has been approved by SMAQMD and the Environmental Coordinator. The fee will be calculated based on the most current SMAQMD recommended methodology and fee rate available at the time of ground disturbance.

AQ-3 The following mitigation measures will be incorporated into the project to minimize the generation of PM₁₀ dust during dry construction conditions:

- a. Enclose, cover, or water twice daily all soil piles.
- b. Water exposed soil with adequate frequency for continued moist soil.

- c. Water all haul roads twice daily.
- d. Cover loads of all haul/dump truck securely.

FUGITIVE DUST EMISSIONS

Fugitive dust emissions (PM₁₀ and PM_{2.5}) associated with construction of development addressed in the 2022 Airport Master Plan Update were evaluated and presented in Tables AQ-5 and AQ-6 (pages 3-16 and 3-17 of the 2022 Airport Draft SEIR). The analysis concluded that implementation of the 2022 Master Plan Update would generate construction-related fugitive PM₁₀ and PM_{2.5} emissions that may have a significant impact on the environment, so mitigation was required to minimize the generation of PM₁₀ and PM_{2.5}, making this impact less than significant with mitigation.

Fugitive dust emissions are associated with land clearing, ground excavation, cut-and-fill operations, demolition, and truck travel on unpaved roadways. Dust emissions also vary substantially from day to day, depending on the level of activity, the specific operations, and weather conditions. Fugitive dust emissions may have a substantial, temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the project vicinity.

Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby. The SMAQMD recommends the implementation of all Basic Construction Control Measures in order to apply the numeric threshold to PM₁₀ and PM_{2.5} emissions, otherwise there is no threshold for fugitive dust emissions. Implementation of Mitigation Measure AQ-1, which is like the mitigation measure included in the 2022 Airport SEIR to address fugitive dust emissions, would require the proposed project to implement SMAQMD Basic Construction Emissions Control Practices to control dust at the project site during all phases of construction.

As shown in Table AQ-5, with the implementation of AQ-1, all criteria pollutant emissions would remain below their respective thresholds. SMAQMD considers fugitive dust emissions to be potentially significant without implementation of the Construction Control Measures which help control fugitive dust. With implementation of the fugitive dust BMPs as required by Mitigation AQ-1, the proposed project construction would not worsen ambient air quality, create additional violations of federal and state standards, or delay the goal for meeting attainment standards in the SVAB. As a result, like the conclusion reached in the 2022 Airport SEIR, and with mitigation, the impact associated with fugitive dust emissions would be **less than significant**.

MITIGATION MEASURE

- AQ-4 Consistent with SMAQMD Basic Construction Emission Control Practices (BMPs), the following controls shall be included as a mitigation measure for the proposed project and implemented at the construction site:
- Control of fugitive dust is required by District Rule 403 and enforced by SMAQMD staff.

- All exposed surfaces shall be watered two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways shall be covered.
- Wet power vacuum street sweepers shall be used to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
- All roadways, driveways, sidewalks, parking lots to be paved shall be completed as soon as possible. In addition, building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

IMPACT: LONG-TERM OPERATIONAL EMISSIONS OF CRITERIA AIR POLLUTANTS AND PRECURSORS

The emissions associated with the operation of the 2022 Airport Master Plan Update were discussed on pages 3-19 to 3-26 of the 2022 Airport Draft SEIR. The analysis concluded that implementation of the 2022 Master Plan Update would generate operational emissions that may have a significant impact on the environment, and that even with implementation of feasible mitigation to reduce emissions, this impact would be significant and unavoidable.

Operational emissions are typically associated with area, energy, and mobile sources. A more detailed discussion of these sources is provided below.

AREA AND STATIONARY SOURCE EMISSIONS

Area source emissions would be generated due to the use of consumer products, architectural coating, and landscaping at the proposed project, and a fire pump would be a source of diesel combustion emissions.

ENERGY SOURCE EMISSIONS

Energy source emissions would be generated as a result of electricity usage associated with the proposed project. The primary use of electricity by the proposed project would be for the charging of vehicles, with a lesser amount used for space heating and cooling, water heating, ventilation, lighting, appliances, and electronics.

MOBILE SOURCE EMISSIONS

Mobile sources emissions would be generated from motor vehicles, including tailpipe and evaporative emissions. These vehicle trips would be from staff, vendors, and occasional customers who drive emissions-generating vehicles to the project site. Project-generated vehicle emissions have been estimated using CalEEMod. Trip

generation rates associated with the project were based on the Traffic Evaluation prepared by Kimley-Horn (2023). Based on the traffic analysis, the project would result in a total of 1,769 daily vehicle trips. Approximately 1,726 trips are anticipated to be for EV charging and 43 trips for the office building staff. The trips associated with the EV chargers are assumed to be all EV with fugitive dust emissions but no tailpipe emissions. Fugitive PM₁₀ and PM_{2.5} would be generated from entrained road dust, brake wear, and tire wear.

The proposed project's operation emissions are presented in **Table AQ-6**. The table compares estimated emissions to SMAQMD's ROG, NO_x, CO, PM₁₀, and PM_{2.5} operational thresholds.

Table AQ-6: Project Operational Emissions

Emissions Source	Emissions (Pounds per Day) ¹				
	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO _x)	Carbon Monoxide (CO)	Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})
Area	0.56	0.00	0.57	0.00	0.00
Energy	0.01	0.09	0.08	0.01	0.01
Mobile ²	0.25	0.61	3.45	25.91	6.59
Stationary (fire pump)	0.00	0.03	0.03	0.00	0.00
Total Emissions	0.82	0.73	4.13	25.92	6.60
<i>Threshold³</i>	65	65	N/A	80	82
Exceed Threshold?	No	No	N/A	N/A	No
NOTES: 1. Total values are from CalEEMod and may not add up 100% due to rounding. 2. Mobile trips associated with EV chargers were assumed to be all electric vehicles. 3. Sacramento Metropolitan Air Quality Management District, <i>SMAQMD Thresholds of Significance Table</i> , 2020. SOURCE: Kimley-Horn, 2024a. Refer to Appendix AQ-1 for model outputs.					

As shown in Table AQ-6, emission levels, without mitigation, would not exceed the applicable thresholds of significance. This finding differs from that determined in the 2022 Airport SEIR. This is because the 2022 Airport SEIR assessed numerous project elements that would be substantially more intensive with respect to operational emissions, and the SEIR therefore prescribed mitigations for uses that are not relevant to those of the proposed project. For instance, SEIR Mitigation Measures AQ-4, AQ-5, and AQ-6 prescribed measures for proposed cargo facilities (e.g., warehouses and distribution centers) which produce substantially more operational emissions than the

proposed project. Accordingly, those measures do not apply to the proposed project, and in any event there would be no basis to prescribe those measures for the proposed project since its operational emissions would be substantially below SMAQMD thresholds, as shown above in Table AQ-6. Therefore, unlike the conclusion reached in the 2022 Airport SEIR, and even without mitigation, the impact would be **less than significant**, and no mitigation would be required.

OFFSITE IMPROVEMENTS

The proposed project would include a variety of offsite improvements, including paving and widening at the intersections of Bayou Way and Airport Boulevard and Bayou Way and Power Line Road to facilitate truck turning movements; widening Bayou Way between Airport Boulevard and Power Line Road from two to three lanes (one-lane each direction, with a two-way left turn lane); the undergrounding of an existing 12 kilovolt (kV) overhead powerline; curb, gutter, and sidewalk improvements along Bayou Way; and an extension of a 69 kV electrical power distribution line between Power Line Road and the proposed substation on the project site.

These activities would result in temporary fugitive dust and equipment exhaust emissions during construction of the improvements, which would cease once these improvements are completed. For long-term air quality emissions, the proposed project will provide a benefit by attracting and enabling use of zero-emission vehicles. This long-term change is expected to reduce the overall emissions to the air basin.

MITIGATION MEASURE

None required.

IMPACT: EXPOSURE OF SENSITIVE RECEPTORS TO TACs

CONSTRUCTION

The exposure of sensitive receptors to substantial concentrations of toxic air contaminants due to the implementation of the 2022 Airport Master Plan Update were discussed on pages 3-26 to 3-28 of the 2022 Airport Draft SEIR. The analysis concluded that the health effects associated with the implementation of the 2022 Master Plan Update would be negligible, and this impact was determined to be less than significant.

The key drivers to exposure sensitivity are concentration of pollutants and duration of exposure. Diesel particulate matter (DPM) represents the primary TAC of concern from construction activities. Construction-related activities would result in project-generated emissions of DPM 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.

The area in the vicinity of the project site is generally agricultural without much residential or commercial development, but directly north is SMF and industrial land uses in Metro Air Park. However, there is one sensitive, residential receptor located on

Power Line Road, approximately 400 feet to the southeast of the project site. The HRA evaluated potential health risks associated with the construction emissions of DPM at sensitive receptors near the project site. PM₁₀ exhaust construction emissions over the entire construction period were used in AERMOD to approximate construction DPM emissions. The HRA also evaluated nearby worker receptors.

The HRA was conducted using factors and guidance from the Office of Environmental Health Hazard Assessment (OEHHA) and evaluated cancer risk and chronic, non-carcinogenic hazard index (HI) from construction of the proposed project. Details about the modeling and factors used are presented in the HRA technical report prepared by Kimley-Horn (Appendix AQ-2).

RESULTS OF THE HRA

Table AQ-7 presents the results of the HRA for project construction. The results are shown for cancer risk probability, per million, and chronic HI, which is based on DPM concentrations relative to an acceptable reference exposure level provided by OEHHA.

Table AQ-7: Construction Carcinogenic Risk Assessment

Exposure Scenario	Cancer Risk per million¹	Significance Threshold	Exceeds Threshold?
Residential Receptors (southeast of site)	0.56	10	No
Worker Receptors (east of site)	1.20	10	No
	Chronic HI	Significance Threshold	Exceeds Threshold?
Residential Receptors (southeast of site)	0.001	1	No
Worker Receptors (east of site)	0.002	1	No
NOTES:			
1. The reported annual pollutant concentration is at the closest maximally exposed individual (MEI) to the project site.			
SOURCE: Kimley-Horn, 2024b. Refer to Appendix AQ-2: Modeling Data.			

Project construction would occur for a period of approximately 12 months. As shown in Table AQ-7, the cancer risk and chronic HI at residential and worker receptors would be well below the SMAQMD significance thresholds, and like the conclusion reached in the 2022 Airport SEIR, the impact related to TAC emissions during construction, would be **less than significant**.

MITIGATION MEASURE

None required.

OPERATION

Operational emissions from the proposed project would result from staff motor vehicle use (mainly light-duty passenger vehicles and trucks) and area sources (such as the use of landscape maintenance equipment, consumer products, and architectural coatings). These are not substantial sources of TACs. Since the project is intended to provide charging stations for EV trucks and passenger vehicles, there would be no emissions associated with those vehicles coming to and going from the charging stations themselves. Therefore, operational emissions would not be considered a substantial source of TACs, and like the conclusion reached in the 2022 Airport SEIR, the impact related to operational TAC emissions would be **less than significant**.

MITIGATION MEASURE

None required.

IMPACT: EXPOSURE TO OBJECTIONABLE ODORS

The potential to create objectionable odors due to the implementation of the 2022 Airport Master Plan Update was discussed on pages 3-28 to 3-29 of the 2022 Airport Draft SEIR. The analysis concluded that implementation of the 2022 Master Plan Update would not create objectionable odors and that this impact would be less than significant.

Construction activities often include diesel-fueled equipment and heavy-duty trucks, which could create odors associated with diesel fumes that may be considered objectionable. However, construction activities associated with the proposed project would be temporary. Project construction would also be required to comply with all applicable SMAQMD rules and regulations as discussed above. These regulations would help to minimize emissions, including emissions leading to odors. Accordingly, substantial objectionable odors would not be expected to occur during construction activities. Furthermore, the project site does not include any land uses that have been identified as odor sources. Therefore, like the conclusion reached in the 2022 Airport SEIR, the project would not create objectionable odors and the impact is **less than significant**.

MITIGATION MEASURE

None required.

7 BIOLOGICAL RESOURCES

INTRODUCTION

This chapter evaluates the effects of the proposed project related to biological resources, focusing on changes to the 2022 Airport SEIR that may result in new or more severe impacts, and describes any mitigation measures needed to address any such impacts.

FINDINGS OF THE AIRPORT MASTER PLAN UPDATE SEIR

Impacts of the 2022 Airport Master Plan Update related to biological resources were analyzed in Chapter 4, *Biological Resources*, of the 2022 Airport Draft SEIR. The 2022 Airport SEIR determined that implementation of the 2022 Airport Master Plan Update would have the following impacts with respect to biological resources:

- Implementation of the Airport Master Plan Update would not have a substantial adverse effect on protected state or federally protected wetlands or surface waters (*Less than Significant after Mitigation*)
- Implementation of the Airport Master Plan Update would not have a substantial adverse effect, either directly or through habitat modification, on any species identified as a special status species (*Less than Significant after Mitigation*)
- Implementation of the Airport Master Plan Update would not have substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plan, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service (*Less than Significant*)
- Implementation of the Airport Master Plan Update would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites (*Less than Significant after Mitigation*)
- Implementation of the Airport Master Plan Update would conflict with local policies or ordinances protecting biological resources (*Potentially Significant after Mitigation*)
- Implementation of the Airport Master Plan Update would not conflict with the provision of an adopted habitat conservation plan, natural community conservation plan, or approved local, regional, or state habitat conservation plan (*Less than Significant*)

NOTICE OF PREPARATION COMMENTS

The Notice of Preparation (NOP) for the Supplement to the 2022 Airport SEIR was circulated on August 17, 2023. The County received scoping comments from the CDFW, the City of Sacramento, and the Environmental Council of Sacramento (ECOS)

that pertained to the biological resources analysis. These comments include a CDFW request that the Supplement to the 2022 Airport SEIR include a complete assessment of the flora and fauna within and adjacent to the project footprint consistent with existing CEQA guidelines. CDFW provided some recommendations to consider when developing mitigation measures to compensate for potential effects to biological resources. CDFW also requested that the Supplement to the 2022 Airport SEIR analysis evaluate the effects to all covered species included in the adopted conservation plans covering the Natomas Basin. The City of Sacramento requested that any biological mitigation lands be designated on existing Airport/County-owned lands or outside Natomas Basin. ECOS requested that mitigation land for impacts on biological resources be restricted to within the Natomas Basin. The ECOS letter also requested an analysis of the growth inducing effects of the project on agricultural lands potentially used by Swainson's hawk and how the project could conflict with existing adopted conservation plans covering the Natomas Basin.

INFORMATION SOURCES

The information and analysis included in this chapter was developed based on a review of the Airport Master Plan, relevant policies of the Sacramento County 2030 General Plan, and a biological reconnaissance survey and aquatic resources delineation of the project area. Additionally, the following data sources were utilized in the analysis of this chapter:

- Topographic maps
- Online soil maps from the U.S. National Resources Conservation Service
- California Wildlife Habitat Relationships database
- The California Department of Fish and Wildlife's (CDFW's) California Natural Diversity Database (CNDDDB) list of plant and wildlife species documented on the Taylor Monument quadrangle and eight surrounding quadrangles (CDFW, 2023)
- The California Native Plant Society (CNPS) online database of plant species documented on the Taylor Monument quadrangle and eight surrounding quadrangles (CNPS, 2023)
- A U.S. Fish and Wildlife Service (USFWS) list of species that may be present in the vicinity of the project site (USFWS, 2023)
- The Natomas Basin Conservancy (TNBC) Biological Effectiveness Monitoring Annual Survey Results Report (ICF, 2023)

The CNDDDB and CNPS lists include special-status species documented on the following nine quadrangles: Sacramento West, Taylor Monument, Rio Linda, Pleasant Grove, Verona, Sacramento East, Knights Landing, Grays Bend and Davis).

ENVIRONMENTAL SETTING

This chapter describes those landcover types and sensitive biological resources (including special-status species) known to occur or have the potential to occur in the project area. Background information was gathered from a variety of sources identified in the *Data Sources* section below. The project site is bounded by Bayou Way and I-5 to the north, fallow farmland to the east, the West Drainage Canal (Witter Canal) and farmland to the south, and fallow farmland to the west. Information was collected regarding the distribution of native communities/land cover types and observations of flora and fauna present in the project area were made during a biological resource reconnaissance survey conducted by Dudek biologists on August 14, 2023.

NATURAL COMMUNITIES/LAND COVER TYPES

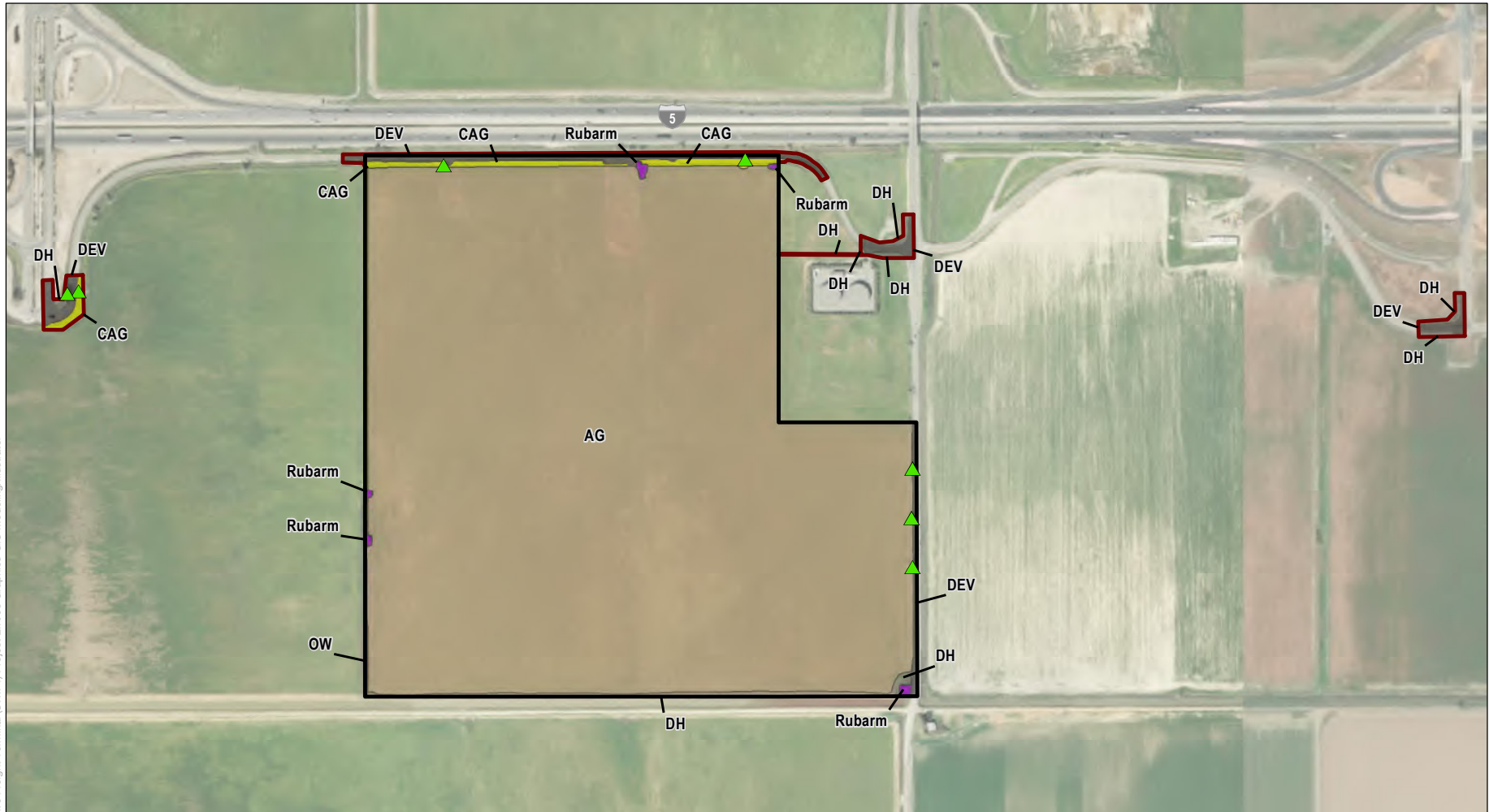
One vegetation community and three landcover types were documented within the project site (110 acres) and buffer (32.21 acres) (see **Plate BR-1**). The landcover types within the study area consist of general agriculture, disturbed areas, urban/developed areas, and open water. General Agriculture is the dominant landcover covering most of the study area, comprising 134.02 acres. Disturbed landcover comprises 1.89 acres of the study area. Urban/developed areas comprise 3.89 acres of the study area. 0.16 acres of open water is present along the perimeter of the study area. The Himalayan blackberry vegetation community comprises the remainder of the study area at 0.23 acres.

The offsite improvements areas consist mostly of disturbed and urban/developed land cover as they are situated immediately along existing transportation corridors. The offsite improvement area associated with the paving and widening at the intersection of Bayou Way and Airport Boulevard to facilitate truck turning movements as well as the offsite improvement area associated with widening Bayou way between Airport Boulevard and Power Line Road from two to three lanes also contains small patches of annual grasslands totaling 2.04 acres.

General agricultural land cover is comprised of areas actively cultivated for food crops or previously actively cultivated but currently fallowed. These areas are typically subject to annual soil disturbance through disking, tilling, and harvesting, and may also receive supplemental irrigation. The project site is currently fallow.

Disturbed habitat refers to areas where soil has been recently or repeatedly disturbed by grading, compaction, or clearing of vegetation. When vegetated, disturbed habitat supports predominantly non-native plant species such as ornamentals or ruderal exotic species that take advantage of disturbance. Disturbed habitat occurs along the southern portion of the project site abutting the adjacent irrigation canal.

Open water is described as ponded bodies of water persisting year-round that consist of less than 10 percent vegetative cover. Open water may support submerged aquatic communities and can contain various substrate compositions, largely determined by the surrounding environment. Areas mapped as open water include the irrigation canals present around the southern and western border of the project site.



20221020200555.03 - WattEV Innovative Freight Terminal (SWIFT) Project EIR/05 Graphics-GIS-Modeling/Illustrator

Project Boundary	Vegetation Communities and Land Covers	Rubarm - Rubus armeniacus Association (0.23 acre)
Off-site Improvements	AG - General Agriculture (134.02 acres)	OW - Open Water (0.16 acre)
Trees > 6 inches in diameter	CAG - California Annual Grassland (2.04 acres)	DH - Disturbed Habitat (1.89 acres)
		DEV - Urban/Developed (3.89 acres)

SOURCE: ESRI Imagery 2023, Open Street Map 2019, EDAW 2007; Dudek, 2023

WattEV Innovative Freight Terminal (SWIFT) Project

Plate BR-1
Vegetation Communities and Land Cover Types



SPECIAL-STATUS SPECIES

Special-status species are legally protected under the California Endangered Species Act (CESA) and Federal Endangered Species Act (FESA) or other regulations or are species that are considered sufficiently rare by the scientific community to qualify for such listing. These species fall into the following categories:

1. Species listed or proposed for listing as threatened or endangered under FESA (Code of Federal Regulations Title 50, Section 17.12 [50 CFR 17.12] [listed plants], 50 CFR 17.11 [listed animals], and various notices in the Federal Register [FR] [proposed species]).
2. Species that are candidates for possible future listing as threatened or endangered under FESA (61 FR 40, February 28, 1996).
3. Species listed or proposed for listing by the State of California as threatened or endangered under CESA (California Code of Regulations Title 14, Section 670.5).
4. Plants listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code Section 1900 et seq.).
5. Animal species of special concern to the CDFW.
6. Animals fully protected under Fish and Game Code (California Fish and Game Code Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).
7. Species that meet the definitions of rare and endangered under CEQA. CEQA Section 15380 provides that a plant or animal species may be treated as “rare or endangered” even if not on one of the official lists (CEQA Guidelines Section 15380).
8. Plants considered by the California Native Plant Society (CNPS) and CDFW to be “rare, threatened or endangered in California” (California Rare Plant Ranks 1A, 1B, and 2).

Several species known to occur on or in the vicinity of the project site are protected by federal and/or state endangered species laws or have been designated as species of special concern by CDFW. In addition, CEQA Guidelines Section 15380(b) provides a definition of rare, endangered, or threatened species that are not included in any listing. For example, vascular plants listed as rare or endangered or as List 1 or 2 by CNPS are considered to meet Section 15380(b) requirements. Species recognized under these terms are collectively referred to as “special-status species.”

The 2022 Airport SEIR assess the potential for special-status species to occur within the project site for the Sacramento International Airport Master Plan Update. The special-status species considered for analysis in the 2022 Airport SEIR were based on the California Natural Diversity Database (CNDDDB), CNPS, and USFWS lists generated in 2020. All lists were reviewed and habitat preferences for each species. Updated

species lists were generated for preparation of this Supplement to the 2022 Airport SEIR and compared with the list of previously evaluated species. The lists include the common and scientific names for each species, regulatory status (federal, state, local, CNPS), habitat descriptions, and a discussion for the potential for occurrence within the study area. The following set of criteria has been used to determine the potential for each species to occur within the study area.

- **Known to occur:** the species has been documented in the study area by a reliable source.
- **High potential to occur:** the species has not been documented in the study area but is known to recently occur in the vicinity and suitable habitat is present.
- **Moderate potential to occur:** the species has not been documented in the study area or vicinity, but the site is within the known range of the species and suitable habitat for the species is present.
- **Low potential to occur:** the species has not been documented in the study area or vicinity, but the site is within the known range of the species; however, suitable habitat for the species is of low quality.
- **Not expected to occur:** the study area is outside the known geographic or elevational range of the species and/or does not support suitable habitat for the species.

SPECIAL-STATUS PLANTS

All the special-status plant species considered for this analysis are listed below in **Table BR-1**. All were determined either to have a low potential to occur or were unlikely to occur due to lack of suitable habitat within or adjacent to the study area, ongoing disturbance of the study area, no known occurrences within two miles of the study area, and/or the study area being outside of the species' known geographic or elevation range. Additionally, Table BR-1 includes those special-status plant species covered under the Natomas Basin Habitat Conservation Plan and the Metro Air Park Habitat Conservation Plan (refer below to *Regulatory Setting* for more details on these conservation plans).

SPECIAL-STATUS WILDLIFE

Forty (40) special status wildlife species were evaluated in the biological resources assessment prepared by Dudek for this project since they were known to occur in the vicinity of the study area (see **Appendix BR-1**). Thirty-two (32) of these species were determined to have a low potential to occur or are not expected to occur due to lack of suitable habitat within or adjacent to the study area, ongoing agricultural disturbance of the project site main parcel, no known occurrences within two miles of the study area, and/or the study area being outside of the species' known geographic or elevation range. These species are listed below in **Table BR-2**. Additionally, Table BR-2 includes special-status wildlife species covered under the Natomas Basin Habitat Conservation Plan and the Metro Air Park Habitat Conservation Plan.

Table BR-1: Special-Status Plant Species Evaluated

Scientific Name/ Common Name	Status	Habitat	Blooming Period	Elevation Range	Potential to Occur
<i>Astragalus tener</i> var. <i>ferrisiae</i> Ferris' milk-vetch	--/--/1B.1	Annual herb found in meadows and seeps (vernally mesic), valley and foothill grassland (subalkaline flats)	Apr–May	5–245	Not expected to occur. The study area does not contain subalkaline flats, meadows or seeps. There are no known species within two miles of the study area.
<i>Astragalus tener</i> var. <i>tener</i> alkali milk-vetch	--/--/1B.2	Annual herb found in playas, valley and foothill grassland (adobe clay), vernal pools	Mar–June	0–195	Not expected to occur. The study area does not contain adobe clay or alkaline soils or vernal pool habitat. There are no known occurrences within two miles of the study area.
<i>Atriplex cordulata</i> var. <i>cordulata</i> heartscale	--/--/1B.2	Annual herb found in chenopod scrub, Meadows and seeps, valley and foothill grassland (sandy)	Apr–Oct	0–1,835	Not expected to occur. Suitable saline or alkaline habitat for this species is absent from the study area. There are no known occurrences of this species within two miles of the study area.
<i>Atriplex depressa</i> brittlescale	--/--/1B.2	Annual herb found in chenopod scrub, meadows and seeps, playas, valley and foothill grassland, vernal pools	Apr–Oct	0–1,045	Not expected to occur. Suitable alkaline clay soil substrates are absent from the study area. There are no known occurrences within two miles of study area.
<i>Centromadia parryi</i> ssp. <i>parryi</i> pappose tarplant	--/--/1B.2	Annual herb found in chaparral, coastal prairie, meadows and seeps, marshes and swamps (coastal salt), valley and foothill grassland (vernally mesic)	May–Nov	0–1,375	Not expected to occur. No suitable prairie, chaparral, coastal salt marsh, or alkaline grassland present in the study area. There are no known occurrences within two miles of the study area.
<i>Chloropyron palmatum</i> Palmate-bracted bird's-beak	FE/CE/ 1B.1	Annual herb found in chenopod scrub, valley and foothill grassland	May–Oct	15–510	Not expected to occur. No suitable alkaline soil substrates are present in the study area. There are no known occurrences within two miles of the study area.

Scientific Name/ Common Name	Status	Habitat	Blooming Period	Elevation Range	Potential to Occur
<i>Downingia pusilla</i> dwarf downingia	--/--/2B.2	Annual herb found in valley and foothill grassland (mesic), vernal pools	Mar–May	0–1,455	Not expected to occur. No suitable vernal pool habitat is present in the study area. There are no known occurrences within two miles of the study area. The closest occurrence of this species was documented approximately 3 miles east of the study area in 1993 (CDFW 2023a).
<i>Extriplex joaquinana</i> San Joaquin spearscale	--/--/1B.2	Annual herb found in chenopod scrub, meadows and seeps, playas, valley and foothill grassland	Apr–Oct	0–2,735	Not expected to occur. No suitable alkaline soil substrates are present in the study area. There are no known occurrences within two miles of the study area.
<i>Gratiola heterosepala</i> Boggs Lake hedge-hyssop	-- /CE/1B.2	Annual herb found in marshes and swamps (lake margins), vernal pools	Apr–Aug	30–7,790	Not expected to occur. Suitable vernal pool, marsh, and swamp habitat for this species is absent from the study area. Moreover, the study area is at the lowest elevational limits for this species. There are no known occurrences of this species within two miles of the study area.
<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i> woolly rose-mallow	--/--/1B.2	Perennial rhizomatous herb found in marshes and swamps. Often found in riprap on sides of levees.	June–Sep	0–395	Not expected to occur. Suitable habitat, such as along margins of canals and ditches, is not present within the study area. There are no known occurrences within two miles of the study area.
<i>Lathyrus jepsonii</i> var. <i>jepsonii</i> Delta tule pea	--/--/1B.2	Perennial herb found in marshes and swamps	May–July (Aug–Sept)	0–15	Not expected to occur. The study area does not contain suitable marsh habitat for this species.
<i>Legenere limosa</i> Legendre	--/--/1B.1	Annual herb found in vernal pools	Apr–June	0–2,885	Not expected to occur. Suitable vernal pool habitat is absent from the study area. There are no known occurrences of this species within two miles of the study area.

Scientific Name/ Common Name	Status	Habitat	Blooming Period	Elevation Range	Potential to Occur
<i>Lepidium latipes</i> var. <i>heckardii</i> Heckard's pepper-grass	--/--/1B.2	Found in valley and foothill grassland	Mar-May	5-660	Not expected to occur. No suitable alkaline flats are present in the study area. There are no known occurrences of this species within two miles of the study area.
<i>Neostapfia colusana</i> Colusa grass	FT/CE/ 1B.1	Annual herb found in vernal pools (adobe clay).	May-Aug	15-655	Not Expected to Occur. No suitable vernal pools are present in the study area.
<i>Orcuttia tenuis</i> Slender Orcutt grass	FT/CE/ 1B.1	Annual herb found in vernal pools.	May-Sep (Oct)	115-5775	Not Expected to Occur. No suitable vernal pools are present in the study area.
<i>Orcuttia viscida</i> Sacramento Orcutt grass	FE/CE/ 1B.1	Annual herb found in vernal pools.	Apr-July (Sept)	100-330	Not Expected to Occur. No suitable vernal pools are present in the study area.
<i>Puccinellia simplex</i> California alkali grass	--/--/1B.2	Annual herb found in chenopod scrub, meadows and seeps, valley and foothill grassland, vernal pools	Mar-May	5-3,050	Not expected to occur. Suitable alkaline soil substrates are absent from the study area. There are no known occurrences of this species within two miles of the study area.
<i>Sagittaria sanfordii</i> Sanford's arrowhead	--/--/1B.2	Perennial rhizomatous herb found in marshes and swamps	May-Oct (Nov)	0-2,130	Low potential to occur. Suitable habitat is not present within the canals/ditches of the study area. There are no known occurrences of this species within two miles of the study area.
<i>Symphotrichum lentum</i> Suisun Marsh aster	--/--/1B.2	Perennial rhizomatous herb found in marshes and swamps	(Apr) May- Nov	0-10	Not expected to occur. The study area does not contain suitable marsh habitat for this species. There are no known occurrences within two miles of the study area.
<i>Trifolium hydrophilum</i> saline clover	--/--/1B.2	Annual herb found in marshes and swamps, valley and foothill grassland, vernal pools	Apr-June	0-985	Not expected to occur. Suitable alkaline soil substrates are absent from the study area. There are no known occurrences of this species within two miles of the study area.

Table BR-2: Special-Status Wildlife Species Evaluated

Scientific Name/ Common Name	Status	Habitat	Potential to Occur
AMPHIBIANS			
<i>Ambystoma californiense</i> California tiger salamander	FT/CT	Annual grassland, valley–foothill hardwood, and valley–foothill riparian habitats; vernal pools, other ephemeral pools, and (uncommonly) along stream courses and manmade pools if predatory fishes are absent.	Not Expected to Occur. Suitable habitat for this species is absent from the study area. There are no known occurrences of this species within the nine-quad search area (CDFW 2023a). This species is not known from this area of Sacramento County, and there are no occurrences of this species within the nine-quad search area (CDFW 2023a).
<i>Rana draytonii</i> California red-legged frog	FT/CSC	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby, or emergent vegetation associated with deep, still or slow-moving water; uses adjacent uplands.	Not Expected to Occur. The study area does not contain suitable habitat for this species. There are no current records of this species occurring in Sacramento County.
<i>Spea hammondii</i> western spadefoot	--/CSC	Primarily grassland and vernal pools, but also in ephemeral wetlands that persist at least 3 weeks in chaparral, coastal scrub, valley–foothill woodlands, pastures, and other agriculture.	Low Potential to Occur. The study area does not contain typical suitable habitat for this species, such as standing ephemeral wetlands. There are no known occurrences within two miles of the study area.
REPTILES			
<i>Actinemys marmorata</i> western pond turtle	--/CSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter.	Moderate Potential to Occur. Upland habitat for this species is present within the study area and suitable aquatic habitat is immediately adjacent. This species has been documented 3 miles to the northwest (CDFW 2023a).
<i>Thamnophis gigas</i> Giant garter snake	FT/CT	Freshwater marsh habitat and low gradient streams; also uses canals and irrigation ditches and flooded rice fields. Upland habitat adjacent to aquatic habitat includes burrows above floodplain for winter refuge.	Moderate Potential to Occur. Upland habitat for this species is present within the study area and marginal aquatic habitat is immediately adjacent to the south and west. Multiple occurrences are within two miles of the study area (CDFW 2023a).

Scientific Name/ Common Name	Status	Habitat	Potential to Occur
BIRDS			
<i>Agelaius tricolor</i> Tricolored blackbird	--/CT	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberry; forages in grasslands, woodland, and agriculture.	Low Potential to Occur. Suitable foraging habitat for this species is present within the study area but nesting habitat is not present. The study area is in the known range for this species, although there are no known occurrences within two miles of the study area.
<i>Ammodramus savannarum</i> grasshopper sparrow	--/CSC	Nests and forages in moderately open grassland with tall forbs or scattered shrubs used for perches.	Low Potential to Occur. The study area is within the species' range, and there is habitat present along the north side of the site. No occurrence records are within 10 miles of the study area.
<i>Asio otus</i> long-eared owl	--/CSC	Nests in riparian habitat, live oak thickets, other dense stands of trees, edges of coniferous forest; forages in nearby open habitats.	Not Expected to Occur. Suitable pond nesting habitat is absent from the study area. There are no known occurrences within ten miles of the study area.
<i>Athene cunicularia</i> Burrowing owl	--/CSC	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows.	Moderate Potential to Occur. No burrows were observed during the field survey. The study area is in the known range for this species, although there are no known occurrences within two miles of the study area. No burrows or ground squirrels were observed during the reconnaissance survey.
<i>Buteo swainsoni</i> Swainson's hawk	--/CT	Nests in open woodland and savanna, riparian, and in isolated large trees; forages in nearby grasslands and agricultural areas such as wheat and alfalfa fields and pasture.	Known to Occur. Nesting and foraging habitat for this species is present within and adjacent to the study area. Multiple CNNDB occurrences within two miles of the study area (CDFW 2023a). Potential nest trees are located within the study area along the Bayou Way frontage. Nesting pairs have been documented in one of these trees during previous field surveys in 2020.

Scientific Name/ Common Name	Status	Habitat	Potential to Occur
<i>Charadrius alexandrinus nivosus</i> Western snowy plover	FT/CSC	On coasts nests on sandy marine and estuarine shores; in the interior nests on sandy, barren or sparsely vegetated flats near saline or alkaline lakes, reservoirs, and ponds	Not Expected to Occur. Suitable pond nesting habitat is absent from the study area. There are no known occurrences within two miles of the study area.
<i>Charadrius montanus</i> Mountain plover	--/CSC	Winters in shortgrass prairies, plowed fields, open sagebrush, and sandy deserts.	Not Expected to Occur. Known wintering sites are absent from the study area.
<i>Circus hudsonius</i> Norther harrier	--/CSC	Nests in open wetlands (marshy meadows, wet lightly-grazed pastures, old fields, freshwater and brackish marshes); also in drier habitats (grassland and grain fields); forages in grassland, scrubs, rangelands, emergent wetlands, and other open habitats.	Moderate Potential to Occur. The study area has suitable nesting and foraging habitat. The study area is in the known range for this species, although there are no known occurrences within two miles of the study area.
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	FT/CE	Nests in dense, wide riparian woodlands and forest with well-developed understories.	Not Expected to Occur. This species has been documented in the region and the study area is within the known range of the species. The study area has no riparian habitat.
<i>Elanus leucurus</i> White-tailed kite	--/CFP	Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands.	Moderate Potential to Occur. The study area has open grasslands and disturbed lands for foraging but lacks riparian trees for nesting. The study area is in the known range for this species, although there are no known occurrences within two miles of the study area.
<i>Falco mexicanus</i> Prairie falcon	--/WL	Forages in grassland, savanna, rangeland, agriculture, desert scrub, alpine meadows; nest on cliffs or bluffs.	Low Potential to Occur. The study area has suitable foraging habitat, but not nesting habitat. The study area is in the known range for this species, although there are no known occurrences within two miles of the study area.

Scientific Name/ Common Name	Status	Habitat	Potential to Occur
<i>Ixobrychus exilis</i> Least bittern	--/CSC	Nests in freshwater and brackish marshes with dense, tall growth of aquatic and semiaquatic vegetation.	Not Expected to Occur. This species has been documented in the region and the study area is within the known range of the species. The study area has no suitable habitat
<i>Lanius ludovicianus</i> Loggerhead shrike	--/CSC	Nests and forages in open habitats with scattered shrubs, trees, or other perches.	Moderate Potential to Occur. The study area has suitable nesting and foraging habitat. The study area is in the known range for this species, although there are no known occurrences within two miles of the study area.
<i>Laterallus jamaicensis coturniculus</i> California black rail	--/CFP, CT	Tidal marshes, shallow freshwater margins, wet meadows, and flooded grassy vegetation; suitable habitats are often supplied by canal leakage in Sierra Nevada foothill populations.	Not Expected to Occur. The study area has no suitable habitat and is outside of the known range of the species.
<i>Melospiza melodia</i> Song sparrow (“Modesto population”)	--/CSC	Nests and forages in emergent freshwater marsh, riparian forest, vegetated irrigation canals and levees, and newly planted valley oak (<i>Quercus lobata</i>) restoration sites.	Not Expected to Occur. This species has been documented in the region and the study area is within the known range of the species. The study area does not contain suitable habitat. Canals adjacent to the study area are sparsely vegetated. There are no known occurrences within two miles of the study area (CDFW 2023a).
<i>Progne subis</i> Purple martin	--/CSC	Nests and forages in woodland habitats including riparian, coniferous, and valley foothill and montane woodlands; in the Sacramento region often nests in weep holes under elevated freeways.	Not Expected to Occur. The study area has no riparian habitat potentially suitable for nesting and foraging by this species. There are several known nesting areas within the City of Sacramento, although there are no known occurrences within two miles of the study area (CDFW 2023a).
<i>Riparia riparia</i> Bank swallow	--/CT	Nests in riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with sandy soils; open country and water during migration.	Not Expected to Occur. The study area lacks suitable nesting and foraging habitat. There are several documented nesting occurrences along the Sacramento and Feather Rivers upstream of the study area (CDFW 2023a).

Scientific Name/ Common Name	Status	Habitat	Potential to Occur
<i>Setophaga petechia</i> Yellow warbler	--/CSC	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats.	Not Expected to Occur. The study area has no suitable habitat and is outside of the known range of the species.
<i>Vireo bellii pusillus</i> Least Bell's vireo	FE/CE	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season.	Not Expected to Occur. The study area is outside of the current known range of this species. The closest occurrence is a specimen collected in 1877 (CDFW 2023a).
<i>Branta canadensis leucopareia</i> Aleutian Canada goose	FD/WL	During migration and on wintering grounds, the geese are commonly found in marshes, pastures and grass crops, harvested agriculture fields and flood-irrigated and nonirrigated land.	Low Potential to Occur. The study area does not contain typical suitable habitat for this species. There are no known occurrences within two miles of the study area.
<i>Falco peregrinus anatum</i> American peregrine falcon	FD/CD	Often nests on ledge or hole on face of rocky cliff or crag. Ideal locations include undisturbed areas with a wide view, near water, and close to plentiful prey. Substitute man-made sites include tall buildings, bridges, rock quarries, and raised platforms.	Low Potential to Occur. The study area does not contain typical suitable habitat for this species. There are no known occurrences within two miles of the study area.
<i>Grus canadensis tabida</i> Greater sandhill crane	--/CT, CFP	During the nonbreeding season, sandhill cranes roost at night in shallow water along river channels, on alluvial islands of braided rivers, or in natural basin wetlands. A communal roost site consisting of an open expanse of shallow water is a key feature of wintering habitat.	Low Potential to Occur. The study area does not contain typical suitable habitat for this species. There are no known occurrences within two miles of the study area.
<i>Plegadis chihi</i> White-faced Ibis	--/WL	Found in marshes, swamps, ponds and rivers, mostly in freshwater habitats. In the Central Valley of California, preferentially found in select foraging sites close to emergent vegetation.	Low Potential to Occur. The study area does not contain typical suitable habitat for this species. There are no known occurrences within two miles of the study area.

Scientific Name/ Common Name	Status	Habitat	Potential to Occur
FISHES			
<i>Archoplites interruptus</i> Sacramento perch	--/CSC	Historically found in the sloughs, slow-moving rivers, and lakes of the Central Valley.	Not Expected to Occur. The study area does not contain suitable habitat for this species.
<i>Hypomesus transpacificus</i> Delta smelt	FT/CE	Sacramento–San Joaquin Delta; seasonally in Suisun Bay, Carquinez Strait, and San Pablo Bay.	Not Expected to Occur. The study area does not contain suitable habitat for this species.
<i>Oncorhynchus mykiss irideus</i> Central Valley steelhead	FT/--	Coastal basins from Redwood Creek south to the Gualala River, inclusive; does not include summer-run steelhead.	Not Expected to Occur. The study area does not contain suitable habitat for this species.
<i>Oncorhynchus tshawytscha</i> Central Valley spring-run Chinook salmon	FT/CT	Federal listing refers to populations spawning in Sacramento River and tributaries. Adult numbers depend on pool depth and volume, amount of cover, and proximity to gravel. Water temps >27 C are lethal to adults.	Not Expected to Occur. The study area does not contain suitable habitat for this species.
<i>Oncorhynchus tshawytscha</i> Sacramento River winter-run Chinook salmon	FE/CT	Spawns in the Sacramento River below Keswick Dam, but not in tributary streams. Requires clean, cold water over gravel beds with water temperatures between 6 and 14 C for spawning.	Not Expected to Occur. The study area does not contain suitable habitat for this species.
<i>Pogonichthys macrolepidotus</i> Sacramento splittail	--/CSC	Endemic to the lakes and rivers of the Central Valley, but now confined to the Delta, Suisun Bay, and associated marshes.	Not Expected to Occur. The study area does not contain suitable habitat for this species.
<i>Spirinchus thaleichthys</i> Longfin smelt	FC/CT	Aquatic, estuary.	Not Expected to Occur. The study area does not contain suitable habitat for this species.
<i>Thaleichthys pacificus</i> Eulachon	FT/--	Found in Klamath River, Mad River, Redwood Creek, and in small numbers in Smith River and Humboldt Bay estuaries.	Not Expected to Occur. The study area does not contain suitable habitat for this species.

Scientific Name/ Common Name	Status	Habitat	Potential to Occur
MAMMALS			
<i>Antrozous pallidus</i> Pallid bat	--/CSC	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in manmade structures and trees.	Low Potential to Occur. Potentially suitable roosting trees are present adjacent to the study area but are sparse. There are no documented occurrences within two miles of the study area.
<i>Lasiurus blossevillii</i> Western red bat	--/CSC	Forest, woodland, riparian, mesquite bosque, and orchards, including fig, apricot, peach, pear, almond, walnut, and orange; roosts in tree canopy.	Low Potential to Occur. Potentially suitable roosting trees are present adjacent to the study area but are sparse. There are no documented occurrences within two miles of the study area.
<i>Taxidea taxus</i> American badger	--/CSC	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils.	Low Potential to Occur. The study area provides marginal habitat, and no burrows showing sign of badger presence were detected during the field assessments. There are no documented occurrences within two miles of the study area.
INVERTEBRATES			
<i>Bombus crotchii</i> Crotch's bumble bee	--/CC	Open grassland and scrub communities supporting suitable floral resources.	Not Expected to Occur. There are no documented occurrences within two miles of the study area. Plant assemblage typically associated with Crotch's bumble bee were not documented within the study area.
<i>Bombus occidentalis</i> Western bumble bee	--/CC	Once common and widespread, species has declined precipitously from central California to southern British Columbia, perhaps from disease.	Not Expected to Occur. There are no documented occurrences within two miles of the study area. Plant assemblage typically associated with western bumble bee were not documented within the study area.
<i>Branchinecta lynchi</i> Vernal pool fairy shrimp	FT/--	Vernal pools, seasonally ponded areas within vernal swales, and ephemeral freshwater habitats.	Not Expected to Occur. No ephemeral freshwater habitats, vernal pools, or swales are present in the study area. No known occurrences within two miles of the study area.

Scientific Name/ Common Name	Status	Habitat	Potential to Occur
<i>Desmocerus californicus dimorphus</i> Valley elderberry longhorn beetle	FT/--	Occurs only in the Central Valley of California, in association with blue elderberry (<i>Sambucus nigra ssp. caerulea</i>).	Not Expected to Occur. No suitable elderberry trees are present within the study area. This species has been documented south of the study area within the riparian corridor of the Sacramento River.
<i>Lepidurus packardi</i> Vernal pool tadpole shrimp	FT/--	Ephemeral freshwater habitats including alkaline pools, clay flats, vernal lakes, vernal pools, and vernal swales.	Not Expected to Occur. No vernal pools or other suitable habitat present in the study area. No known occurrences within two miles of the study area.
<i>Branchinecta mesovallensis</i> Midvalley fairy shrimp	--/--	Lives in vernal pools, vernal swales, and other ephemeral water bodies; sometimes in roadside puddles. Habitat requirements similar to other area fairy shrimp.	Not Expected to Occur. No vernal pools or other suitable habitat present in the study area.

WILDLIFE CORRIDORS

Wildlife movement corridors have been recognized by federal agencies and the state as important habitats worthy of conservation. Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation; they may be continuous habitat or discrete habitat islands that function as steppingstones for wildlife dispersal. Wildlife corridors provide migration channels seasonally (i.e., between winter and summer habitats), and provide non-migrant wildlife the opportunity to move within their home range for food, cover, reproduction, and refuge. The study area is within the Pacific flyway, one of the four major bird migration routes in North America. Irrigation and drainage ditches, such as those common within the Natomas Basin and present just outside the perimeter of the study area, can provide corridors for dispersal for highly aquatic species such as giant garter snake and western pond turtle.

REGULATORY SETTING

FEDERAL

U.S. FISH AND WILDLIFE SERVICE

The U.S. Fish and Wildlife Service (USFWS) administers the Federal Endangered Species Act (FESA) (16 U.S. Code [USC] 153 et seq.), the Migratory Bird Treaty Act (MBTA) (16 USC 703–711), and the Bald and Golden Eagle Protection Act (16 USC 668). These regulations are described below.

FEDERAL ENDANGERED SPECIES ACT

Under the FESA, the Secretary of the Interior and the Secretary of Commerce have joint authority to list a species as threatened or endangered (16 USC § 1533(c)). Two federal agencies oversee the FESA: the USFWS has jurisdiction over plants, wildlife, and resident fish, while the National Marine Fisheries Service (NMFS) has jurisdiction over anadromous fish and marine fish and mammals. Section 7 of the FESA mandates that federal agencies consult with the USFWS and NMFS, as appropriate, to ensure that federal agency actions do not jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat for listed species. The FESA prohibits the “take”¹ of any fish or wildlife species listed as threatened or endangered, including the destruction of habitat that could hinder species recovery.

Section 10 requires the issuance of an “incidental take” permit before any public or private action may be taken that could take an endangered or threatened species. The permit requires preparation and implementation of a habitat conservation plan (HCP) that would offset the take of individuals that may occur, incidental to implementation of a proposed project, by providing for the protection of the affected species.

¹Take is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, collecting, or attempting to engage in any such conduct.

Pursuant to the requirements of the FESA, a federal agency reviewing a project within its jurisdiction must determine whether any federally listed threatened or endangered species may be present in the project area and whether the proposed project will have a potentially significant impact on such species. In addition, the agency is required to determine whether the proposed action is likely to jeopardize the continued existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC § 1536(3), (4)).

CRITICAL HABITAT.

The USFWS designates critical habitat for listed species under FESA. Critical habitat designations are specific areas within the geographic region that are occupied by a listed species that are determined to be critical to its survival and recovery in accordance with FESA. Federal entities issuing permits or acting as a lead agency must show that their actions do not negatively affect the critical habitat to the extent that it impedes the recovery of the species.

MIGRATORY BIRD TREATY ACT

The MBTA (16 United States Code § 703 Supp. I, 1989) generally prohibits the killing, possessing, or trading of migratory birds, bird parts, eggs, and nests, except as provided by the statute.

BALD AND GOLDEN EAGLE PROTECTION ACT

The Bald and Golden Eagle Protection Act, enforced by the USFWS, makes it illegal to import, export, take (which includes molest or disturb), sell, purchase, or barter any bald eagle (*Haliaeetus leucocephalus*) or golden eagle (*Aquila chrysaetos*) or parts thereof.

U.S. ARMY CORPS OF ENGINEERS

CLEAN WATER ACT

The federal Clean Water Act (CWA) was enacted as an amendment to the federal Water Pollution Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to waters of the United States (WOTUS). The CWA serves as the primary federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands.

On May 25, 2023, the Supreme Court, ruling in *Sackett v. EPA*, sharply limited the scope of the CWA. The Court redefined the Act's coverage of WOTUS by citing the earlier *Rapanos* Supreme Court decision that the CWA's use of "waters" encompasses "only those relatively permanent, standing or continuously flowing bodies of water 'forming geographic[al] features' that are described in ordinary parlance as 'streams, oceans, rivers, and lakes.'" The decision goes on to state: "To determine when a wetland is part of adjacent "waters of the United States," the Court agrees with the *Rapanos* plurality that the use of "waters" in §1362(7) may be fairly read to include only wetlands that are "indistinguishable from waters of the United States." This occurs only when wetlands have "a continuous surface connection to bodies that are 'waters of the

United States' in their own right, so that there is no clear demarcation between 'waters' and wetlands." (again, citing from *Rapanos*). The Court concludes that "In sum, the CWA extends to only wetlands that are 'as a practical matter indistinguishable from waters of the United States.'"

SECTION 401

Under CWA Section 401, applicants for a federal license or permit to conduct activities which may result in the discharge of a pollutant into WOTUS must obtain certification from the state in which the discharge would originate or, if appropriate, from the interstate water pollution control agency with jurisdiction over affected waters at the point where the discharge would originate. Therefore, all projects that have a federal component and may affect state water quality (including projects that require federal agency approval, such as issuance of a Section 404 permit) must also comply with CWA Section 401.

SECTION 402

Under the CWA Section 402, the State Water Resources Control Board (SWRCB) has adopted a *General Construction Activity Storm Water Permit* (General Permit) for storm water discharges associated with any construction activity including clearing, grading, excavation reconstruction, and dredge and fill activities that results in the disturbance of at least one acre of total land area. The general permit requires the site owner to notify the state, to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP), and to monitor the effectiveness of the plan.

De minimis discharge activities that are regulated by an individual or general NPDES permit, such as discharges resulting in construction dewatering, also require the General Order for Dewatering and Other Low Threat Discharge to Surface Waters Permit (Section 402). Project applicants/proponents should apply for this permit concurrently with the NPDES permit application.

SECTION 404

CWA Section 404 regulates the discharge of dredged and fill materials into WOTUS. Applicants must obtain a permit from the USACE for all discharges of dredged or fill material into WOTUS, including wetlands, before proceeding with a proposed activity. WOTUS are under the jurisdiction of the USACE and the Environmental Protection Agency (EPA).

Compliance with CWA Section 404 requires compliance with several other environmental laws and regulations. The USACE cannot issue an individual permit or verify the use of a general nationwide permit until the requirements of NEPA, ESA, and the National Historic Preservation Act (NHPA) have been met. In addition, the USACE cannot issue or verify any permit until a water quality certification or a waiver of certification has been issued pursuant to CWA Section 401.

STATE

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

The California Department of Fish and Wildlife (CDFW), formerly identified as the California Department of Fish and Game, administers a number of laws and programs designed to protect fish and wildlife resources under the Fish and Game Code (FGC), such as the California Endangered Species Act (FGC Section 2050, et seq.), Fully Protected Species (FGC Section 3511), Native Plant Protection Act (FGC Sections 1900 to 1913) and Lake or Streambed Alteration Agreement Program (FGC Sections 1600 to 1616). These regulations are described below.

CALIFORNIA ENDANGERED SPECIES ACT

In 1970, the State of California enacted the California Endangered Species Act (CESA), which was subsequently repealed and replaced in 1984 and amended in 1997. The CESA prohibits the take of State-listed endangered and threatened species; although, habitat destruction is not included in the State's definition of take. Section 2090 requires State agencies to comply with endangered species protection and recovery and to promote conservation of these species. The CDFW administers the CESA and authorizes take through California Fish and Game Code Section 2081 agreements (except for designated "fully protected species," see below). Unlike its federal counterpart, the CESA protections apply to candidate species that have been petitioned for listing.

Regarding listed rare and endangered plant species, the CESA defers to the California Native Plant Protection Act (see below).

FISH AND GAME CODE SECTION 3503

California Fish and Game Code Section 3503.5 provides that it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto. Construction activities that result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment and/or reproductive failure are considered a "take" by CDFW. Any loss of eggs, nests, or young or any activities resulting in nest abandonment would constitute a significant project impact.

FULLY PROTECTED SPECIES

Certain species are considered *fully protected*, meaning that the code explicitly prohibits all take of individuals of these species except for take permitted for scientific research. California Fish and Game Code Section 5050 lists fully protected amphibians and reptiles, Section 5515 lists fully protected fish, Section 3511 lists fully protected birds, and Section 4700 lists fully protected mammals.

It is possible for a species to be protected under the California Fish and Game Code, but not fully protected. For instance, mountain lion (*Puma concolor*) is protected under California Fish and Game Code Section 4800 et seq. but is not a fully protected species.

NATIVE PLANT PROTECTION ACT

The California Native Plant Protection Act (CNPPA) was enacted in 1977 and created California Fish and Game Code Sections 1900–1913 which are intended to preserve, protect, and enhance endangered or rare native plants in California. The CNPPA directs CDFW to establish criteria for determining what native plants are rare or endangered. Under Section 1901, a species is endangered when its prospects for survival and reproduction are in immediate jeopardy from one or more causes. A species is rare when, although not threatened with immediate extinction, it is in such small numbers throughout its range that it may become endangered. The CNPPA also directs the California Fish and Game Commission to adopt regulations governing the taking, possessing, propagation, or sale of any endangered or rare native plant.

CALIFORNIA RARE PLANT RANKING SYSTEM

CDFW works in collaboration with the CNPS to maintain a list of plant species native to California that have low numbers, limited distribution, or are otherwise threatened with extinction. These species are categorized by rarity in the California Rare Plant Rank (CRPR). This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Potential impacts to populations of CRPR species may receive consideration under CEQA review. The following identifies the definitions of the CRPR:

- Rank 1A: Plants presumed extirpated in California and either rare or extinct elsewhere.
- Rank 1B: Plants Rare, Threatened, or Endangered in California and elsewhere.
- Rank 2A: Plants presumed extirpated in California, but more common elsewhere.
- Rank 2B: Plants Rare, Threatened, or Endangered in California, but more common elsewhere.
- Rank 3: Plants about which more information is needed - A Review List.
- Rank 4: Plants of limited distribution - A Watch List.

In general, plants with CRPR 1A, 1B, or 2 are considered to meet the criteria of CEQA Guidelines Section 15380. Additionally, with CRPR Rank 1A, 1B or 2 meet the definition of Section 1901, Chapter 10 (Native Plant Protection Act) and Sections 2062 and 2067 (California Endangered Species Act) of the California Fish and Game Code.

LAKE OR STREAMBED ALTERATION PROGRAM

The CDFW regulates activities that would interfere with the natural flow of, or substantially alter, the channel, bed, or bank of a lake, river, or stream. California Fish and Game Code Section 1602 requires notification of the CDFW for lake or stream alteration activities. If, after notification is complete, the CDFW determines that the activity may substantially adversely affect an existing fish and wildlife resource, the CDFW has authority to issue a Streambed Alteration Agreement under California Fish and Game Code Section 1603. Requirements to protect the integrity of biological resources and water quality are often conditions of Streambed Alteration Agreements. These may include avoidance or minimization of heavy equipment use within stream

zones, limitations on work periods to avoid impacts to wildlife and fisheries resources, and measures to restore degraded sites or compensate for permanent habitat losses.

SPECIES OF SPECIAL CONCERN

CDFW maintains lists for candidate-endangered species and candidate-threatened species. California candidate species are afforded the same level of protection as listed species. California also designates species of special concern, which are species of limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. These species do not have the same legal protection as listed species or fully protected species but may be added to official lists in the future. CDFW intends the species of special concern list to be a management tool for consideration in future land use decisions. The *Special Plants* list can be found online at: <http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/spplants.pdf>; and the *Special Animals* list may be found online at: <http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/spanimals.pdf>.

STATE WATER RESOURCES CONTROL BOARD

PORTER COLOGNE WATER QUALITY ACT

The State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs) (together “Boards”) are the principal State agencies with primary responsibility for the coordination and control of water quality. In the Porter-Cologne Water Quality Control Act (Porter-Cologne), the Legislature declared that the “state must be prepared to exercise its full power and jurisdiction to protect the quality of the waters in the state from degradation...” (California Water Code section 13000). Porter-Cologne grants the Boards the authority to implement and enforce the water quality laws, regulations, policies and plans to protect the groundwater and surface waters of the State. Waters of the State determined to be jurisdictional would require, if impacted, waste discharge permitting and/or a Clean Water Act Section 401 certification (in the case of the required USACE permit).

The enforcement of the State's water quality requirements is not solely in the purview of the Boards and their staff. Other agencies (e.g., the California Department of Fish and Wildlife) have the authority to enforce certain water quality provisions in State law. Whether a water quality certification and/or a waste discharge requirement is necessary, all application information would be required to be submitted in accordance with the State Water Resource Control Board’s Procedures for the Discharge of Dredged or Fill Material to Waters of the State (Procedures) which became effective on May 28, 2020. The Procedures define what is considered by the State to be a “wetland” and provide a framework for determining if a feature that meets the State’s definition of a wetland is a jurisdictional water of the State.

CEQA GUIDELINES SECTION 15380

Although threatened and endangered species are protected by specific federal and State statutes, CEQA Guidelines Section 15380(b) provides that a species not listed on the federal or State list of protected species may be considered rare or endangered if the species can be shown to meet certain specific criteria. These criteria have been modeled after the definition of FESA and the section of Fish and Game Code discussing

rare or endangered plants or animals. This section was included in the CEQA Guidelines primarily for situations in which a public agency is reviewing a project that may have a significant effect on a candidate species that has not yet been listed by CDFW or USFWS. CEQA provides the ability to protect species from potential project impacts until the respective agencies can designate protection for the species.

CEQA also specifies the protection of other locally or regionally significant resources, including natural communities or habitats. Although natural communities do not presently have legal protection, CEQA requires an assessment of such communities and potential project impacts. Natural communities that are identified as sensitive in the CNDDDB are considered by CDFW to be significant resources and fall under the CEQA Guidelines for addressing impacts. Local planning documents such as general and area plans often identify natural communities.

LOCAL

SACRAMENTO COUNTY GENERAL PLAN

The following policies from the Agricultural and Conservation elements of the Sacramento County 2030 General Plan are applicable to the proposed project.

AGRICULTURAL

AG-17 The establishment of conservation easements combining preservation of agricultural uses, habitat values, and open space on the same property should be encouraged where feasible.

CONSERVATION

CO-25 Support the preservation, restoration, and creation of riparian corridors, wetlands and buffer zones.

CO-26 Protect areas susceptible to erosion, natural water bodies, and natural drainage systems.

CO-58 Ensure no net loss of wetlands, riparian woodlands, and oak woodlands.

CO-59 Ensure mitigation occurs for any loss of or modification to the following types of acreage and habitat function:

- vernal pools
- wetlands
- riparian
- native vegetative habitat, and
- special status species habitat

CO-62 Permanently protect land required as mitigation.

- CO-64 Consistent with overall land use policies, the County shall support and facilitate the creation and biological enhancement of large natural preserves or wildlife refuges by other government entities or by private individuals or organizations.
- CO-65 Create a network of preserves linked by wildlife corridors of sufficient size to facilitate the movement of species.
- CO-75 Maintain viable populations of special status species through the protection of habitat in preserves and linked with natural wildlife corridors.
- CO-78 Plans for urban development and flood control shall incorporate habitat corridors linking habitat sites for special status species.
- CO-90 Discourage introductions of invasive non-native aquatic plants and animals.
- CO-121 No grading, clearing, tree cutting, debris disposal or any other despoiling action shall be allowed in rivers and streams except for normal channel maintenance, restoration activities, and road crossings.
- CO-134 Maintain and establish a diversity of native vegetative species in Sacramento County.
- CO-137 Mitigate for the loss of native trees for road expansion and development consistent with General Plan policies and/or the County Tree Preservation Ordinance.
- CO-139 Native trees other than oaks, which cannot be protected through development, shall be replaced with in-kind species in accordance with established tree planting specifications, the combined diameter of which shall equal the combined diameter of the trees removed.

SACRAMENTO COUNTY TREE PROTECTION ORDINANCE

Sacramento County Code Chapter 19.12 (*Tree Preservation and Protection*) regulates the removal of any living native oak tree with at least one trunk of six inches or more in diameter measured at four and one-half feet above the ground (dbh), or a multi-trunked native oak tree having an aggregate diameter of ten inches or more. Chapter 19.12 further defines native oak trees as valley oak (*Quercus lobata*), interior live oak (*Quercus wislizenii*), blue oak (*Quercus douglasii*), or oracle oak (*Quercus morehus*). The ordinance prohibits trenching, grading, or filling within the dripline of any such trees or destroy, kill or remove any such trees within the designated urban area of the incorporated area of Sacramento County (including both public and private property) without a tree permit or authorization by the Board of Supervisors.

Sacramento County Code Chapter 19.04 provides for the special protection of “heritage” and “landmark” trees within the unincorporated area of the county. The definition of “heritage tree” means a California oak tree growing on any land in

Sacramento County land with a 60" or greater dbh. A "landmark tree" means an especially prominent or stately tree on any land in Sacramento County.

SACRAMENTO COUNTY SWAINSON'S HAWK ORDINANCE

In recognition of the effects that urban and agricultural-residential use expansion into agricultural zones lands can have on the extent of suitable foraging habitat for Swainson's hawk, the Sacramento County Board of Supervisors established the Swainson's Hawk Ordinance as a means of establishing feasible mitigation to address these habitat impacts. This ordinance allows for any projects on parcels that are within ten miles of a Swainson's hawk nest an additional means to mitigate loss of foraging habitat for the species. The ordinance establishes that the most effective means for loss of suitable Swainson's hawk foraging habitat is the direct preservation, in perpetuity, of equally suitable foraging habitat on an acre-per-acre based on the project's determined acreage impact. However, since the County found it infeasible to mitigate for impacts to Swainson's hawk foraging habitat by use of easements for less than 40 acres of suitable foraging habitat, the ordinance allows for the establishment of an impact mitigation fee which proponents of projects determined to impact fewer than 40 acres have the option to pay. The impact mitigation fee provides funds to acquire available land with suitable Swainson's hawk foraging habitat values.

NATOMAS BASIN HABITAT CONSERVATION PLAN

The Natomas Basin Habitat Conservation Plan (NBHCP) was developed to provide and implement a multispecies conservation program to minimize and mitigate impacts of planned urban development, operation and maintenance of irrigation and drainage systems, and management activities of the Natomas Basin Conservancy (TNBC) associated with its system of reserves. The NBHCP applies to the 53,537-acre area interior to the toe of levees surrounding the Natomas Basin, located in the northern portion of Sacramento County and southern portion of Sutter County. This NBHCP was approved by the U.S. Fish and Wildlife Service in 2003. The City of Sacramento, Sutter County, and the Natomas Basin Conservancy are the permittees that are signatory to the NBHCP; Sacramento County is not a participant in the NBHCP.

Although the County is not a permittee under the NBHCP, the conservation plan of the NBHCP is presented below for informational purposes because of its importance as an instrument for conservation of listed species in the Natomas Basin and for the mitigation of development activities within the Basin. The plan has four component strategies that are described in Chapter IV, "Conservation Plan," of the NBHCP:

- **General conservation strategy.** The general conservation strategy is to create a reserve system that provides greater habitat values than the land converted to urban land uses. The reserve system is required to include one habitat block that is at least 2,500 acres in size and all reserves are required to be part of habitat blocks that are at least 400 acres in size, and connections between reserves via agricultural irrigation/drainage canals must be maintained. Reserves are required to include 30–70-foot-wide buffers between habitat and adjacent land uses, and site-specific management plans are required to be

developed for each reserve. Because upland species rely on foraging habitat both inside and outside of the reserve system, the general conservation strategy also includes measures for addressing reductions in the amount of foraging habitat in the Natomas Basin. These measures include modifying reserve acquisition criteria or the percentages of habitat types in the reserve system, substituting reserves impacted by land use changes with reserves at other sites with greater foraging opportunities, and pursuit of outside funding sources to maintain foraging habitat in the Natomas Basin.

- **Guidelines for reserve acquisition.** Guidelines for the acquisition of reserves provide for a general division of habitat types within TNBC’s system of reserves as follows: 25 percent restored and managed marsh, 50 percent preserved rice land maintained in production, and 25 percent upland habitat. The guidelines for reserve acquisition also require that at the time of acquisition, reserves are at least 800 feet from existing urban lands or land designated for urban uses in an adopted general plan. The guidelines for reserve acquisition allow for up to 20 percent of the reserve system to be located outside of the Natomas Basin in the adjacent “Area B” (which is primarily in Sutter and Placer counties) if the acquisitions are approved by USFWS and CDFW. TNBC may consider acquiring reserves in Area B when there is a limited inventory of suitable parcels available in the Basin at the fair market price being used to determine the fees collected to fund the HCP, and in the approval process, USFWS and CDFW must consider the effect of acquiring out-of-Basin reserves on the viability of Covered Species populations within the Natomas Basin.
- **Conservation strategy for wetland habitat.** The conservation strategy for wetland habitat is to (1) convert rice land into managed marsh wetlands to enhance habitat values for the giant garter snake and other Covered Species, and (2) preserve rice land and manage it to provide greater habitat values than unreserved rice land. This conservation strategy includes site suitability requirements, marsh design guidelines, management practices for restored marsh and preserved rice land, and water management requirements.
- **Conservation strategy for upland habitat.** The conservation strategy for upland habitat is to avoid development in the Swainson’s Hawk Zone (within the City of Sacramento and Sutter County) and to preserve upland habitat inside the Swainson’s Hawk Zone. This zone encompasses undeveloped land in the Natomas Basin that is within one mile of the inside toe of the levee along the Sacramento River from the Natomas Cross Canal south to Interstate 80. The goal of this strategy is to maintain optimum nesting and foraging habitat for Swainson’s hawks nesting in this zone because in the Natomas Basin most Swainson’s hawk nesting has been along the Sacramento River.

METRO AIR PARK HABITAT CONSERVATION PLAN

The Metro Air Park Property Owners Association (MAPOA) received an incidental take permit from the USFWS for giant garter snake, valley elderberry longhorn beetle, and 12 additional species to cover development within the 1,892-acre Metro Air Park site and 123 acres of off-site lands, all located within Sacramento County. Pursuant to the

incidental take permit application, the MAPOA developed the Metro Air Park Habitat Conservation Plan. This HCP establishes that mitigation for impacts associated with development of the Metro Air Park will be through participation in the conservation program set up for the Natomas Basin through the NBHCP, and the Metro Air Park HCP has incorporated applicable provisions of the NBHCP. The TNBC is the plan operator for both the Metro Air Park HCP and the NBHCP.

IMPACTS AND ANALYSIS

The analysis in this Supplement to the 2022 Airport SEIR describes impacts identified in the 2022 Airport SEIR and describes how the impacts of the proposed project would differ, as applicable.

SIGNIFICANCE CRITERIA

For the purposes of this Supplement to the 2022 Airport SEIR and consistent with the criteria present in the 2022 Airport SEIR, which is based on Appendix G CEQA Guidelines, impacts to biological resources were considered significant if the project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or USFWS;
- Have a substantial adverse effect on protected State or federally protected wetlands or surface waters, as defined by the Army Corps of Engineers Wetland Delineation Manual (1987 ed.) and/or as defined by Sections 401 and 404 of the Clean Water Act (including, but not limited to, seeps, vernal pools, swales, drainages, and perennial waterways) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources; or
- Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

ISSUES NOT DISCUSSED IN IMPACTS

Substantial adverse effect on riparian habitat or other sensitive natural community – No sensitive natural communities are located within the project site; the

project site only contains agricultural land, disturbed habitat, and open water, which are not considered sensitive natural communities. As a result, **no impact** would occur, and this issue is not evaluated further in this Supplement to the 2022 Airport SEIR.

METHODOLOGY AND ASSUMPTIONS

As discussed in Chapter 1, *Introduction*, the 2022 Airport Master Plan Update and the 2022 Airport SEIR considered a development and operational horizon of 20 years (2018 through 2038) with four Planning Activity Levels (PALs). The area south of I-5 within the Airport Master Plan area, which includes the project site, was included within PAL 4 (with anticipated development within the 2034-2038 time period) of the 2022 Airport Master Plan Update. Due to the extended 20-year planning horizon, Master Plan projects or facilities identified in PAL 4 were determined to be beyond the scope of the 2022 Airport SEIR. As discussed in Chapter 8, *Land Use*, of the 2022 Airport Draft SEIR (page 8-11), the 2022 Airport Master Plan Update identifies future commercial development south of I-5 in PAL 4. The discussion further notes that if PAL 4 becomes ripe for development additional environmental review will be necessary. Accordingly, proposed project impacts related to biological resources on the project site are evaluated at a project level below.

The proposed project has the potential to adversely affect biological resources. The proposed project may have direct impacts on biological resources through habitat loss, habitat fragmentation, disturbance to special-status species, and injury or mortality to individual special-status species. Temporary and permanent impacts to special-status species habitat could result from construction activities associated with the proposed project, including through development of structures and parking areas in the northern portion of the project site and installation of the solar arrays and access roads in the southern portion of the project site.

A Biological Resource Assessment prepared by Dudek Consultants was completed for the study area. Information from the report is incorporated into the impact analysis and is available as **Appendix BR-1**. Additional analysis to further refine the Dudek analysis was conducted by ESA and is available as **Appendix BR-2**.

IMPACT: HAVE A SUBSTANTIAL ADVERSE EFFECT ON PROTECTED STATE OR FEDERALLY PROTECTED WETLANDS OR SURFACE WATERS

The analysis of potential substantial adverse effects on protected State or federally protected wetlands or surface waters due to implementation of the 2022 Airport Master Plan Update was discussed on pages 4-26 to 4-29 of the 2022 Airport Draft SEIR. This analysis determined that implementation of the 2022 Master Plan Update would convert approximately 2.28 acres of wetlands due to projects listed in PAL 1, with potential impacts associated with PALs 2 and 3 potentially accounting for an additional loss of up to 9.39 acres. With implementation of appropriate mitigation, including use of a mitigation bank or protection of off-site wetlands through the establishment of a permanent conservation easement at a 1:1 ratio, it was concluded that the impact from implementation of the 2022 Master Plan Update would be less than significant.

A comprehensive aquatic resources delineation of the Sacramento International Airport and vicinity (including the study area for the proposed project) was conducted in 2016. The delineation identified several drainage ditches along the Bayou Way frontage and along the west and southern edges of the study area. Based on the August 2023 EPA Final Rule, these waters would not be considered waters of the United States, however they would likely be considered jurisdictional waters of the State under the Porter-Cologne Water Quality Control Act.

The project design includes a 200-foot wide buffer area along the western and southern borders of the project site meaning that the drainage ditches that run along the western and southern edges of the project site would be entirely avoided. The existing abandoned agricultural drainage ditch along the south side of Bayou Way along the project frontage cannot be avoided in a similar fashion, as traffic entering the project during project operation would need to cross over this aquatic feature. As discussed in Chapter 12, *Hydrology and Water Quality*, the hydrologic functionality of this drainage ditch along the south side of Bayou Way would be filled and eliminated under the proposed project, as stormwater from the northern portion of the project site (e.g., from the paved parking areas, plaza, charging stations, and buildings once the site is operational) would be directed to several culverts that would be routed under Bayou Way to an existing drainage channel that lies between Bayou Way and I-5..

Impacts associated with the elimination of this abandoned drainage ditch may require mitigation to compensate for the temporary or permanent removal of aquatic habitat. Conversion of waters of the U.S. requires permits from the USACE and from the RWQCB. Since the project site does not appear to contain any jurisdictional waters of the U.S., conversion of jurisdictional waters of the State, including drainage ditches, would be regulated pursuant to the RWQCB's Waste Discharge Requirements (WDR) process. An estimated 0.2 acres of the drainage ditch along the south side of Bayou Way would be filled as a result of the project. Some of these aquatic features could also be considered subject to CDFW's authority under Section 1602 of the Fish and Game Code. If the proposed project would impact aquatic features protected under Fish and Game Code Section 1600 et seq, then Notification of a Lake or Streambed Alteration would be submitted to CDFW for preparation of a potential Lake or Streambed Alteration Agreement.

Implementation of Mitigation Measure BR-1, which is similar in intent to the mitigation measure included in the 2022 Airport SEIR to address the impacts to wetlands and other waters, would require use of a mitigation bank or protection of off-site wetlands through the establishment of a permanent conservation easement to a least a 1:1 compensation ratio for loss of wetlands. The alterations in language within Mitigation Measure BR-1 relative to the version included in the 2022 Airport SEIR are because the project site contains waters of the State and not waters of the U.S. and hence no permit approval from the U.S. Army Corps of Engineers would be triggered; rather, authorization to fill waters of the State would require issuance of Waste Discharge Requirements by the RWQCB. The permanent conversion of aquatic features associated with the proposed project is a potentially significant impact. Like the

conclusion reached in the 2022 Airport SEIR, the mitigation measure described above would ensure that the impact to aquatic features would be **less than significant**.

MITIGATION MEASURES

- BR-1 To reduce impacts to waters of the State, or to protected aquatic or wetland habitats, the applicant shall comply with one or a combination of the following prior to construction of the proposed project which involves conversion of wetlands or waters of the State:
- a. Where a Waste Discharge Requirements (WDR) has been issued by Central Valley Regional Water Quality Control Board, or an application has been made to obtain a WDR, the Mitigation and Management Plan required by that permit or proposed to satisfy the requirements of the Central Valley Regional Water Quality Control Board for granting a WDR may be submitted for purposes of achieving a no net-loss of waters of the state. The required Plan shall be submitted to the Sacramento County Environmental Coordinator for approval prior to its implementation.
 - b. If the regulatory permitting process results in less than a 1:1 compensation ratio for permanent loss of waters of the state, the project applicant shall demonstrate that the waters of the State which went unmitigated/ uncompensated as a result of permitting have been mitigated through other means. In sum, a net mitigation ratio of at least 1:1 must be achieved for any permanent loss of waters of the state resulting from implementation of the proposed project. Acceptable methods include payment into a mitigation bank or protection of off-site wetlands through the establishment of a permanent conservation easement, subject to the approval of the Environmental Coordinator.

IMPACT: HAVE A SUBSTANTIAL ADVERSE EFFECT, EITHER DIRECTLY OR THROUGH HABITAT MODIFICATION, ON ANY SPECIES IDENTIFIED AS A SPECIAL STATUS SPECIES

BIRDS

SWAINSON'S HAWK

Swainson's hawk is a State-listed Threatened species under the CESA. It nests in California in the Central Valley and smaller adjacent valleys, as well as the Klamath Basin, the Northeastern Plateau, Lassen County, and the Mojave Desert. It breeds in riparian areas, stands of trees in agricultural environments, oak savannah, Joshua trees (*Yucca brevifolia*) in the Mojave Desert, and juniper-sage flats. In the Central Valley, it nests in riparian areas and in isolated tree clusters, often near rural residences or other areas with some human disturbance. Alfalfa fields are the favored foraging areas of Swainson's hawk in the Central Valley, but the species also forages in undisturbed grasslands, fallow agricultural fields, and some row crops (CDFW, 2023b).

NESTING

The analysis of potential substantial adverse effects on Swainson's hawk due to implementation of the 2022 Airport Master Plan Update was discussed on pages 4-43 to 4-47 of the 2022 Airport Draft SEIR. The analysis concluded that implementation of the 2022 Master Plan Update would have a less than significant impact on nesting Swainson's hawk as a result of mitigation measures implemented, which would require nesting surveys to be conducted prior to any new construction and if any nests are found, require that the applicant contact CDFW to determine measures to be implemented so as to ensure that nesting hawks remain undisturbed.

Protocol-level Swainson's hawk surveys conducted by Dudek in 2020 for another nearby project located Swainson's hawk actively nesting in two trees along Bayou Way (Dudek, 2023). One nest was along the Bayou Way frontage of the project site, and another was just west of the project site. These trees were surveyed again in August 2023 during the reconnaissance survey. No Swainson's hawks were observed in or near these trees during that survey (Dudek, 2023). No remnant stick nests were identified in these trees; however, trees were at full foliage during the 2023 survey making a positive determination difficult (Dudek, 2023). The CNDDDB lists many nearby occurrence records (CDFW, 2023a). Additionally, there are multiple citizen science records of Swainson's hawk on and in the vicinity of the project site (eBird, 2023). No Swainson's hawks were observed during the field surveys in August 2023 and no large nests that could be potentially used by Swainson's hawks were observed in any trees present within the project site main parcel or within a 0.25-mile radius of the site.

Project activities would not remove any known active Swainson's hawk nest trees. However, if nests become established within 0.5 miles of the project site, including locations of off-site improvements such as SMUD's 69-kv line extension, project construction activities near suitable nesting habitat could disturb active Swainson's hawk nest sites. Increased levels of noise and human activity within 0.5 miles of an active nest during construction work could result in nest abandonment or forced fledging and subsequent loss of fertile eggs, nestlings, or juveniles. Such nest abandonment or forced fledging would be considered a significant impact if not mitigated. However, it is anticipated that any Swainson's hawks nesting in the vicinity of the project site would have already been accustomed to loud noises, given the substantial noise levels generated from aircraft taking off and landing at the nearby Sacramento International Airport and ambient vehicle traffic noise from the nearby I-5. As such, Mitigation Measure BR-2 described below includes the provision for monitoring of active nests for signs of agitation and disturbance rather than unconditional avoidance.

Operational-related impacts on Swainson's hawk nesting were also analyzed. These considerations included the reflection, heat, and sound generated from the solar array.

NOISE

The level of sound generated by the solar array field would be minimal. The sound power output from the single axis tracking motors that would be installed with photovoltaic arrays is estimated at 70dBA (Kaliski et al, 2020). This level of

sound from the solar arrays would be quickly attenuated with further distance from the solar array. For context, the project site is located within the Airport Noise Zone of 70dB, so this same level of noise already exists on the project site.

As stated in the project description (see Chapter 2), while power output from the solar field would principally go to the charging stations in the vehicle charging area, any remaining power generated would be sent to a Battery Energy Storage System (BESS) for export to the grid during off-peak times. As described in the Chapter 14 (pages 14-26 through 14-28), the mechanical equipment noise associated with the BESS – and heating, venting, and air conditioning (HVAC) units associated with the BESS – would result in a noise level of 68dBA at 50 feet away and 33dBA at a reference distance of approximately one-half mile (2,800 feet) away. Because the project site is located within the Airport Noise Zone of 70dB, existing noise levels on the site already exceed those amounts. The project’s level of noise would therefore not be louder than existing conditions and therefore would not be expected to reduce nesting success of Swainson’s hawks.

REFLECTION

Modern photovoltaic panels reflect as little as two percent of incoming sunlight, i.e., about the same as water and less than soil or wood shingles (National Renewable Energy Laboratory, 2018). As the expected level of glare or reflection from the photovoltaic panels would match ambient conditions in the vicinity (e.g., reflections from aquatic habitat in the Sacramento River and other nearby bodies of water), these effects would have minimal to no effect on the success of foraging or nesting behaviors by nearby Swainson’s hawks.

HEAT

A study of the “heat island” effect associated with photovoltaic facilities found temperatures over the studied plant were 5.4 to 7.2 degrees Fahrenheit higher than wildlands at night (Barron-Gafford et al., 2016). Based on another study, the heat associated from solar fields was found to dissipate relatively quickly; less than 1,000 feet away from the solar field, air temperatures were found to be consistent with ambient conditions (Fthenakis and Yu, 2013). Given the location of the solar array on the south side of the project site and away from previously identified potential nest trees, the effect of heat directly associated with the presence of the solar panels would be substantially or entirely attenuated so as to not affect nesting performance of any Swainson’s hawk pairs that are present in the area.

Implementation of Mitigation Measure BR-2, which is the same as the mitigation measure included in the 2022 Airport SEIR to address the impacts to Swainson’s hawk nesting habitat, calls for nesting surveys to be conducted prior to any new construction and if any nests are found, the applicant would be required to contact CDFW to determine what measures would be implemented to ensure that nesting hawks remain undisturbed. Since Swainson’s hawk nests that are or have been active within the last 5 years are located within or adjacent to the project site, nesting surveys will be

conducted prior to development associated with the proposed project as specified under Mitigation Measure BR-2. The purpose of the survey requirement is to ensure that construction activities do not agitate nesting hawks, potential resulting in nest abandoned or other harm to nesting success. If Swainson's hawk nests are found, CDFW will be contacted to determine what measures need to be implemented to ensure that nesting hawks remain undisturbed. Like the conclusion reached in the 2022 Airport SEIR, the mitigation measure described above would ensure that the impact to Swainson's hawk nesting would be **less than significant**.

FORAGING

The analysis of potential substantial adverse effects on Swainson's hawk due to implementation of the 2022 Airport Master Plan Update was discussed on pages 4-43 to 4-47 of the 2022 Airport Draft SEIR. The analysis in the 2022 Airport SEIR determined that hundreds of acres of suitable Swainson's hawk foraging habitat could be permanently converted. However, with implementation of mitigation measures, including protection of suitable Swainson's hawk foraging habitat through land dedication, it was concluded that the impact to Swainson's hawk foraging habitat from implementation of the 2022 Master Plan Update would be less than significant.

Foraging habitat exists within the fallowed agricultural land that comprises the overwhelming majority of the project site. This area will remain as suitable foraging habitat for Swainson's hawk until the proposed project development takes place. The proposed project would eliminate this Swainson's hawk foraging habitat. The loss of this habitat would be considered a significant impact if not mitigated.

The permanent loss of fallowed agricultural foraging habitat for Swainson's hawk would result from construction of the proposed project, including from installation of the solar generation field within the southern portion of the project site along with the development of the charging areas and associated support facilities within the northern portion of the project site. Specifically, construction of the vehicle charging facilities and rest area would permanently convert agricultural cropland substrate where small prey items (e.g., rodents) for Swainson's hawk are prevalent and accessible to an entirely built environment where the appropriate prey base for the hawk is expected to be eliminated or made non-accessible (e.g., rodents hiding in walls of buildings cannot be hunted by the hawk). Since it is not definitively known whether Swainson's hawk would use areas beneath solar panels or between solar array rows or blocks, it has been conservatively assumed that all agricultural land within the solar generation field would be permanently converted to non-habitat and would result in a permanent loss of Swainson's hawk foraging habitat. Therefore, as a result of the proposed project a total of 110 acres of existing agricultural foraging habitat for Swainson's hawk would be functionally considered converted to non-habitat.

In 1997, in response to the need to mitigate for the loss of Swainson's hawk foraging habitat in Sacramento County, the Board of Supervisors adopted an ordinance that established a Swainson's Hawk Impact Mitigation Program (Chapter 16.130 of the Sacramento County Code). The Program has been amended several times; the latest amendment went into effect in December of 2009. The ordinance provides for the

establishment of impact mitigation fees, which in some circumstances, may be paid in lieu of providing habitat lands. These fees accumulate and are held in trust by the County until used for the acquisition of foraging habitat of a size large enough to be biologically and economically viable. Under the Swainson's Hawk Impact Mitigation Program, only projects which have an impact of less than 40 acres are eligible to pay fees. Since the proposed project would impact over 40 acres, the Swainson's Hawk Impact Mitigation Program would not be available to mitigate the impacts of the proposed project.

For projects impacting over 40 acres of Swainson's hawk foraging habitat, the Sacramento County Swainson's Hawk Ordinance requires project proponents to preserve, through conservation easement(s) or fee title, one acre of similar Swainson's hawk foraging habitat for each acre impacted. The ordinance also requires that the easement(s) or title be transferred to the County, CDFW, or a third-party conservation organization acceptable to the County and CDFW. Mitigation Measure BR-3 is consistent with the requirements of the County's Swainson's Hawk Impact Mitigation Program and would compensate for the loss of Swainson's hawk foraging habitat. Like the conclusion reached in the 2022 Airport SEIR, this mitigation measure would ensure that the impact to Swainson's hawk foraging habitat would be **less than significant**.

OTHER RAPTOR SPECIES

The analysis of potential substantial adverse effects on other raptor species due to implementation of the 2022 Airport Master Plan Update was discussed on pages 4-48 to 4-49 of the 2022 Airport Draft SEIR. The analysis concluded that implementation of the 2022 Master Plan Update would have a significant impact on nesting raptors, which could be reduced to less than significant with implementation of a mitigation measure to conduct a pre-construction raptor nest survey and execution of a site-specific take avoidance plan in the event that such active raptor nests are found.

Potential nesting habitat for raptor species within the project site is generally limited to that for ground-nesting species, such as northern harrier. Other raptor species, besides Swainson's hawk, could nest in the trees located outside but in close proximity to the project site or locations of off-site improvements, such as improvements to Bayou Way east to Power Line Road or SMUD's 69-kv line extension. Potential direct construction-related impacts on raptors could include destruction of nests or eggs from vegetation trimming and removal, and grading. Indirect impacts on these bird species could include visual or auditory disturbance from construction noise and human presence. These direct and indirect construction-related impacts could result in destruction of a nest, abandonment of juveniles or forced fledging, which all would be considered a significant impact if not mitigated. However, it is anticipated that any birds nesting in the vicinity or within the project site would have already been accustomed to high levels of noise, considering the high noise levels coming from aircraft taking off and landing at the nearby Sacramento International Airport and ambient vehicle traffic noise from the nearby I-5. Nevertheless, disturbance from project construction activities could result in nest abandonment or failure by deterring birds from nest sites, and/or distracting adults from tending to their eggs or young potentially resulting in nest destruction, abandonment, and failure. Such nest destruction, abandonment, or failure would be considered a

significant impact if not mitigated. As such, Mitigation Measure BR-4 described below includes a site-specific take avoidance plan that describes avoidance/protective measures to comply with the Fish and Game Code.

Implementation of Mitigation Measure BR-4, which is the same as the mitigation measure included in the 2022 Airport SEIR to address the impacts to other raptor species, would reduce the potential for take of raptor nests. Other raptor species besides Swainson's hawk and burrowing owl could potentially be present and use the trees observed along Bayou Way for nesting. As specified under Mitigation Measure BR-4, a pre-construction survey for raptor nests will be conducted by a qualified biologist if construction activity is to commence within 500 feet of suitable nesting habitat during the raptor nesting season. If active raptor nests are found, an avoidance plan will be developed. Like the conclusion reached in the 2022 Airport SEIR, this mitigation measure would ensure that the impact to raptor nesting habitat would be **less than significant**.

WESTERN BURROWING OWL

The analysis of potential substantial adverse effects on burrowing owl due to implementation of the 2022 Airport Master Plan Update was discussed on pages 4-49 to 4-50 of the 2022 Airport Draft SEIR. The analysis concluded that implementation of the 2022 Master Plan Update would have a less than significant impact on burrowing owl, with implementation of a mitigation measure to conduct a pre-construction burrowing owl survey and developing and implementing a Burrowing Owl Mitigation Plan approved by CDFW in the event occupied burrows or burrowing owls are found.

The permanent loss of fallowed agricultural landcover from the project site would result in loss of potential breeding, foraging, and overwintering habitat for burrowing owl. Much of the development of the site would be associated with installation of the solar generation field within the southern portion of the project site. The likelihood that burrowing owls would occupy the solar generation field after the proposed project is constructed will be minimal because they typically inhabit areas that are open with long clear sightlines. Construction-related ground disturbance could collapse potentially occupied burrows during site clearing and grading, resulting in potential injuries or death to burrowing owl individuals. Additionally, indirect impacts on burrowing owls include visual or auditory disturbance from nearby construction noise and human presence that causes reduced survival or nest success.

During the reconnaissance survey, potentially suitable habitat for burrowing owl was observed. However, no burrows or ground squirrel activity were observed during this reconnaissance, reducing the likelihood that burrowing owls are present. Nevertheless, given the presence of potentially suitable habitat for burrowing owl within the project site, which would be converted to non-habitat as a result of the proposed project, the impact on the species is significant if the site is occupied by burrowing owls and there is no mitigation. Implementation of Mitigation Measure BR-5, which is the same as the mitigation measure included in the 2022 Airport SEIR to address the impacts to burrowing owls, calls for conducting a pre-construction burrowing owl survey and developing and implementing a Burrowing Owl Mitigation Plan approved by CDFW in

the event occupied burrows or burrowing owls are found. Mitigation Measure BR-5 would be implemented to ensure a pre-construction survey for burrowing owl would be conducted. Like the conclusion reached in the 2022 Airport SEIR, this mitigation measure would ensure that the impact to burrowing owl would be **less than significant**.

TRICOLORED BLACKBIRD

The analysis of potential substantial adverse effects on tricolored blackbird due to implementation of the 2022 Airport Master Plan Update was discussed on pages 4-51 to 4-52 of the 2022 Airport Draft SEIR. The analysis concluded that implementation of the 2022 Master Plan Update would have a less than significant impact on tricolored blackbird, given implementation of a mitigation measure to conduct a pre-construction survey for nesting tricolored blackbirds and through adherence of any protective measures recommended by CDFW if tricolored blackbird colonies are found.

The closest occurrence of this species was documented in 1992 in willow trees along an irrigation ditch approximately 2.0 miles east of the project site. This occurrence record was updated in 2018 to say that the habitat was likely removed due to development (CDFW, 2023a). Tricolored blackbirds are known to nest in Himalayan blackberry brambles, which are present along the margins of the project site along Bayou Way. There are no historic records of tricolored blackbird breeding occurring in this location, and no tricolored blackbirds were observed during surveys. Tricolored blackbirds are documented to prefer the tallest blackberry stands, especially those that are supported by fences; they are also found to use blackberry stands not associated with fences when they are near a reliable source of water (Meese and Breedy 2015). Given that the blackberry stands along Bayou Way are quite small, and are low in height, and the ditch along Bayou Way is abandoned and is no longer used for irrigation purposes the potential for tricolored blackbird breeding within the project site is very low. The project site nevertheless represents potentially suitable foraging habitat for this species which could occur within the project site or surrounding areas prior to project construction.

While nesting habitat is not present on the project site, the fallowed agricultural landcover within the project site can provide suitable foraging habitat for this species. Conversion of the project site for installation of the solar generation field within the southern portion of the project site along with the development of the charging areas and associated support facilities within the northern portion of the project site would have the potential to convert suitable foraging habitat for tricolored blackbird, potentially reducing reproductive success and survival rates for any nearby tricolored blackbirds; however, loss of foraging habitat is not considered an impact under CEQA, and therefore the impact would be **less than significant**.

REPTILES

GIANT GARTER SNAKE

The analysis of potential substantial adverse effects on giant garter snake due to implementation of the 2022 Airport Master Plan Update was discussed on pages 4-55 to 4-62 of the 2022 Airport Draft SEIR. The analysis determined that implementation of the 2022 Master Plan Update would convert approximately two acres of marginal giant

garter snake habitat under PAL 2 and 3. With implementation of appropriate mitigation, including limiting construction activity within giant garter snake habitat to the snake's active period, the 2022 Airport SEIR concluded that the impact to giant garter snake would be less than significant.

Giant garter snake is listed as threatened under the federal ESA. No critical habitat has been designated for this species; however, a draft recovery plan was prepared in 1999 and finalized in September 2017 (USFWS, 2017). This species is primarily aquatic and prefers marshes, sloughs, wetlands, agricultural ditches, rice fields, and other slow moving or still waters with emergent vegetation that is necessary for cover and foraging, and upland habitat consisting of grassy banks and openings for basking and aestivation in the summer and torpor in the winter (Hansen 1988 as cited in Dudek 2023). Essential habitat components consist of (1) adequate water during the snake's active period (i.e., early spring through mid-fall) to provide a prey base and cover; (2) emergent, herbaceous wetland vegetation, such as cattails and bulrushes, for escape cover and foraging habitat; (3) upland habitat for basking, cover, and retreat sites; and (4) high-elevation uplands for cover and refuge from flood waters. Giant garter snakes are typically absent from larger rivers and other water bodies that support introduced populations of large, predatory fish, and from wetlands with sand, gravel, or rock substrates. Riparian woodlands do not provide habitat because of excessive shade, lack of basking sites, and absence of prey populations (USFWS, 2017). Giant garter snakes do not typically travel far into dry upland habitats. In their Programmatic Consultation with the U.S. Army Corps of Engineers for 404 Permitted Projects with Relatively Small Effects on the Giant Garter Snake within Butte, Colusa, Glenn, Fresno, Merced, Sacramento, San Joaquin, Solano, Stanislaus, Sutter and Yolo Counties, California, the USFWS specified that construction projects could avoid habitat disturbance to giant garter snake by maintaining a 200 foot buffer from the banks of potential aquatic habitat.

The project site is within the known geographic range of the species and the canals abutting the project site to the west and south provide marginal aquatic habitat (Dudek, 2023). The ditch along the southside of Bayou Way does not provide suitable aquatic habitat for giant garter snake as Sacramento County has confirmed the ditch has been abandoned and is no longer used for irrigation; as such, the ditch feature is not expected to hold sufficient water during the snake's active season (early spring through mid-fall) when the species utilizes aquatic habitat. The agricultural land has been in dryland crop rotation for over a decade and is not suitable aquatic habitat; however, it does provide potential upland habitat in the form of basking or winter shelter, particularly within 200 feet of the canals abutting the project site that may be used by giant garter snakes.

Burrowing activity by fossorial mammals (e.g., ground squirrels) was not detected at the time of the reconnaissance survey but cannot be ruled out. The nearest giant garter snake occurrences are within a half mile (0.5 miles) east of the project site in a series of adjacent irrigation canals east of Power Line Road and north of Interstate 5 within airport property (Dudek, 2023). These records include detections from 1976 through 2006 in various locations of that canal complex. Other nearby giant garter snake occurrences are in the irrigation canal east/southeast of the project site giant garter

snake were trapped in 2005 and 2006 (CDFW, 2023a) and more recently in 2019 when a single giant garter snake was captured about one mile southeast of the project site during trapping conducted as part of the biological effectiveness monitoring for TNBHC (no individuals were captured in this area during subsequent monitoring in 2020-2022) (ICF, 2023). No culvert is present beneath Power Line Road that would provide aquatic connectivity between those canals with recorded occurrences and the one south of the project site.

Power Line Road presents a barrier between the canals east of the project site. The canal to the east of Power Line Road has aquatic vegetation present and the banks have more vegetative cover (low-lying Himalayan blackberry predominantly) and some armored rock, whereas the canal adjacent to the project site has simple earthen banks with sparse vegetation and no aquatic vegetation.

Grubbing, earth moving, and operation of heavy equipment in uplands within 200 feet of the irrigation channels on the west and south sides of the project site could result in direct mortality to individual giant garter snakes if they are present. Noise, vibration, and increased activity levels could indirectly impact giant garter snakes by causing individuals to avoid areas they normally use, which could make them more vulnerable to predation or interfere with normal breeding activity. However, the proposed 200-foot wide buffer area along the western and southern borders of the project site would reduce the overall potential for the proposed project to impact giant garter snake aquatic and upland habitat associated with adjacent agricultural channels. To ensure exclusion of giant garter snake from areas of active construction, Mitigation Measure BR-6 would be implemented which calls for installation and maintenance of wildlife exclusion fencing along the western and southern perimeters of the project site to further reduce the potential for presence of this species within active construction areas. As such, the project's impact to giant garter snake would be **less than significant**.

WESTERN POND TURTLE

The analysis of potential substantial adverse effects on western pond turtle due to implementation of the 2022 Airport Master Plan Update was discussed on page 4-62 of the 2022 Airport Draft SEIR. The analysis determined that implementation of the 2022 Master Plan Update could encroach into potential nesting habitat for western pond turtle. With implementation of appropriate mitigation, including conducting a pre-construction clearance survey for western pond turtle and pausing construction if a western pond turtle is encountered, it was concluded that the impact to western pond turtle from implementation of the 2022 Master Plan Update impact would be less than significant.

Western pond turtle is a CDFW Species of Special Concern typically found in open water such as lakes, streams, ponds, reservoirs, estuaries, and brackish waters throughout California, and is a candidate for listing under the federal ESA. This species prefers areas with cover from predators, such as vegetation and algae, as well as basking sites for thermoregulation. Adults tend to favor deeper, slow-moving water, whereas hatchlings search for slow and shallow water that is slightly warmer. Western pond turtles spend most of the warmer months (April through September) in aquatic

habitats that provide favorable environments for foraging, mating, basking, and predator avoidance (CDFW, 2023b; Germano and Rathbun, 2008).

Western pond turtles use terrestrial habitats for nesting and overwintering. They normally lay their eggs near water; however, females may climb hillsides along foothill streams, sometimes traveling over 330 feet to find a suitable nest site. Generally, three to 11 eggs are laid from March to August depending on local conditions and are incubated for approximately 73 to 80 days. Although nesting sites should contain deep soils (at least 4 inches deep), the type of soil can vary from sandy to very hard (CDFW, 2023b).

The project site is within the species' known geographic range and the nearest occurrence record is three miles to the northwest within Teal Bend Golf Club. The agricultural fields provide terrestrial habitat and the adjacent canals along the western and southern boundary of the site provide suitable aquatic habitat. The canals provide marginal habitat, lacking cover and basking sites. No western pond turtles were observed during the field survey.

Grubbing, earth moving, and operation of heavy equipment in uplands proximal to the drainage ditches which run along the western and southern boundary of the project site could result in direct mortality to western pond turtle individuals. The establishment of the 200-foot wide buffer area from the ditches along the western and southern boundary would greatly reduce the overall potential for the proposed project to directly affect western pond turtle. This buffer would not entirely avoid risk to this species, since its known overland range extends further from aquatic habitat than for giant garter snake. Additionally, noise, vibration, and increased activity levels could indirectly impact western pond turtles by causing individuals to avoid areas they normally use. As such, construction activities associated with implementation of the proposed project without mitigation could have a potentially significant impact on western pond turtles.

Implementation of Mitigation Measure BR-6, which is similar to the mitigation measure included in the 2022 Airport SEIR to address the impacts to western pond turtles, requires a qualified biologist to survey the area for western pond turtle prior to the commencement of ground disturbance; furthermore, during active construction, the qualified biologist will ensure the protection of any encountered western pond turtles by stopping construction and either allowing the animal to leave the construction area voluntarily or physically relocating the animal to a safe suitable habitat. Additionally, Mitigation Measure BR-6 calls for installation and maintenance of wildlife exclusion fencing prior to construction along the western and southern perimeter of the construction area. Like the conclusion reached in the 2022 Airport SEIR, this mitigation measure would ensure that the impact to western pond turtle would be **less than significant**.

MITIGATION MEASURES

BR-2 Initiation of ground disturbance (clearing and grubbing, grading, or construction) for any proposed construction project shall be conducted between September 15 and March 1. If new disturbance must be conducted during the nesting season, March 1 to September 15, a focused surveys for Swainson's hawk nests on the site and within ½ mile of the site shall be

conducted by a qualified biologist in accordance with the Swainson's Hawk Survey Protocol outlined in the Swainson's Hawk Technical Advisory Committee 2000 paper. Multiple surveys **will** ~~may~~ be required ~~depending on the timing of the surveys~~. If no active nests are found during the focused survey, no further mitigation will be required.

If active nests are found, a qualified biologist shall be retained to prepare a site-specific take avoidance plan that proposes measures to comply with the California Endangered Species Act and the Fish and Game Code, and these measures shall be implemented prior to the start of any ground-disturbing activities. Measures may include, but are not limited to, nest-specific no disturbance buffers, biological monitoring, rescheduling project activities around sensitive periods for the species (e.g., nest establishment), or implementation of construction best practice such as staging equipment out of the species' line of sight from the nest tree. In the event take of Swainson's hawk cannot be avoided, the project applicant may seek related take authorization as provided by Fish and Game Code. Evidence of take authorization from CDFW must be submitted to Sacramento County prior to removal of any Swainson's hawk nests. **Removal of known raptor nest trees will be replaced with appropriate native trees species at a ratio of 3:1 at a location within the Natomas Basin but outside the FAA-designated critical zone for the airport.**

BR-3 Prior to the commencement of ground-disturbing activity in the fallowed agricultural landcover suitable as foraging habitat for Swainson's hawks, the applicant will compensate for permanent loss of 110 acres of foraging habitat through the preservation and management of foraging habitat. This compensatory mitigation will be at a ratio of 1:1 (mitigation habitat to permanently lost habitat). For permanent loss of foraging habitat, mitigation sites will be within 10 miles of the Natomas Basin so that habitat would be provided for Swainson's hawks nesting or foraging in and near the Natomas Basin.

This mitigation may be provided through purchase of credits from an agency-approved conservation bank, or through protection of habitat through acquisition of fee-title or a conservation easement and funding for long-term management of the habitat. Protection of land on Airport owned property for mitigation purposes will be implemented through deed restriction or other similarly enforceable land use restriction mechanisms.

Mitigation provided through acquisition of fee title or a conservation easement outside of Airport owned property must satisfy the following requirements:

- The mitigation site must be approved by the County and CDFW.
- The form and content of the easement must be recordable and acceptable to the County and CDFW, prohibit any activity that substantially impairs or diminishes the land's capacity as suitable Swainson's Hawk foraging

habitat, and protect any existing water rights necessary to maintain foraging habitat in agricultural production.

- The easement or title will be transferred to the CDFW or a third-party conservation organization acceptable to the County and CDFW.
- A fee must be paid to the County to cover the costs of administering, monitoring, and enforcing the easement or managing the property in fee title in an amount determined by the County or the third-party conservation organization, not to exceed three thousand five hundred dollars (\$3,500.00) per acre. The actual amount will be calculated by use of the Property Analysis Record (PAR) software program or other generally accepted, attribute based, site-specific method for calculating in-perpetuity endowments for preserves.

BR-4 If construction activity (which includes clearing, grubbing, or grading) is to commence within 500 feet of suitable nesting habitat for raptor nests between February 1 and September 15, a survey for raptor nests shall be conducted by a qualified biologist. The survey shall cover all potential tree, ground, or manmade (e.g., utility poles) suitable nesting habitat on-site and off-site up to a distance of 500 feet from the project boundary. The survey shall occur within 15 days of the date that project activities will encroach within 500 feet of such suitable habitat. The biologist shall supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity. If no active nests are found during the survey, no further mitigation will be required.

If any active nests are found, the Environmental Coordinator and a site-specific take avoidance plan that describes avoidance/protective measures to comply with the Fish and Game Code shall be prepared in consultation with a qualified biologist. The avoidance/protective measures shall be implemented prior to the commencement of construction within 500 feet of an identified nest. Measures may include, but are not limited to, nest-specific no disturbance buffers, biological monitoring, rescheduling project activities around sensitive periods for the species (e.g., nest establishment), or implementation of construction best practice such as staging equipment out of the species' line of sight from the nest tree.

If a lapse in project-related work of 15 days or longer occurs, the qualified biologist shall perform a new focused survey, and if nests are found, perform the tasks described in this measure.

BR-5 Prior to ground disturbance (which includes clearing, grubbing, or grading) within 500 feet of suitable burrow habitat, a survey for burrowing owl shall be conducted by a qualified biologist. The survey shall occur within 30 days of

the date that construction will encroach within 500 feet of suitable habitat. Surveys shall be conducted in accordance with the following:

1. A survey for occupied burrows and owls should be conducted by walking through suitable habitat over the area to be disturbed and in areas within 150 meters (~500 feet) of the project impact zone.
2. Pedestrian survey transects should be spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines should be no more than 30 meters (~100 feet) and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility. To efficiently survey projects larger than 100 acres, it is recommended that two or more surveyors conduct concurrent surveys. Surveyors should maintain a minimum distance of 50 meters (~160 feet) from any owls or occupied burrows. It is important to minimize disturbance near occupied burrows during all seasons.
3. If no occupied burrows or burrowing owls are found in the survey area, a letter report documenting survey methods and findings shall be submitted to the Environmental Coordinator and no further mitigation is necessary.
4. If occupied burrows or burrowing owls are found, then a complete burrowing owl survey is required. This consists of a minimum of four site visits conducted on four separate days, which must also be consistent with the Survey Method, Weather Conditions, and Time of Day sections of Appendix D of the California Fish and Wildlife "Staff Report on Burrowing Owl Mitigation" (March 2012). Submit a survey report to the Environmental Coordinator which is consistent with the Survey Report section of Appendix D of the California Fish and Wildlife "Staff Report on Burrowing Owl Mitigation" (March 2012).
5. If occupied burrows or burrowing owls are found the applicant shall contact the Environmental Coordinator and confer with California Fish and Wildlife prior to construction and will be required to submit a Burrowing Owl Mitigation Plan (subject to the approval of the Environmental Coordinator and in consultation with California Fish and Wildlife). This plan must document all proposed measures, including avoidance, minimization, exclusion, relocation, or other measures, and include a plan to monitor mitigation success. The California Fish and Wildlife "Staff Report on Burrowing Owl Mitigation" (March 2012) shall be followed in the development of the mitigation plan.

BR-6 To avoid impacts to western pond turtles the applicant shall:

1. Twenty-four hours prior to the commencement of ground-disturbing activity (i.e., clearing, grubbing, or grading) suitable habitat within the project area shall be surveyed for western pond turtle by a qualified biologist. The survey shall include aquatic habitat and 1,650 feet of adjacent uplands surrounding aquatic habitat within the project area. The biologist shall supply a brief written report (including date, time of survey, survey

method, name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity.

2. Construction personnel shall receive worker environmental awareness training. This training instructs workers how to recognize western pond turtles and their habitat.
3. If a western pond turtle is encountered during active construction, all construction shall cease until the animal has moved out of the construction area on its own or relocated by a qualified biologist. If the animal is injured or trapped, a qualified biologist shall move the animal out of the construction area and into a suitable habitat area. California Fish and Wildlife and the Environmental Coordinator shall be notified within 24-hours that a turtle was encountered.
4. Install exclusion fencing along the entire western and southern perimeters of the work areas to prevent western pond turtles that may be occupying the nearby ditches from entering into active construction zones. Pre-construction surveys will be conducted prior to fence installation. The fencing shall extend to the edge of the bank of the ditches, perpendicular to the water line. The exclusion fencing shall consist of silt fence material. Fences shall be installed to a depth of 6 inches below the ground surface to prevent special-status reptiles from going under the fence. Fences shall be installed before May 1 and prior to initial grading and deployment of staging equipment. It shall remain in place until construction machinery and material are completely removed. Prior to the commencement of daily construction activities, the on-site biological monitor shall conduct a morning pre-construction survey to verify that there are no special-status reptiles in the work area. This survey process shall also include verifying that the fence is in suitable condition. If any repairs are necessary, the monitor shall guide construction personnel in making the necessary repairs.
5. **The applicant shall prepare a western pond turtle relocation plan. This relocation plan shall include: a summary of the species and habitat features; identification of habitat suitability in relation to the project site; acceptable methods to capture, handle, and relocate individuals out of the construction area; minimum qualifications for biologists to conduct physical relocation of turtle individuals, if necessary; identification of where salvaged individuals will be relocated; and identification of wildlife rehabilitation center or veterinary facility where any injured individuals found within the project site will be taken.**

IMPACT: INTERFERE SUBSTANTIALLY WITH THE MOVEMENT OF ANY NATIVE RESIDENT OR MIGRATORY FISH OR WILDLIFE SPECIES OR WITH ESTABLISHED NATIVE RESIDENT OR MIGRATORY WILDLIFE CORRIDORS, OR IMPEDE THE USE OF NATIVE WILDLIFE NURSERY SITES

The analysis of potential substantial adverse effects on movement of resident or migratory wildlife due to implementation of the 2022 Airport Master Plan Update was discussed on pages 4-64 to 4-65 of the 2022 Airport Draft SEIR. The analysis determined that construction activities may remove giant garter snake transportation corridors through filling of drainage ditches, but that since the ditches in and around the airport are not high quality and not likely used as main transportation corridors, construction pursuant to the Airport Master Plan Update would not substantially interfere with established active resident wildlife corridors. Additionally, the 2022 Airport SEIR considered effects on migratory birds, as the area is located within the Pacific Flyway. With implementation of mitigation to protect nesting migratory birds, the 2022 Airport SEIR concluded that the impact to migratory birds was less than significant.

While the project site is within the Pacific flyway, the Sacramento International Airport facility is subject to intensive wildlife control to prevent airplane-wildlife collision, and Interstate 5 immediately north of the project site presents a substantial barrier to wildlife movement. Furthermore, dryland agricultural practices within the project site do not attract waterfowl, so the project site does not likely function as a wildlife corridor. Nevertheless, the project site may still support migratory bird species.

Construction-related direct impacts on migratory birds could result from the removal of vegetation while an active bird nest is present. In addition, earth moving, operation of heavy equipment, and increased human presence could result in noise, vibration, and visual disturbance. These conditions could indirectly result in nest failure (disturbance, avoidance, or abandonment that leads to unsuccessful reproduction), or could cause flight behavior that would expose a migratory adult to predators. These activities could cause birds that have established a nest before the start of construction to change their behavior or even abandon an active nest, putting their eggs and nestlings at risk for mortality. Without mitigation, this impact is potentially significant.

Operational-related impacts on movement of native birds and bats were also analyzed, specifically the anticipated mortality of these species from collision with the solar array and appurtenant electrical transmission infrastructure.

Based on an analysis of various photovoltaic solar facilities located in California and Nevada, estimates of bird fatalities ranged from 0.031 birds/hectare/year to 5.170 birds/hectare/year, with a mean of 1.088 birds/hectare/year (Kosciuch et al. 2020). Songbirds, pigeons and doves, and more specifically, mourning doves, western meadowlark, and horned lark, were the most frequently detected bird groups at solar facilities in this study. Mourning dove, western meadowlark, and horned lark share several traits, including that these species are primarily ground

dwelling and have comparatively large populations in regions where the studies occurred.

Assuming this range of avian mortality is directly translatable to the project site, there would be predicted mortality of between approximately one bird/year to about 207 birds/year, with a mean of around 43 birds/year. The project site is located within the “Critical Zone” for the Airport, defined by the Federal Aviation Administration (FAA) as a 10,000-foot radius around the centerlines of the Airport’s two runways. Areas around the airport are actively managed to discourage occupation by wildlife that could potentially fly into the flight path of aircraft landing or taking off from the runway. As a result, the risk of birds incidentally colliding with the solar related infrastructure that would be installed within the project site is thereby commensurately reduced. For this reason, it is reasonable to assume that mortality directly attributable to the presence of a new solar array within the project site would be lower than the range in the study cited above.

There is less information available regarding bat impacts at solar facilities compared to studies of avian mortality, likely because energy facilities in the United States typically require documentation of avian fatalities but not bats (Conkling et al., 2023). The U.S. Geological Survey is conducting a before-after-control-impact (i.e., BACI design) study to better understand the impacts of solar facilities on birds and bats. One study in the United Kingdom found that bat activity was significantly reduced at solar farms compared to other nearby areas (Tinsley et al. 2023). This reduction in bat use around solar facilities reduces the risk of their mortality through accidental collisions with solar infrastructure. It would also be difficult to separate fatalities directly linked to a solar facility from those brought about through natural mortality.

Because only a few bird mortalities per year would be anticipated at the project facility once operational, and even fewer bats would potentially be impacted, the operation of the project would not result in a significant impact of the movement of birds and bats.

Mitigation Measure BR-7, which is nearly identical to the mitigation measure included in the 2022 Airport SEIR to address impacts to nesting migratory birds, would require establishment and maintenance of non-disturbance buffers around active nests. Mitigation Measure BR-7 would ensure migratory nesting birds are not disturbed as a result of construction. Following construction, the site will be operated as a vehicle charging station and rest stop, limiting its value as habitat for migratory birds. While some bird species could potentially use the project site as a habitat linkage, the habitat type available in the project site remains regionally abundant. As such it would be expected that migratory birds could easily use available suitable habitat in the vicinity of the project site following its development. Irrigation and drainage ditches, such as those present just outside the perimeter of the project site, can provide corridors for dispersal for highly aquatic species such as giant garter snake and western pond turtles. Since such aquatic habitat will be avoided by design, the project will not result in interference to movement conditions for highly aquatic species. In conclusion, like the conclusion

reached in the 2022 Airport SEIR, if Mitigation Measure BR-7 is implemented, it would ensure that the impact of the proposed project to migration and movement corridors for wildlife would be **less than significant**.

MITIGATION MEASURES

BR-7 To avoid impacts to nesting migratory birds the following shall be required:

1. If construction activity (which includes clearing, grubbing, or grading) is to commence within 50 feet of nesting habitat between February 1 and August 31, a survey for active migratory bird nests shall be conducted no more than 14 days prior to construction by a qualified biologist.
2. Trees slated for removal shall be removed during the period of September through January, in order to avoid the nesting season. Any trees that are to be removed during the nesting season, which is February through August, shall be surveyed by a qualified biologist and will only be removed if no nesting migratory birds are found.
3. If active nest(s) are found in the survey area, a non-disturbance buffer, the size of which has been determined by a qualified biologist, shall be established and maintained around the nest to prevent nest failure. All construction activities shall be avoided within this buffer area until a qualified biologist determines that nestlings have fledged, or until September 1.

IMPACT: CONFLICT WITH ANY LOCAL POLICIES OR ORDINANCES PROTECTING BIOLOGICAL RESOURCES

The analysis of potential conflicts with local policies or ordinances protecting biological resources due to implementation of the 2022 Airport Master Plan Update was discussed on pages 4-66 to 4-67 of the 2022 Airport Draft SEIR. The analysis determined that implementation of projects pursuant to the Airport Master Plan Update could result in native trees being removed, such as in the area north of Elverta Road identified for commercial development during PAL 3 as it contains native trees. Even with implementation of mitigation measures BR-8 and BR-9, which call for conducting a tree inventory and conducting replacement tree plantings, since it was unknown the number of trees that would need to be removed, it was concluded that implementation of the 2022 Master Plan Update would remain potentially significant.

As described in detail above in the *Regulatory Section*, Sacramento County has adopted an ordinance to protect Swainson's hawk foraging habitat. Construction of the proposed project, including from installation of the solar generation field and the development of the charging areas and associated support facilities, would result in the permanent loss of fallowed agricultural foraging habitat for Swainson's hawk. Specifically, construction of the vehicle charging facilities and rest area would permanently convert fallowed agricultural land substrate where small prey items (e.g., rodents) for Swainson's hawk are prevalent to an entirely built environment where the appropriate prey base for the hawk is expected to be eliminated or made non-accessible.

Additionally, it is conservatively assumed that Swainson's hawk would not use areas beneath solar panels or between solar array rows or blocks for foraging. Without mitigation, the proposed project's potential for conflicts with the Sacramento County ordinance to protect foraging habitat for Swainson's hawk is potentially significant. If implemented, Mitigation Measure BR-3 would reduce this conflict to a less than significant level since the measure is consistent with the Swainson's Hawk Impact Mitigation Program and would compensate for the loss of Swainson's hawk foraging habitat.

Sacramento County has also adopted measures protecting its native and landmark trees. To be considered a protected tree it must have a dbh of at least 6 inches, or if it was multiple trunks of less than 6 inches each, a combined dbh of 10 inches. There is a Northern California black walnut (*Juglans hindsii*) and an arroyo willow (*Salix lasiolepis*) tree with trunks of greater than six inches in diameter located along Bayou Way along the margin of the project area. In addition, there are three blue oak (*Quercus douglasii*) trees located east of the project area along Power Line Road, and two blue oak trees within the off-site improvements area at the intersection of Bayou Way and Airport Boulevard. Each of these seven trees are native to Sacramento County. For the purposes of this analysis, it is assumed that all seven of the aforementioned trees identified within the study area could be removed as a result of project construction; as such, implementation of the proposed project could potentially result in damage to or removal of native trees that are protected by Sacramento County, including five native oak trees specifically protected by Sacramento County Code Chapter 19.12. Without mitigation, the proposed project's potential for conflicts with the Sacramento County ordinance to protect native trees is potentially significant. Mitigation Measures BR-8 and BR-9 are similar to the mitigation measures included in the 2022 Airport SEIR to address impacts to native trees and they call for conducting a tree inventory and conducting replacement tree plantings. Like the conclusion reached in the 2022 Airport SEIR, if these mitigation measures are implemented, the impact related to any potential for conflicts with local policies or ordinances protecting native trees would be reduced to a less than significant level.

In summary, the proposed project has the potential for potentially significant conflicts with local policies protecting biological resources. If mitigation measures BR-3, BR-8, and BR-9 are implemented, these impacts would be reduced to **less than significant**.

MITIGATION MEASURES

BR-8 Prior to approval of permits for any ground disturbing activities, a tree inventory shall be completed which includes all native trees over six (6) inches in diameter at breast height must be inventoried including species, size, dripline radius, health condition within the proposed areas of impact. The removal of native trees shall be compensated for by planting in-kind native trees equivalent to the dbh inches lost, based on the ratios listed below, at locations that are authorized by the Environmental Coordinator. On-site preservation of native trees that are less than 6 inches (<6 inches) dbh, may also be used to meet this compensation requirement. Native trees include:

valley oak (*Quercus lobata*), interior live oak (*Quercus wislizenii*), blue oak (*Quercus douglasii*), or oracle oak (*Quercus morehus*), California sycamore (*Platanus racemosa*), California black walnut (*Juglans californica*, which is also a List 1B plant), Oregon ash (*Fraxinus latifolia*), western redbud (*Cercis occidentalis*), gray pine (*Pinus sabiniana*), California white alder (*Alnus rhombifolia*), boxelder (*Acer negundo*), California buckeye (*Aesculus californica*), narrowleaf willow (*Salix exigua*), Gooding's willow (*Salix gooddingii*), red willow (*Salix laevigata*), arroyo willow (*Salix lasiolepis*), shining willow (*Salix lucida*), Pacific willow (*Salix lasiandra*), and dusky willow (*Salix melanopsis*).

Replacement tree planting shall be completed prior to approval of grading or improvement plans, whichever comes first.

Equivalent compensation based on the following ratio is required:

- one preserved native tree < 6 inches dbh on-site = 1 inch dbh
- one D-pot seedling (40 cubic inches or larger) = 1 inch dbh
- one 15-gallon tree = 1 inch dbh
- one 24-inch box tree = 2 inches dbh
- one 36-inch box tree = 3 inches dbh

Prior to the approval of Improvement Plans or Building Permits, whichever occurs first, a Replacement Tree Planting Plan shall be prepared by a certified arborist or licensed landscape architect and shall be submitted to the Environmental Coordinator for approval. The Replacement Tree Planting Plan(s) shall include the following minimum elements:

1. Species, size and locations of all replacement plantings and < 6-inch dbh trees to be preserved
2. Method of irrigation
3. If planting in soils with a hardpan/duripan or claypan layer, include the Sacramento County Standard Tree Planting Detail L-1, including the 10-foot-deep boring hole to provide for adequate drainage
4. Planting, irrigation, and maintenance schedules;
5. Identification of the maintenance entity and a written agreement with that entity to provide care and irrigation of the trees for a 3-year establishment period, and to replace any of the replacement trees which do not survive during that period.
6. Designation of 20-foot root zone radius and landscaping to occur within the radius of trees < 6 inches dbh to be preserved on-site.

No replacement tree shall be planted within 15 feet of the driplines of existing native trees or landmark size trees that are retained on-site, or within 15 feet

of a building foundation. The minimum spacing for replacement native trees shall be 20 feet on-center. Examples of acceptable planting locations are publicly owned lands, common areas, and landscaped frontages (with adequate spacing). Generally unacceptable locations are utility easements (PUE, sewer, storm drains), under overhead utility lines, private yards of single-family lots (including front yards), and roadway medians.

Native trees <6 inches dbh to be retained on-site shall have at least a 20-foot radius suitable root zone. The suitable root zone shall not have impermeable surfaces, turf/lawn, dense plantings, soil compaction, drainage conditions that create ponding (in the case of oak trees), utility easements, or other overstory tree(s) within 20 feet of the tree to be preserved. Trees to be retained shall be determined to be healthy and structurally sound for future growth, by an ISA Certified Arborist subject to Environmental Coordinator approval.

If tree replacement plantings are demonstrated to the satisfaction of the Environmental Coordinator to be infeasible for any or all trees removed, then compensation shall be through payment into the County Tree Preservation Fund. Payment shall be made at a rate of \$325.00 per dbh inch removed but not otherwise compensated, or at the prevailing rate at the time payment into the fund is made.

BR-9 For the purpose of this mitigation measure, a native tree is defined as a those listed in Mitigation Measure BR-8 having a diameter at breast height (dbh) of at least 6 inches, or if it has multiple trunks of less than 6 inches each, a combined dbh of at least 10 inches.

With the exception of the trees removed and compensated for through Mitigation Measure BR-8, above, all native trees on the project site, all portions of adjacent off-site native trees which have driplines that extend onto the project site, and all off-site native trees which may be impacted by utility installation and/or improvements associated with this project, shall be preserved and protected as follows:

1. A circle with a radius measurement from the trunk of the tree to the tip of its longest limb shall constitute the dripline protection area of the tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of the tree. Removing limbs which make up the dripline does not change the protected area.
2. Chain link fencing or a similar protective barrier shall be installed one foot outside the driplines of the native trees prior to initiating project construction, in order to avoid damage to the trees and their root system.
3. No signs, ropes, cables (except cables which may be installed by a certified arborist to provide limb support) or any other items shall be attached to the native trees.

4. No vehicles, construction equipment, mobile home/office, supplies, materials or facilities shall be driven, parked, stockpiled or located within the driplines of the native trees.
5. Any soil disturbance (scraping, grading, trenching, and excavation) is to be avoided within the driplines of the native trees. Where this is necessary, an ISA Certified Arborist will provide specifications for this work, including methods for root pruning, backfill specifications and irrigation management guidelines.
6. All underground utilities and drain or irrigation lines shall be routed outside the driplines of native trees. Trenching within protected tree driplines is not permitted. If utility or irrigation lines must encroach upon the dripline, they should be tunneled or bored under the tree under the supervision of an ISA Certified Arborist.
7. If temporary haul or access roads must pass within the driplines of oak trees, a roadbed of six inches of mulch or gravel shall be created to protect the root zone. The roadbed shall be installed from outside of the dripline and while the soil is in a dry condition, if possible. The roadbed material shall be replenished as necessary to maintain a six-inch depth.
8. Drainage patterns on the site shall not be modified so that water collects or stands within, or is diverted across, the dripline of oak trees.
9. No sprinkler or irrigation system shall be installed in such a manner that it sprays water within the driplines of the oak trees.
10. Tree pruning that may be required for clearance during construction must be performed by an ISA Certified Arborist or Tree Worker and in accordance with the American National Standards Institute (ANSI) A300 pruning standards and the International Society of Arboriculture (ISA) "Tree Pruning Guidelines".
11. Landscaping beneath the oak trees may include non-plant materials such as boulders, decorative rock, wood chips, organic mulch, non-compacted decomposed granite, etc. Landscape materials shall be kept two (2) feet away from the base of the trunk. The only plant species which shall be planted within the driplines of the oak trees are those which are tolerant of the natural semi-arid environs of the trees. Limited drip irrigation approximately twice per summer is recommended for the understory plants.
12. Any fence/wall that will encroach into the dripline protection area of any protected tree shall be constructed using grade beam wall panels and posts or piers set no closer than 10 feet on center. Posts or piers shall be spaced in such a manner as to maximize the separation between the tree trunks and the posts or piers in order to reduce impacts to the trees.
13. For a project constructing during the months of June, July, August, and September, deep water trees by using a soaker hose (or a garden hose set to trickle) that slowly applies water to the soil until water has penetrated at least one foot in depth. Sprinklers may be used to water

deeply by watering until water begins to run off, then waiting at least an hour or two to resume watering (provided that the sprinkler is not wetting the tree's trunk. Deep water every 2 weeks and suspend watering 2 weeks between rain events of 1 inch or more.

IMPACT: CONFLICT WITH THE PROVISIONS OF AN ADOPTED HABITAT CONSERVATION PLAN, NATURAL COMMUNITY CONSERVATION PLAN, OR APPROVED LOCAL, REGIONAL, OR STATE HABITAT CONSERVATION PLAN

The analysis of potential conflicts with an adopted conservation plan due to implementation of the 2022 Airport Master Plan Update was discussed on pages 4-70 to 4-71 of the 2022 Airport Draft SEIR. The analysis determined that since all the ground disturbing activities through 2038 will occur on existing County property, and that since none of the land owned by the County is identified as potential mitigation land for the Natomas Basin or Metro Air Park Conservancies, the build-out of the Master Plan would not interfere with the abilities for these conservancies to obtain mitigation lands. Furthermore, the 2022 Airport SEIR determined that species-specific mitigation would be consistent or sometimes even more demanding than those required under the conservation plans. As such, it was concluded that implementation of the 2022 Airport Master Plan Update would have a less than significant impact on implementation of the Natomas Basin or Metro Air Park Habitat Conservation Plans.

The Natomas Basin HCP and Metro Air Park HCP are adopted conservation plans whose respective plan areas cover portions of the Natomas Basin. The County of Sacramento is not a party to either the Natomas Basin HCP or the Metro Air Park HCP. As described previously in this chapter, a number of mitigation measures for this proposed project pursuant to protection of biological resources have been identified. Some of these mitigation measures would be required for the protection of some of the same species covered under the Natomas Basin HCP and Metro Air Park HCP (**Table BR-3**). The Natomas Basin HCP provides for conservation of 22 wildlife and plant species. Metro Air Park HCP has 14 covered wildlife and plant species, as listed below, many of which are the same as those listed under the Natomas Basin HCP.

As described previously, the Metro Air Park HCP's conservation plan has been aligned with the NBHCP's conservation plan, and its implementation integrated with that of the NBHCP. The TNBC acts as the plan operator for both the Metro Air Park HCP and the NBHCP. As such, projects that are consistent with the conservation plan for NBHCP would also be consistent with the Metro Air Park HCP.

The effects of the proposed project, including any reasonably foreseeable effects associated with implementation of Mitigation Measures BR-3 and AG-1, were analyzed to consider whether they would conflict with any of the previously described four main strategies of the NBHCP conservation plan: 1) General Conservation Strategy; 2) Guidelines for Reserve Acquisition, 3) Conservation Strategy for Wetland Habitat, and 4) Conservation Strategy for Upland Habitat.

Table BR-3: Evaluation of Habitat Conservation Plan Covered Species

Common Name/Scientific Name	NBHCP Covered Species	MAPHCP Covered Species	Habitat	Mitigation Measure	Effect on HCP Covered Species
Western pond turtle <i>Actinemys marmorata</i>	Yes	Yes	Suitable habitat is present	BR-6	Less than Significant with Mitigation
Tricolored blackbird <i>Agelaius tricolor</i>	Yes	Yes	Suitable habitat is present	N/A	Less than Significant with Mitigation
California tiger salamander <i>Ambystoma californiense</i>	Yes	No	Suitable habitat is absent	N/A	No impact
Burrowing owl <i>Athene cunicularia</i>	Yes	Yes	Suitable habitat is present but no burrows observed in study area	BR-5	Less than Significant with Mitigation
Midvalley fairy shrimp <i>Branchinecta mesovallensis</i>	Yes	No	Suitable vernal pool habitat is absent	N/A	No impact
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	Yes	No	Suitable vernal pool habitat is absent	N/A	No impact
Aleutian Canada goose <i>Branta canadensis leucopareia</i>	Yes	Yes	Study area is not identified as suitable habitat in BRA	N/A	No impact
Swainson's hawk <i>Buteo swainsoni</i>	Yes	Yes	Suitable habitat identified during reconnaissance survey	BR-3	Less than Significant with Mitigation
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	Yes	Yes	No elderberry shrubs identified during reconnaissance survey	N/A	No impact
American peregrine falcon <i>Falco peregrinus anatum</i>	No	Yes	Species not observed during reconnaissance survey	BR-4	Less than Significant with Mitigation
Boggs Lake hedge-hyssop <i>Gratiola heterosepala</i>	Yes	No	Suitable vernal pool habitat is absent	N/A	No impact
Greater sandhill crane <i>Grus canadensis tabida</i>	No	Yes	Study area is not identified as suitable habitat in BRA	N/A	No impact

Common Name/Scientific Name	NBHCP Covered Species	MAPHCP Covered Species	Habitat	Mitigation Measure	Effect on HCP Covered Species
Delta tule pea <i>Lathyrus jepsonii</i> var. <i>jepsonii</i>	Yes	Yes	Suitable habitat is not present	N/A	No impact
Loggerhead shrike <i>Lanius ludovicianus</i>	Yes	Yes	Suitable habitat is present	BR-7	Less than Significant with Mitigation
Legerere <i>Legenere limosa</i>	Yes	No	Suitable vernal pool habitat is absent	N/A	No impact
Vernal pool tadpole shrimp <i>Lepidurus packardii</i>	Yes	No	Suitable vernal pool habitat is absent	N/A	No impact
Colusa grass <i>Neostapfia colusana</i>	Yes	No	Study area is not identified as suitable habitat in BRA	N/A	No impact
Slender Orcutt grass <i>Orcuttia tenuis</i>	Yes	No	Suitable vernal pool habitat is absent	N/A	No impact
Sacramento Orcutt grass <i>Orcuttia viscida</i>	Yes	No	Suitable vernal pool habitat is absent	N/A	No impact
White-faced Ibis <i>Plegadis chihi</i>	Yes	Yes	Study area is not identified as suitable habitat in BRA	N/A	No impact
Bank swallow <i>Riparia riparia</i>	Yes	Yes	Study area lacks suitable nesting and foraging habitat	N/A	No impact
Sanford's arrowhead <i>Sagittaria sanfordii</i>	Yes	Yes	Suitable habitat is not present	N/A	No impact
Western spadefoot toad <i>Spea hammondi</i>	Yes	No	Suitable habitat is not present	N/A	No impact
Giant garter snake <i>Thamnophis gigas</i>	Yes	Yes	Suitable habitat identified during reconnaissance survey	NA	Less than Significant with Mitigation

GENERAL CONSERVATION STRATEGY

The general conservation strategy for the NBHCP calls for all reserve lands to be part of habitat blocks that are at least 400 acres in size. The project site is on a 118-acre parcel of land and thus on its own represents less than 30 percent of the minimum habitat block size required under the NBHCP. As such, the project site on its own would not be eligible for inclusion into the HCP reserve system unless it could be paired with other immediately adjoining properties to cumulatively meet the 400-acre threshold.

Another consideration is that existing habitat preserve lands that are being managed for the NBHCP and the Metro Air Park HCP are not located adjacent to the project site. Priorities for adding additional preserve areas pursuant to these conservation plans will focus on adding properties that are contiguous to or in close proximity to existing preserve holdings. Given that the project site is not located in close proximity to any existing preserve areas means that it is not a priority target for the TNBC.

Furthermore, potential mitigation lands for the NBHCP or the Metro Air Park HCP need to be sited in a manner to avoid potential safety conflicts relating to collisions between aircraft and birds, consistent with the May 1997 Federal Aviation Administration Advisory Circular concerning wildlife attractants in the vicinity of airports. Given the proposed project's location within the southern portion of the Sacramento International Airport Master Plan area and its presence within a one-mile radius from one of the airport runways, the project site would not be viable as potential mitigation land pursuant to implementation of the NBHCP or the Metro Air Park HCP. Therefore, the proposed project would be fully compatible with the first main strategy of the NBHCP conservation plan.

GUIDELINES FOR RESERVE ACQUISITION

The NBHCP calls for all mitigation lands acquired by TNBC to be situated a minimum of 800 feet from existing urban lands or lands designated for urban uses in an adopted general plan. The current General Plan land use designation for the project site is Public and Quasi-Public. This designation establishes areas for a range of public and similar uses such as education, solid and liquid waste disposal, and cemeteries, and is used for Sacramento International Airport properties. The 2022 Airport SEIR identifies the entire project site and other adjacent areas south of I-5 for commercial development. Under the NBHCP's guidelines for reserve acquisition, the project site would not be a target for inclusion into the preserve system for either the NBHCP or the Metro Air Park HCP since it is already identified in the General Plan to support developed uses.

Additionally, the potential for implementation of compensatory mitigation pursuant to the proposed project to conflict with the NBHCP guidelines for reserve acquisition were considered. Implementation of Mitigation Measure BR-3 and Mitigation Measure AG-1 is not expected to directly compete with the TNBC for limited Swainson's hawk foraging habitat or giant garter snake habitat mitigation opportunities within the Natomas Basin because these measures maintain flexibility in the location of where the mitigation site is ultimately located. As a result, they would not unnecessarily directly compete with TNBC for limited habitat mitigation opportunities within the geographic boundaries of the

Natomas Basin. Therefore, the proposed project would be fully compatible with the second main strategy of the NBHCP conservation plan.

CONSERVATION STRATEGY FOR WETLAND HABITAT

The NBHCP conservation strategy for wetland habitat is to (1) convert rice land into managed marsh wetlands and (2) preserve rice land and manage it to provide greater habitat values than unpreserved rice land. The portion of the project site proposed for development neither contains existing rice land nor provides existing wetland habitat values. Additionally, since rice and wetlands are not considered suitable for Swainson's hawk foraging habitat, implementation of Mitigation Measure BR-3 is not expected to impinge on opportunities for the TNBC to carry out the conservation strategy for wetland habitat. Therefore, there would be no conflict between the proposed project and the third main strategy of the NBHCP conservation plan.

CONSERVATION STRATEGY FOR UPLAND HABITAT

The NBHCP conservation strategy for upland habitat is to avoid development in the Swainson's Hawk Zone (within the City of Sacramento and Sutter County) and to preserve upland habitat inside the Swainson's Hawk Zone. The project site is located entirely outside the Swainson's Hawk Zone. Mitigation Measure BR-3 calls for preservation of suitable Swainson's hawk habitat and thus precludes future development of the protected property. Therefore, the proposed project is fully compatible with the fourth main strategy of the NBHCP conservation plan that calls for avoiding development within the Swainson's Hawk Zone.

In summary, the implementation of the proposed project would not be in conflict with the conservation plan for either the NBHCP or the Metro Air Park HCP. Furthermore, as summarized in Table BR-3, the implementation of the proposed project with the biological resource mitigation measures specified in this Supplement to the 2022 Airport SEIR will avoid or minimize any potential impacts to Natomas Basin HCP and Metro Air Park HCP covered species. The project through design will entirely avoid nearby ditches that could function as giant garter snake movement corridors for snakes moving in and out of HCP wetland preserve holdings present approximately a mile away. Given these considerations, the proposed project is consistent and compatible with the existing adopted habitat conservation plans; the overall impact is **less than significant**.

MITIGATION MEASURES

None required.

8 CLIMATE CHANGE

INTRODUCTION

This chapter evaluates the potential greenhouse gas (GHG) emissions and climate change effects associated with the proposed project, focusing on changes to the 2022 Airport SEIR that may result in new or more severe impacts, and describes any mitigation measures needed to address any such impacts.

FINDINGS OF THE AIRPORT MASTER PLAN UPDATE SEIR

Impacts of the 2022 Airport Master Plan Update related to climate change were analyzed in Chapter 5, *Climate Change*, of the 2022 Airport Draft SEIR. The 2022 Airport SEIR determined that implementation of the 2022 Airport Master Plan Update would have the following impacts with respect to climate change:

- Implementation of the Airport Master Plan Update would generate greenhouse gas emissions that may impact the environment (*Significant and Unavoidable Impact*)
- Implementation of the Airport Master Plan Update would conflict with plans, policies, or regulations adopted to reduce greenhouse gas emissions (*Significant and Unavoidable Impact*)

NOTICE OF PREPARATION COMMENTS

The Notice of Preparation (NOP) for the Supplement to the 2022 Airport SEIR was circulated on August 17, 2023. The proposed project received scoping comments from SMAQMD pertaining to air pollutant emissions, but none of the comments from SMAQMD or others were specifically related to GHG emissions. SMAQMD input related to air quality is addressed in Chapter 6, *Air Quality*.

INFORMATION SOURCES

The information analysis included in this chapter was developed based on a review of the 2022 Airport SEIR, the Greenhouse Gas Emissions Assessment prepared by Kimley-Horn in 2024 (Appendix CC-1) and peer reviewed by ESA and Sacramento County and determined to be accurate and adequate for inclusion in this Supplement to the 2022 Airport SEIR, and relevant data from Sacramento County. The impacts were assessed consistent with the guidance provided by the SMAQMD's Guide to Air Quality Assessment in Sacramento County (SMAQMD, 2020a). Additionally, this chapter has been updated to include the most recent developments in the County's climate action planning process.

ENVIRONMENTAL SETTING

Global warming and *climate change* are common terms used to describe the increase in the average temperature of the earth's near-surface air and oceans since the mid-20th century. Increasing GHG concentrations resulting from human activity such as fossil fuel combustion, deforestation, and other activities are a major factor in climate change.

GHGs in the atmosphere naturally trap heat by impeding the exit of solar radiation that has hit the Earth and is reflected back into space—a phenomenon sometimes referred to as the *greenhouse effect*. Some GHGs occur naturally and are necessary for keeping the Earth's surface inhabitable. However, increases in the concentrations of these gases in the atmosphere during the last 100 years have trapped solar radiation and decreased the amount that is reflected back into space, intensifying the natural greenhouse effect and resulting in the increase of global average temperature.

Carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆) are the principal GHGs. CO₂, CH₄, and N₂O occur naturally and are also generated through human activity. Emissions of CO₂ are largely byproducts of fossil fuel combustion (e.g., coal, natural gas), whereas CH₄ results from off-gassing,¹ natural gas leaks from pipelines and industrial processes, and incomplete combustion associated with agricultural practices, landfills, energy providers, and other industrial facilities. N₂O emissions are also largely attributable to agricultural practices and soil management. Other human-generated GHGs include fluorinated gases such as HFCs, PFCs, and SF₆, which have much higher heat-absorption potential than CO₂ and are byproducts of certain industrial processes.

CO₂ is the typical reference gas for climate change, as it is the GHG emitted in the highest volume. While some other GHGs have a higher potential for causing climate change, they are emitted in much lower levels and are not as significant a factor. In emissions inventories, GHG emissions are typically reported as metric tons (MT) of CO₂ equivalents (CO₂e). CO₂e emissions are calculated as the product of the mass emitted of a given GHG and its specific global warming potential (GWP).

POTENTIAL EFFECTS OF HUMAN ACTIVITY ON GHG EMISSIONS

Fossil fuel combustion, especially for the generation of electricity and powering of motor vehicles, has led to substantial increases in CO₂ emissions and thus substantial increases in atmospheric concentrations of CO₂. There is international scientific consensus that human-caused increases in GHGs have contributed to and will continue to contribute to global warming. Potential global warming impacts in California may include a loss in Sierra Nevada snowpack, sea level rise, more extreme heat days per year, an increase in high ground-level ozone days, larger and more intense forest fires, and increased drought conditions. Secondary effects will likely include displacement

¹ Off-gassing is defined as the release of chemicals under normal conditions of temperature and pressure.

due to sea level rise, impacts on agriculture, changes in disease vectors, and changes in habitat and biodiversity for various plants and animals. In California, it is expected that global warming will cause detrimental effects to some of the state's largest industries, including agriculture, winemaking, tourism, skiing, commercial and recreational fishing, forestry, and the adequacy of electrical power generation (CARB, 2017).

GREENHOUSE GAS EMISSIONS ESTIMATES

GLOBAL EMISSIONS

Worldwide GHG emissions generated in 2020 were approximately 36 billion metric tons of CO_{2e} (PBL NEAA, 2022). This includes both ongoing emissions from industrial and agricultural sources but excludes emissions from land use changes.

U.S. EMISSIONS

In 2021, the last emissions year reported at the federal level, the United States emitted about 6.3 billion metric tons of CO_{2e}. Of the major economic sectors—residential, commercial, industrial, electric power, agricultural, and transportation—transportation accounts for the highest fraction of GHG emissions (approximately 29 percent), followed by electric power (approximately 25 percent) and industry (approximately 24 percent). The remaining 22 percent of U.S. GHG emissions were contributed by, in order of magnitude, the agriculture, commercial, and residential sectors (USEPA, 2023).

STATE OF CALIFORNIA EMISSIONS

California produced approximately 369 million metric tons of CO_{2e} in 2020. Combustion of fossil fuel in the transportation sector was the single largest source of California GHG emissions in 2020, accounting for 36.8 percent of total GHG emissions in the state. This sector was followed by the industrial sector (19.9 percent), the electric power sector (including both in-state and out-of-state sources) (16.1 percent), residential and commercial sectors (10.5 percent), agriculture sector (8.6 percent), and other high global warming potential and waste sectors (8.1 percent) (CARB, 2022a).

EXISTING CONDITIONS

SACRAMENTO COUNTY EMISSIONS

Sacramento County produced approximately 4.03 million metric tons of CO_{2e} in 2021, according to the most recent community-wide emissions inventory year. The transportation sector represented the largest source of GHG emissions, accounting for 43 percent of annual CO_{2e} emissions. Electricity and natural gas used to operate, heat, and cool commercial, industrial, and residential buildings accounted for another 36 percent of annual CO_{2e} emissions. The other CO_{2e} emissions sectors included in the inventory were solid waste (4 percent), off-road vehicles (2.5 percent), agriculture (6 percent), high-GWP gases (8 percent), and wastewater (<1 percent) (Sacramento County, 2023). **Table CC-1** presents the 2021 GHG inventory for Sacramento County.

Table CC-1: Sacramento County GHG Emissions

Sector	2021 GHG Emissions (MTCO₂e)	Percent
Residential Energy	878,308	22%
Commercial / Industrial Energy	555,596	14%
On-Road Vehicles	1,740,212	43%
Off-Road Vehicles	107,174	2.5%
Solid Waste	156,422	4%
Agriculture	234,536	6%
High-GWP Gases	329,734	8%
Wastewater	24,928	0.5%
Total	4,026,910	100%
NOTES: GHG = greenhouse gas; MTCO ₂ e = metric tons of carbon dioxide equivalent; GWP = global warming potential.		
SOURCE: Sacramento County, 2023		

EXISTING (BASELINE) CONDITIONS

The project area is located in the Sacramento International Airport Master Plan area in the northwest portion of Sacramento County. The 110-acre site is just south of Sacramento International Airport and Interstate 5 (I-5). This area is approximately 7.5 miles from downtown Sacramento and predominantly agricultural land. The area is not currently farmed actively, so therefore the site is not an existing substantial material source of GHG emissions.

REGULATORY SETTING

In recent years federal, state, regional, and local governments have been active in studying and regulating GHG emissions. The actions that are considered particularly important in establishing targets for GHG emissions, and that have been used by Sacramento County in establishing thresholds of cumulative significance, are listed below.

FEDERAL

MASSACHUSETTS v. ENVIRONMENTAL PROTECTION AGENCY

In *Massachusetts v. Environmental Protection Agency et al.* (2007) 549 U.S. 497, California and other states, cities, and environmental organizations sued to require USEPA to regulate GHGs as pollutants under the Clean Air Act. The U.S. Supreme Court ruled that GHGs fit within the Clean Air Act's definition of a pollutant and that

USEPA has the authority to regulate GHGs. On December 7, 2009, the USEPA Administrator signed two findings regarding GHGs under Section 202(a) of the federal Clean Air Act:

- **Endangerment Finding:** The current and projected atmospheric concentrations of six key GHGs—CO₂, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride—threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The combined emissions of these GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution that threatens public health and welfare.

40 CFR PART 98, USE OF ELECTRIC TRANSMISSION AND DISTRIBUTION EQUIPMENT

Pursuant to federal regulations (40 CFR Part 98, Subpart DD), operators of certain electrical facilities, such as sulfur hexafluoride–containing circuit breakers, are required to report sulfur hexafluoride emissions to EPA (USEPA, 2022). If circuit breakers and switchgear associated with the project contain sulfur hexafluoride, then the project would be subject to reporting under this regulation.

STATE

STATE OF CALIFORNIA POLICY AND LEGISLATION

ASSEMBLY BILL 32 AND THE GLOBAL WARMING SOLUTIONS ACT OF 2006

In 2006, the California Legislature passed Assembly Bill (AB) 32 (California Health and Safety Code Section 38500 et seq.), also known as the Global Warming Solutions Act. AB 32 required CARB to design and implement feasible and cost-effective emissions limits, regulations, and other measures, such that statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25 percent reduction in emissions). The legislature anticipated that AB 32 GHG reduction goals will be met, in part, through local government actions. CARB identified a GHG reduction target of 15 percent from current levels for local governments (municipal and community-wide) and noted that successful implementation of the plan relies on local governments' land use planning and urban growth decisions because local governments have the primary authority to plan, zone, approve, and permit land development to accommodate population growth and the changing needs of their jurisdictions.

SENATE BILL 32 AND ASSEMBLY BILL 197

Signed into law on September 8, 2016, SB 32 (Amendments to California Global Warming Solutions Act of 2006: Emission Limit) amended Health and Safety Code (HSC) Division 25.5 and codifies the 2030 target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The 2030 target is intended to ensure that California remains on track to achieve the goal set forth by Executive Order B-30-15 to reduce statewide GHG emissions by 2050 to 80 percent below 1990 levels. SB 32 stated the intent of the legislature to continue to reduce GHGs for the protection of all

areas of the state and especially the state's most disadvantaged communities, which are disproportionately affected by the deleterious effects of climate change on public health. The law amended HSC Division 25.5 and established a new climate pollution reduction target of 40 percent below 1990 levels by 2030, while AB 197 includes provisions to ensure that the benefits of state climate policies include disadvantaged communities.

ASSEMBLY BILL 1279

The California Climate Crisis Act, otherwise known as AB 1279, was enacted on September 16, 2022. AB 1279 establishes the policy of the State of California to achieve net zero GHG emissions as soon as possible but no later than 2045, and to achieve and maintain net negative GHG emissions thereafter. Additionally, AB 1279 mandates that by 2045, statewide anthropogenic GHG emissions are to be reduced at least 85 percent below 1990 levels. AB 1279 also requires CARB to ensure that the Scoping Plan identifies and recommends measures to achieve carbon neutrality, and to identify and implement policies and strategies for CO₂ removal solutions and carbon capture, utilization, and storage technologies. It also requires CARB to submit an annual report on progress in achieving the Scoping Plan's goals.

THE CALIFORNIA CLIMATE CHANGE SCOPING PLAN

Pursuant to AB 32, CARB adopted the *Climate Change Scoping Plan* (Scoping Plan) in December 2008 (CARB, 2008) (re-approved by CARB on August 24, 2011). The Scoping Plan must be updated at least every 5 years. The *First Update to the Climate Change Scoping Plan* described progress made to meet near-term emissions goals of AB 32, defined California's climate change priorities and activities for the next few years and described the issues facing the State of California as it establishes a framework for achieving air quality and climate goals beyond the year 2020. On December 14, 2017, CARB approved the final version of California's *2017 Climate Change Scoping Plan*, which outlines the proposed framework of action for achieving the 2030 target of reducing GHG emissions by 40 percent relative to 1990 levels (CARB, 2017). The 2017 Scoping Plan acknowledged the importance of local government actions in GHG planning and provided information to support those efforts.

The *2022 Climate Change Scoping Plan* was adopted on December 15, 2022. It assesses progress toward achieving the SB 32 2030 target and lays out the path to achieve carbon neutrality by 2050 and reduce GHG emissions by 85 percent below 1990 levels by 2045, as directed by AB 1279 (CARB, 2022b). Among other things, the plan's actions and outcomes are intended to achieve significant reductions in fossil fuel combustion by deploying clean technologies and fuels, further reductions in short-lived climate pollutants, support for sustainable development increased action on natural and working lands to reduce emissions and sequester carbon, and the capture and storage of carbon.

CALIFORNIA ENVIRONMENTAL QUALITY ACT AND SENATE BILL 97

Under CEQA, lead agencies are required to disclose the reasonably foreseeable adverse environmental effects of projects they are considering for approval. GHG

emissions have the potential to adversely affect the environment because they contribute to global climate change. In turn, global climate change has the potential to raise sea levels, alter rainfall and snowfall, and affect habitat.

Senate Bill (SB) 97, signed in August 2007, acknowledges that climate change is a prominent environmental issue requiring analysis under CEQA. This bill directed the Governor's Office of Planning and Research (OPR) to prepare, develop, and transmit to the California Natural Resource Agency (CNRA) guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, no later than July 1, 2009. The CNRA was required to certify or adopt those guidelines by January 1, 2010. On December 30, 2009, the CNRA adopted amendments to the State CEQA Guidelines, as required by SB 97. The State CEQA Guidelines amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in draft CEQA documents. The amendments became effective March 18, 2010.

The State CEQA Guidelines are embodied in the California Code of Regulations (CCR), Public Resources Code, Division 13, starting with Section 21000. Section 15064.4 of the State CEQA Guidelines specifically addresses the significance of GHG emissions, requiring a lead agency to make a "good-faith effort" to "describe, calculate or estimate" GHG emissions in CEQA environmental documents. Section 15064.4 further states that the analysis of GHG impacts should include consideration of (1) the extent to which the project may increase or reduce GHG emissions, (2) whether the project GHG emissions would exceed a threshold of significance that the lead agency determines applies to the project, and (3) the extent to which the project would comply with "regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions (see, e.g., section 15183.5(b))."

The CEQA Guidelines also state that a project's incremental contribution to a cumulative effect might not be cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program (including plans or regulations for the reduction of greenhouse gas emissions) that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located (State CEQA Guidelines Sections 15064(h)(3) and 15064.4(b)).

The CEQA Guidelines do not require or recommend a specific analytical methodology or provide quantitative criteria for determining the significance of GHG emissions, nor do they set a numerical threshold of significance for GHG emissions. Section 15064.7(c) clarifies that "when adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

When GHG emissions are found to be significant, State CEQA Guidelines Section 15126.4(c) includes the following direction on measures to mitigate GHG emissions:

Consistent with Section 15126.4(a), lead agencies shall consider feasible means, supported by substantial evidence and subject to monitoring or reporting, of

mitigating the significant effects of greenhouse gas emissions. Measures to mitigate the significant effects of greenhouse gas emissions may include, among others:

- (1) Measures in an existing plan or mitigation program for the reduction of emissions that are required as part of the lead agency's decision;
- (2) Reductions in emissions resulting from a project through implementation of project features, project design, or other measures;
- (3) Off-site measures, including offsets that are not otherwise required, to mitigate a project's emissions;
- (4) Measures that sequester greenhouse gases; and
- (5) In the case of the adoption of a plan, such as a general plan, long range development plan, or plans for the reduction of greenhouse gas emissions, mitigation may include the identification of specific measures that may be implemented on a project-by project basis. Mitigation may also include the incorporation of specific measures or policies found in an adopted ordinance or regulation that reduces the cumulative effect of emissions.

STATE OF CALIFORNIA EXECUTIVE ORDERS

EXECUTIVE ORDER S-3-05

In 2005, in recognition of California's vulnerability to the effects of climate change, Governor Arnold Schwarzenegger issued Executive Order S-3-05, which set forth a series of target dates by which statewide emissions of GHGs would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

EXECUTIVE ORDER S-1-07

Executive Order S-1-07, which was signed by Governor Schwarzenegger in 2007, proclaims that the transportation sector is the main source of GHG emissions in California, generating more than 40 percent of statewide emissions. It established a low carbon fuel standard (LCFS) with a goal to reduce the carbon intensity of transportation fuels sold in California by at least 10 percent by 2020.

In September 2018, CARB extended the LCFS program to 2030, making significant changes to the design and implementation of the Program including a doubling of the carbon intensity reduction to 20 percent by 2030.

EXECUTIVE ORDER S-13-08

Governor Schwarzenegger signed EO S-13-08 on November 14, 2008. The order called on State agencies to develop California's first strategy to identify and prepare for expected climate impacts. As a result, the *2009 California Climate Adaptation Strategy (CAS)* report was developed to summarize the best-known science on climate change impacts in the State to assess vulnerability and outline possible solutions that can be implemented within and across State agencies to promote resiliency. The State's fourth major assessment on climate change explores local and statewide vulnerabilities to climate change, highlighting opportunities for taking concrete actions to build climate-change resiliency.

EXECUTIVE ORDER B-16-12

In March 2012, Governor Jerry Brown issued an executive order establishing a goal of 1.5 million zero emission vehicles (ZEVs) on California roads by 2025. In addition to the ZEV goal, EO B-16-12 stipulated that by 2015 all major cities in California will have adequate infrastructure and be 'zero-emission vehicle ready'; that by 2020 the State will have established adequate infrastructure to support 1 million ZEVs; that by 2050, virtually all personal transportation in the State will be based on ZEVs, and that GHG emissions from the transportation sector will be reduced by 80 percent below 1990 levels.

EXECUTIVE ORDER B-30-15

Governor Brown signed EO-B-30-15 on April 29, 2015, directed the following:

- Established a new interim statewide reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030.
- Ordered all State agencies with jurisdiction over sources of GHG emissions to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 reduction targets.
- Directed CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of MMTCO_{2e}.

EXECUTIVE ORDER B-55-18

On September 10, 2018, Governor Brown signed EO B-55-18, committing California to total, economy-wide carbon neutrality by 2045. EO B-55-18 directs CARB to work with relevant State agencies to develop a framework to implement and accounting that tracks progress toward this goal.

CALIFORNIA REGULATIONS**TITLE 24 – CALIFORNIA ENERGY EFFICIENCY STANDARDS**

Energy consumption for new residential and nonresidential buildings is regulated by California Code of Regulations (CCR) Title 24, Part 6, California Energy Efficiency Standards (California Energy Code), which was established in 1978 in response to a legislative mandate to reduce energy consumption in the State. Although not originally intended to reduce GHG emissions, increased energy efficiency and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG

emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically (typically every three years) to allow for the consideration and inclusion of new energy efficiency technologies and methods (CEC, 2016). The current standards became effective on January 1, 2023.

TITLE 24 – CALIFORNIA GREEN BUILDING STANDARDS CODE

Part 11 of CCR Title 24 California Building Standards Code is referred to as the California Green Building Standards (CALGreen) Code, which established new sustainable building standards for all buildings in California. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and indoor environmental quality. These standards include a mandatory set of minimum guidelines, as well as more rigorous voluntary measures, for new construction projects to achieve specific green building performance levels. This code went into effect as part of local jurisdictions' building codes on January 1, 2011, and was most recently updated as the 2022 California Green Building Standards Code, which became effective January 1, 2023 (CBSC, 2022). As discussed below, CALGreen includes several residential and nonresidential electric vehicle charging requirements and recommendations.

For new non-residential development, 15 percent of the total number of parking spaces are required to be EV capable spaces and 5 percent are required to have EVSE (20 percent total). There are also Tier 1 and Tier 2 nonresidential electric vehicle charging voluntary measures. For Tier 1, 20 percent of the total number of parking spaces are required to be EV capable spaces and 10 percent are required to have EVSE (30 percent total). For Tier 2, 30 percent of the total number of parking spaces are required to be EV capable spaces and 15 percent are required to have EVSE (45 percent total).

REGULATION FOR REDUCING SULFUR HEXAFLUORIDE EMISSIONS FROM GAS INSULATED SWITCHGEAR

The purpose of this regulation (17 CCR Section 95350 et seq.) is to achieve GHG emissions reductions by reducing sulfur hexafluoride emissions from gas-insulated switchgear. Owners of such switchgear must not exceed maximum allowable annual emissions of 1.0 percent of the total sulfur hexafluoride capacity of all the owner's active gas-insulated switchgear equipment.

As defined by the regulation, the annual emissions rate equals the gas-insulated switchgear owner's total annual sulfur hexafluoride emissions from all active gas-insulated switchgear equipment, divided by the average annual sulfur hexafluoride nameplate capacity of all active gas-insulated switchgear equipment. Owners must regularly inventory gas-insulated switchgear equipment, measure quantities of sulfur hexafluoride, and maintain records of these for at least 3 years. Additionally, by June 1 of each year, owners must submit an annual report to CARB's Executive Officer for emissions that occurred during the previous calendar year (CARB, 2011).

LOCAL

SACRAMENTO COUNTY GENERAL PLAN

The following goals and policies from the Air Quality, Circulation, Energy, and Land Use elements of the Sacramento County 2030 General Plan are applicable to GHG emissions associated with the proposed project (Sacramento County, 2011a):

AIR QUALITY

- AQ-16 Prohibit the idling of on-and off-road engines when the vehicle is not moving or when the off-road equipment is not performing work for a period of time greater than five minutes in any one-hour period.
- AQ-22 Reduce greenhouse gas emissions from County operations as well as private development.

CIRCULATION

- CI-67 When feasible, incorporate lighter colored (higher albedo) materials and surfaces, such as lighter-colored pavements, and encourage the creation of tree canopy to reduce the built environment's absorption of heat to reduce the urban "heat island" effect.

SACRAMENTO MUNICIPAL UTILITY DISTRICT (SMUD)

SMUD's 2030 Zero Carbon Plan provides goals and a roadmap to eliminate carbon emissions from its power supply by the year 2030, incorporating use of renewable fuels in power plants and utilizing renewable energy sources such as wind, solar, and geothermal.

SACRAMENTO COUNTY CLIMATE ACTION PLAN

The Sacramento County Board of Supervisors adopted the Climate Action Plan – Strategy and Framework Document (Phase 1 CAP) on November 9, 2011. The Phase 1 CAP provides a framework and overall policy strategy for reducing GHG emissions and managing the County's resources in order to comply with AB 32 (Sacramento County, 2011b). The Phase 1 CAP includes a GHG inventory for the unincorporated areas of Sacramento County for 2005, a GHG emission reduction target, and goals and implementation measures developed to help the County reach these goals. Reduction strategies address GHG emissions associated with transportation and land use, energy, water, waste management and recycling, and agriculture and open space. The County's primary goals related to the proposed project include the following:

- Improve energy efficiency of existing and new buildings in the unincorporated county; and
- Decrease use of fossil fuels by transitioning to renewable energy sources.

On September 11, 2012, the Phase 2A CAP (Government Operations) was adopted by the County. Neither the Phase 1 CAP nor the Phase 2A CAP are "qualified" GHG

reduction plans pursuant to CEQA Guidelines section 15183.5(b), through which subsequent projects may receive CEQA streamlining benefits.

In 2016, the County began preparing the communitywide CAP (Phase 2B CAP), but in late 2018, it was placed on hold pending in-depth review of CAP-related litigation in other jurisdictions. In addition to reducing GHG emissions in Sacramento County, the CAP is intended to serve as a climate change resiliency plan to ensure that the County is prepared for the physical effects of climate change. The County released an updated GHG inventory for 2021 in 2023 (see Table CC-1 above) and a Climate Change Vulnerability Assessment in 2017, which identified extreme heat and increased flooding as the most likely adverse impacts to Sacramento County.

The Phase 2B CAP was re-initiated in early 2020. In March of 2021, the draft Phase 2B CAP was released by the County for public review. On September 7, 2021, a Final Draft CAP and Addendum to the 2030 General Plan EIR was released for public review. The County revised the CAP a second time and released the Revised Final Draft CAP and Revised Addendum to the 2030 General Plan EIR on February 17, 2022. These documents were presented at a Board of Supervisors workshop on March 23, 2022. The County received more than 85 comment letters on the Revised Final Draft CAP leading up to the Board workshop on March 23, 2022. Based on input from the Board of Supervisors during the September 27, 2022, hearing on the CAP, County staff are reviewing the numerous comments received and preparing another revision to the CAP. Sacramento County will be preparing a Subsequent Environmental Impact Report to analyze the potential impacts of the revised CAP and it is anticipated that a draft of the report will be distributed for public review in 2024.

Based on the inventory and GHG reductions identified in the Phase 2B CAP, the County has set a goal of achieving a 4.0 metric tons of carbon dioxide equivalent per capita (MTCO_{2e}/capita) for 2030, resulting in an emissions limit of 3,674,904 MTCO_{2e} (Sacramento County, 2022). As allowed under CEQA Guidelines Section 15183(b), lead agencies may choose to analyze and mitigate significant GHG emissions in a plan for the reduction of GHG emissions or similar document. The CAP remains in draft form and has not been formally adopted by the County. As such, the CAP is not yet qualified for use in CEQA reviews.

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

SMAQMD is the primary agency responsible for addressing air quality concerns in all of Sacramento County—its role is discussed further in Chapter 6, *Air Quality*. SMAQMD also recommends methods for analyzing project-generated GHGs in CEQA analyses and offers multiple potential GHG reduction measures for land use development projects. SMAQMD developed thresholds of significance to provide a uniform scale to measure the significance of GHG emissions from land use and stationary source projects in compliance with CEQA (SMAQMD, 2021). SMAQMD's goals in developing GHG thresholds include ease of implementation; use of standard analysis tools; and emissions mitigation consistent with the statewide GHG targets mandated by AB 32 of 2006.

SMAQMD has published CEQA guidance for the evaluation of GHG emissions to provide lead agencies with a pathway to demonstrate that a project would not result in a cumulatively considerable contribution to global climate change. This guidance identifies measures that should be applied to a project to demonstrate consistency with statewide targets. The measures target GHG emissions sources from new development for which state policies and regulations do not achieve adequate reductions, requiring local supportive measures. These measures are known as Tier 1 and Tier 2 Best Management Practices (BMPs).

The Tier 1 BMPs are:

- **BMP 1:** Projects shall be designed and constructed without natural gas infrastructure.
- **BMP 2:** Projects shall meet the current CALGreen Tier 2 standards, except all EV capable spaces shall instead be EV ready.

EV capable means that the parking space is installed with a raceway and electrical panel capable of supporting an EV charging station. In addition to the raceway and panel, EV ready spaces have dedicated branch circuits, circuit breakers, and other electrical components to support future installation of charging stations, but do not include installation of the charger itself.

If Tier 1 BMPs are not fully implemented, then emissions, including natural gas emissions, should be estimated; on-site measures should be implemented to the maximum extent feasible; the project should have the capacity to be all-electric in the future; and BMP 2 requirements should be met.

The proposed project would not include natural gas infrastructure, would not use natural gas for water or space heating, and would provide EV-capable parking for all vehicles. Thus, it would meet the Tier 1 BMPs.

IMPACTS AND ANALYSIS

The analysis in this Supplement to the 2022 Airport Master Plan Update SEIR describes impacts identified in the 2022 Airport SEIR and describes how the impacts of the proposed project would differ, as applicable.

SIGNIFICANCE CRITERIA

For purposes of this Supplement to the 2022 Airport SEIR and consistent with the criteria presented in the 2022 Airport SEIR, which is based on Appendix G of the CEQA Guidelines, impacts on climate change may be considered significant if implementation of the proposed project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or

- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of GHGs.

CEQA Guidelines Section 152064.4 gives lead agencies the discretion to determine whether to assess GHG emissions quantitatively or qualitatively. The *CEQA Guidelines* do not establish a bright-line quantitative threshold of significance; rather, lead agencies are granted discretion to establish significance thresholds for their respective jurisdictions, including looking to thresholds developed by other public agencies, or suggested by other experts, such as the CAPCOA, so long as any threshold chosen is supported by substantial evidence (refer to *CEQA Guidelines* Section 15064.7(c)).

METHODOLOGY AND ASSUMPTIONS

As discussed in Chapter 1, Introduction, the 2022 Airport Master Plan Update and the 2022 Airport SEIR considered a development and operational horizon of 20 years (2018 through 2038) with four Planning Activity Levels (PALs). The area south of I-5 within the Airport Master Plan area, which includes the project site, was included within PAL 4 (with anticipated development within the 2034-2038 time period) of the 2022 Airport Master Plan Update. Due to the extended 20-year planning horizon, Master Plan projects or facilities identified in PAL 4 were determined to be beyond the scope of the 2022 Airport SEIR. As discussed in Chapter 8, *Land Use*, of the 2022 Airport Draft SEIR (page 8-11), the 2022 Airport Master Plan Update identifies future commercial development south of I-5 in PAL 4. The discussion further notes that if PAL 4 becomes ripe for development additional environmental review will be necessary. Accordingly, proposed project impacts related to greenhouse gas emissions and related climate change on the project site are evaluated at a project-level below.

EMISSION ESTIMATES

Project-related GHG emissions were evaluated in two categories: short-term emissions due to construction, and long-term, ongoing emissions due to operations. Estimated construction- and operation-related emissions for the proposed project are presented below in Table CC-2 and Table CC-3, respectively.

The Greenhouse Gas Emissions Assessment focused on project-related operational emissions primarily associated with increased motor vehicle use. The analysis, based on the Transportation Evaluation prepared by Kimley-Horn (2023), projected elevated traffic levels resulting from the project with a notable emphasis on generating a significant number of electric vehicle trips. The assessment assumed all trips associated with electric vehicle chargers to be electric with no GHG emissions, except for onsite employees.

Emissions from various operational sources, including area and stationary sources were quantified using the California Emissions Estimator Model (CalEEMod), version 2022.1.0, with consideration for compliance with select rules and regulations related to energy and vehicle efficiency. CalEEMod is an approved emissions inventory software program that allows the user to estimate criteria pollutant and GHG emissions from land use development projects. Project-specific information was used for modeling, when

possible (e.g., proposed construction schedule and regulations). Where project-specific data are unavailable, CalEEMod default factors for construction equipment and worker trips were used. Furthermore, the CalEEMod energy inputs were adjusted to align with the most current California Title 24, Part 6 Building Energy Efficiency Standards. The project would also include electrical transformers that could result in operational emissions due to SF₆ leakage.

EVALUATION OF EMISSIONS

As described in the *Regulatory Setting* above, the County's 2012 CAP was adopted prior to the passing of SB 32 or AB 1279 and does not present a 2030 community GHG target based on the SB 32 statewide emissions reduction goal for 2030 nor does it address the emissions reduction goals for 2045 or 2050 based on AB 1279. Therefore, it is not used here.

In the absence of a CEQA-qualified CAP for post-2020 projects, SMAQMD has developed and adopted thresholds of significance for GHG emissions during construction and operation of projects. The recommended SMAQMD significance threshold for the construction phase is 1,100 metric tons CO₂e/year. Should the project's construction emissions exceed 1,100 metric tons CO₂e in any year, there would be a significant impact and mitigation measures would be required.

With regard to operational emissions, the SMAQMD's technical support document, *SMAQMD Greenhouse Gas Thresholds/Best Management Practices Applicability*, identifies two recommended thresholds of significance, including 10,000 metric tons CO₂e per year for stationary sources, and 1,100 metric tons CO₂e per year for land use projects. Projects subject to CEQA that are not subject to a qualified CAP may implement SMAQMD-vetted Tier 1 BMPs to reduce on-site GHG emissions. If, following the application of Tier 1 BMPs, a project's GHG emissions are below the 1,100 metric tons CO₂e per year threshold, its contribution to the global climate change impact would be considered less than significant.

An evaluation of potential impacts associated with climate change was based on a review of applicable documents, including the 2022 Airport SEIR, the Sacramento County General Plan, and other state regulations as presented above.

IMPACT: GENERATION OF GHG EMISSIONS

The GHG emissions due to the implementation of the 2022 Airport Master Plan Update were discussed on pages 5-12 to 5-16 of the 2022 Airport Draft SEIR. The analysis concluded that implementation of the 2022 Airport Master Plan Update would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and that even with mitigation requiring all future development projects under the 2022 Airport Master Plan Update to demonstrate compliance with SMAQMD Tier 1 and Tier 2 BMPs as well as applicable future CAP Checklist measures, this impact would remain significant and unavoidable.

CONSTRUCTION

Based on the methods described above, the proposed project would generate 685 MTCO_{2e} over the course of construction. The highest estimated annual GHG emissions, as shown in **Table CC-2**, is construction year 1, generating 655 MTCO_{2e}.

Table CC-2: Construction-Related GHG Emissions

Category	MTCO _{2e}
Construction Year 1 (2024)	655
Construction Year 2 (2025)	30
Total Construction Emissions	685
SMAQMD Project Threshold	1,100
Exceeds Threshold?	No
SOURCE: Appendix CC-1	

Table CC-2 shows that the proposed project would generate approximately 655 MTCO_{2e} in the first construction year. SMAQMD indicates that construction emissions could be compared to the 1,100 MTCO_{2e} per year threshold. As shown above, the proposed project construction-generated GHG emissions would not exceed the threshold.

OPERATION

Operation of the proposed project would result in the long-term generation of GHG emissions from a variety of potential emissions sources on site (e.g., fugitive refrigerants, a stationary source fire pump, landscape maintenance, and indirect emissions from electricity and water consumption) and mobile on-road sources for staff. Total operational emissions associated with the proposed project are shown below in **Table CC-3**.

Table CC-3: Project GHG Emissions

Emission Source	MTCO _{2e} per Year
Area	0.3
Stationary (fire pump)	Negligible
Mobile	122
Solid Waste	8
Water & Wastewater	3
Refrigerants	240
Total	373
SMAQMD Project Threshold	1,100
Exceeds Threshold?	No
SOURCE: Appendix CC-1	

As shown in Table CC-3, annual GHG emissions, comprising operational emissions under the proposed project scenario would be 373 MTCO_{2e} per year, which would not exceed the significance threshold set by SMAQMD.

The proposed project would adhere to the 2022 Title 24 Part 6 Building Energy Efficiency Standards to ensure compliance with updated standards, including electric heat pump requirements and provisions for infrastructure to facilitate the shift from natural gas to electricity. The project would also be consistent with appliance energy efficiency standards in Title 20 of the California Code of Regulations requiring the use of energy- and water-efficient appliances, high-efficiency water fixtures, and water-efficient irrigation systems.

CONSISTENCY WITH SMAQMD GREENHOUSE GAS THRESHOLDS

As mentioned previously, all new developments in SMAQMD must implement Tier 1 BMPs, which require new developments to be constructed without natural gas infrastructure and to be compliant with CalGreen Tier 2 standards, and Tier 2 BMPs when exceeding 1,100 metric tons/year after implementation of Tier 1 BMPs. The project would not exceed the 1,100 metric tons/year threshold and would comply with the CalGreen Tier 2 EV charging requirements. In addition, the project would be consistent with the no-natural gas requirement as no appliances on-site would require natural gas.

The project would result in renewable electricity generation and contribution to the County's energy grid. The project would produce a substantial amount of renewable solar energy which would provide all the electricity for the project site with remaining electricity exported to the County's energy grid.

The proposed project would encourage and actively support the use of electric vehicles, including freight transport vehicles, by providing a charging facility in immediate proximity to I-5, resulting in a substantial decrease in mobile source emissions. There would be a small increase in emissions from facility staff use of non-electric vehicles, as well as other energy and refrigerant sources, but as demonstrated in Table CC-3, these emissions would not exceed SMAQMD thresholds. Therefore, the proposed project would not directly or indirectly generate GHG emissions that would have a significant impact on the environment, and unlike the conclusion reached in the 2022 Airport SEIR, the impact would be less than significant.

IMPACT: CONFLICTS WITH AN APPLICABLE PLAN, POLICY, OR REGULATION

This impact associated with the implementation of the 2022 Airport Master Plan Update was discussed on page 5-16 to 5-17 of the 2022 Airport Draft SEIR. The analysis concluded that implementation of the 2022 Airport Master Plan Update would conflict with local plans adopted to reduce GHG as development under the Master Plan Update would exceed established thresholds. For these reasons, the 2022 Airport SEIR concluded that impacts associated with the potential to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of GHGs would be significant and avoidable despite implementation of recommended mitigation measures.

CONSISTENCY WITH SACRAMENTO COUNTY CLIMATE ACTION PLAN

As discussed above, County staff are reviewing and preparing responses to the numerous comments received on the County's final communitywide CAP published in August 2022. As a result, another revision to this CAP is expected prior to adoption. This discussion addresses impacts relative to this August 2022 final communitywide CAP version, as it is the most recent version. Responses to comments on this version of the CAP are anticipated in 2024, and it is likely its adoption would precede construction of the proposed project. Even prior to adoption, this plan provides useful measures and goals for the proposed project.

The August 2022 final communitywide CAP provides additional guidance for the County's ongoing efforts to reduce GHG emissions and contains goals related to agriculture, energy, transportation/land use, waste, and water. Goals in the section on energy focus on increasing energy efficiency and increasing the usage of renewable sources through local actions such as implementing green building ordinances and programs and creating partnerships with local energy producers. Goals in the transportation and land use sections focus on reductions in vehicle miles traveled, usage of alternative fuel types, and increases in vehicle efficiency through implementation of technologies and planning strategies that improve nonvehicular mobility.

The proposed project would contribute to the successful implementation of the goals set forth in the August 2022 final communitywide CAP by providing a new renewable energy source to the County's electric grid and reducing the County's dependency on natural gas. This is also consistent with SMUD's 2030 Zero Carbon Plan. Further, the project implements EV infrastructure along a high traffic highway which would promote the use of alternative vehicle types in the County, as well as long-haul freight vehicles using I-5. Thus, the project would not conflict with this version of the CAP.

CONSISTENCY WITH VMT GUIDELINES

The County's *Transportation Analysis Guidelines* states that a detailed CEQA transportation analysis would not be required if a project meets the County's screening criteria (Sacramento County, 2020). The project is proposing a solar field with a convenience store, office building, visitor center, and EV truck and passenger car charging and parking areas. According to Table 3-1 in the *Transportation Analysis Guidelines*, because the project is considered local serving retail, a VMT analysis for the proposed project is not required. Thus, the project would not conflict with the County's VMT Guidelines, and a less than significant impact would occur.

CONSISTENCY WITH CARB 2022 SCOPING PLAN UPDATE

As previously discussed, the 2022 Scoping Plan sets a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels by 2045 in accordance with AB 1279. The transportation, electricity, and industrial sectors are the largest GHG contributors in the State. The 2022 Scoping Plan plans to achieve the AB 1279 targets primarily through zero-emission transportation (e.g., electrifying cars, buses, trains, and trucks). Additional GHG reductions are to be achieved through decarbonizing the electricity and industrial sectors.

The proposed project, by providing truck and passenger car EV charging with solar-derived energy, would not conflict with, and in fact would promote successful implementation of the following climate change policies:

- CARB’s Advanced Clean Truck Regulation: Adopted in June 2020, CARB’s Advanced Clean Truck Regulation requires truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California is required to be zero-emission. The Advanced Clean Truck Regulation accelerates the transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8.
- Executive Order N-79-20: Executive Order N-79-20 establishes the goal for all new passenger cars and trucks, as well as all drayage/cargo trucks and off-road vehicles and equipment, sold in California, will be zero-emission by 2035 and all medium and heavy-duty vehicles will be zero-emission by 2045. It also directs CARB to develop and propose rulemaking for passenger vehicles and trucks, medium-and heavy-duty fleets where feasible, drayage trucks, and off-road vehicles and equipment “requiring increasing volumes” of new ZEVs “towards the target of 100 percent.”
- CARB’s Mobile Source Strategy: CARB’s Mobile Source Strategy takes an integrated planning approach to identify the level of transition to cleaner mobile source technologies needed to achieve all of California’s targets by increasing the adoption of ZEV buses and trucks.
- CARB’s Sustainable Freight Action Plan: The Sustainable Freight Action Plan which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks. This Plan applies to all trucks accessing the project site and may include existing trucks or new trucks that are part of the statewide goods movement sector.
- CARB’s Emissions Reduction Plan for Ports and Goods Movement: CARB’s Emissions Reduction Plan for Ports and Goods Movement identifies measures to improve goods movement efficiencies such as advanced combustion strategies, friction reduction, waste heat recovery, and electrification of accessories.

CONCLUSION

As discussed above, the proposed project would not conflict with the wide range of plans, policies, and regulations aimed at reducing GHG emissions by supporting and implementing measures outlined in the Sacramento County CAP, SMAQMD Greenhouse Gas Thresholds, and the CARB Scoping Plan. Therefore, unlike the conclusion reached in the 2022 Airport SEIR, the impact would be less than significant.

MITIGATION MEASURES

None required.

9 CULTURAL RESOURCES

INTRODUCTION

This chapter evaluates the effects of the proposed project related to cultural resources, focusing on changes to the 2022 Airport SEIR that may result in new or more severe impacts, and describes any mitigation measures needed to address any such impacts.

FINDINGS OF THE AIRPORT MASTER PLAN UPDATE SEIR

Impacts of the 2022 Airport Master Plan Update related to cultural resources were analyzed in Chapter 6, *Cultural Resources*, of the 2022 Airport Draft SEIR. The 2022 Airport SEIR determined that implementation of the 2022 Airport Master Plan Update would have the following impacts with respect to cultural resources:

- Implementation of the Airport Master Plan Update would not result in a substantial adverse change in the significance of a built environment resource that is a historical resource pursuant to Section 15064.5 (*Less than Significant Impact*)
- Implementation of the Airport Master Plan Update could result in a substantial adverse change in the significance of an archaeological resource that is a historical resource as defined in Section 15064.5 (*Less than Significant Impact with Mitigation*)
- Implementation of the Airport Master Plan Update could disturb remains, including those interred outside of formal cemeteries (*Less than Significant Impact with Mitigation*)

NOTICE OF PREPARATION COMMENTS

The Notice of Preparation (NOP) for the Supplement to the 2022 Airport SEIR was circulated on August 17, 2023. No comments were received related to historical resources, archaeological resources, or human remains.

INFORMATION SOURCES

The information and analysis included in this chapter was developed based on a review of the 2022 Airport SEIR, relevant policies of the Sacramento County 2030 General Plan, and a cultural resources assessment prepared by Kimley-Horn in 2023, which was peer reviewed by ESA and Sacramento County and determined to be accurate and adequate for inclusion in this Supplement to the 2022 Airport SEIR. Due to the confidentiality of cultural resource locations, disclosure of this information is not available to the public. The report is on file with Sacramento County.

ENVIRONMENTAL SETTING

NATURAL SETTING

The project falls within the Sacramento Valley bioregion, in the northern portion of the great Central Valley. Portions of the project site have been substantially modified by roads, canals and ditches, and agricultural activities. This region is characterized by a Mediterranean climate, which includes dry hot summers and cool wet winters. The Sacramento Valley has two major river systems, the Sacramento and American Rivers, which carry water that originates in the Sierra Nevada south and west into the Sacramento-San Joaquin River Delta. Elevation in the project site averages approximately 10 feet above mean sea level and the topography of the project site is flat.

CULTURAL SETTING

Various attempts to parse out information provided through recorded archaeological assemblages throughout California for the past 12,000 years have led to the development of numerous cultural chronologies. California's archaeological assemblage composition is generally accepted as falling within the following overarching patterns: Paleoindian period (11,550–8550 cal BC), Archaic period (8550 cal BC–cal AD 1100), Emergent period (cal AD 1100–1750), and Ethnohistoric period (post-AD 1769). The most broadly applicable chronology for the Central Valley follows a similar framework, further subdividing the Archaic period into Upper, Middle, and Lower phases based on climatic and cultural variations (Rosenthal et al., 2007).

The project site is located in the southwestern corner of the traditional territory of Nisenan, also known as the Southern Maidu. Other Native American groups located near the project site include the Plains Miwok to the south near Freeport, and the Patwin, on the west side of the Sacramento River.

The proposed project is located within an area of Sacramento County that was historically prone to seasonal flooding from the adjacent Sacramento River. Beginning in the nineteenth century, flood management and land reclamation projects were undertaken in many areas throughout California to make these areas habitable for larger populations, expand agriculture, and offer flood protection. The history of water management facilities in California is as vast and complex as the systems themselves. Because the development of federal, state, and local policies is intrinsically linked to the systematic management of water throughout the state, understanding the over-arching context of water management policy and related construction in California is important to the evolution of reclamation and flood management efforts throughout the state. The project site, the Natomas Basin, and the greater Sacramento area were all shaped by these efforts, as discussed further below.

BACKGROUND RESEARCH

This investigation consisted of a records search at the North Central Information Center at California State University Sacramento on August 7 and October 31, 2023. The

records search identified 18 previous studies that have been completed within 0.5 mile of the project site; of these, seven have covered a least a portion of the project site. The records search identified two cultural resources (districts) intersecting the project site, with an additional three cultural resources identified within 0.5 miles of the project site.

The Sacramento River tribal cultural landscape (designated P-34-005225), roughly encompassing the Lower Sacramento River area, is defined by the distribution of important natural resources across the landscape including waterways, tule habitat, fisheries, and other wildlife that were important for the lifeways of local indigenous groups. The resource is identified as culturally significant by several groups for its association with cultural practices and beliefs, the maintenance of continuing cultural identity, and its association with traditional stories. The area also contributes significantly to broader patterns of pre-contact history, with numerous indigenous sites present within its boundaries. All the previously recorded resources located within 0.5 miles of the project site are situated along the banks of the Sacramento River, highlighting the importance of the river for indigenous lifeways. Thus, while no identified archaeological sites are known within the project site, the proximity of the Sacramento River suggests that the project site and the surrounding area were likely used by people throughout the past.

Reclamation District 1000 (designated P-34-005251) is a 55,000-acre rural historic landscape district that was identified for its importance as a part of a regional reclamation plan that transformed the region from its original floodplain to a distinct open rural landscape consisting of large blocks of fields intersected by levees, canals, and roads that characterize the landscape today. Along with the physical transformation of the landscape came significant changes to the social and economic character of the region. This district, identified as significant at the state level for the period from 1911 to 1939, was among the first and largest reclamation districts in the state and was determined eligible for the National Register of Historic Places in 1994. At that time, it was understood that the integrity of the District would be gradually impacted by urban development associated with population growth in the Sacramento region. In November 2021, the State Historic Preservation Officer (SHPO) concurred that the District is no longer eligible for the National Register due to a degradation of integrity.

SURVEY

A Dudek archaeologist, under the supervision of a Secretary of the Interior qualified archaeologist, conducted an intensive pedestrian survey of the project site on September 19, 2023, using standard archaeological procedures and techniques that meet the Secretary of Interior's Standards and Guidelines for cultural resources inventory. Surface visibility was low (less than 5 percent) due to vegetation and/or development (road paving and gravel shoulders). Vegetation consisted of non-native grasses and other non-native annuals. Vegetation in undeveloped portions of the project site varied in height from 5 to 60 inches. Evidence of artifacts and archaeological deposits was opportunistically sought through inspection of exposed erosional features, mechanical cuts, drainage ditches and animal burrows. The soils within the project site appeared to be largely disturbed by agricultural activity and/or other development. No artifacts or other archaeological resources were identified during the survey.

Dudek architectural historians identified four built environment resources (three ditches and a transmission line) within the project site. As a result of Dudek's archival research and property significance evaluations, all four resources were found to be ineligible for listing on the National Register of Historic Places or for the California Register of Historical Resources due to a lack of historical associations and architectural merit. Three ditches (Ditch A, Ditch B, and Ditch C) located in the project site appear to be linear features associated with Reclamation District 1000. As these resources can no longer be evaluated as potential contributors to the Reclamation District 1000 Historic Landscape (which is no longer eligible as a historical resource), they were evaluated individually and determined to be ineligible. The transmission line in the project site was also evaluated individually and determined to be ineligible. No further consideration of these resources is required for the proposed project.

REGULATORY SETTING

FEDERAL

Cultural resources are addressed through the National Historic Preservation Act (NHPA) of 1966, as amended (54 U.S.C. 306108), and its implementing regulations. Prior to implementing an "undertaking" (e.g., federal funding or issuing a federal permit), Section 106 of the NHPA requires federal agencies to consider the effects of the undertaking on historic properties (i.e., properties listed in or eligible for listing in the National Register) and to afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on any undertaking that would adversely affect properties eligible for listing in the National Register. Under the NHPA, a property is considered significant if it meets the National Register listing criteria at 36 Code of Federal Regulations (CFR) 60.4, as stated below:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and that:

- a) Are associated with events that have made a significant contribution to the broad patterns of our history;
- b) Are associated with the lives of persons significant in our past;
- c) Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- d) Have yielded, or may be likely to yield, information important in prehistory or history.

Federal review of projects is normally referred to as the Section 106 process. This process is the responsibility of the federal lead agency. The Section 106 review

normally involves a four-step procedure, which is described in detail in the implementing regulations (36 CFR Part 800):

- Identify historic properties in consultation with the SHPO and interested parties;
- Assess the effects of the undertaking on historic properties;
- Consult with the SHPO, other agencies, and interested parties to develop an agreement that addresses the treatment of historic properties and notify the ACHP; and finally,
- Proceed with the project according to the conditions of the agreement.

STATE

The State of California consults on implementation of the NHPA of 1966, as amended, and also oversees statewide comprehensive cultural resource surveys and preservation programs. The California Office of Historic Preservation (OHP), as an office of the California Department of Parks and Recreation, implements the policies of the NHPA on a statewide level. The OHP also maintains the California Historical Resources Inventory System. The SHPO is an appointed official who implements historic preservation programs within the state's jurisdiction.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA requires lead agencies to determine if a project would have a significant effect on historical resources, including archaeological resources. The CEQA Guidelines define a historical resource as: (1) a resource in the California Register; (2) a resource included in a local register of historical resources, as defined in Public Resources Code (PRC) Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (3) any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

CEQA requires lead agencies to determine if a project would have a significant effect on important archaeological resources, either historical resources or unique archaeological resources. If a lead agency determines that an archaeological site is a historical resource, the provisions of PRC Sections 21083.2 and 21084.1, and CEQA Guidelines Sections 15064.5 and 15126.4, would apply. If an archaeological site does not meet the CEQA Guidelines criteria for a historical resource, then the site may meet the threshold of PRC Section 21083 regarding unique archaeological resources. A unique archaeological resource is "an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;

- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person” (PRC Section 21083.2 [g]).

The CEQA Guidelines note that if a resource is neither a unique archaeological resource nor a historical resource, the effects of the project on that resource shall not be considered a significant effect on the environment (CEQA Guidelines Section 15064[c][4]).

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

The California Register is “an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change” (PRC Section 5024.1[a]). The criteria for eligibility are based on National Register criteria (PRC Section 5024.1[b]). Certain resources are determined by the statute to be automatically included in the California Register, including California properties formally determined eligible for or listed in the National Register.

To be eligible for the California Register, an historical resource must be significant at the local, state, and/or federal level under one or more of the following criteria:

- 1) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- 2) Is associated with the lives of persons important in our past;
- 3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- 4) Has yielded, or may be likely to yield, information important in prehistory or history (PRC Section 5024.1[c]).

For a resource to be eligible for the California Register, it must also retain enough integrity to be recognizable as a historical resource and to convey its significance. A resource that does not retain sufficient integrity to meet the National Register criteria may still be eligible for listing in the California Register.

CALIFORNIA PUBLIC RESOURCES CODE AND HEALTH AND SAFETY CODE

Several sections of the PRC protect cultural resources. Under PRC Section 5097.5, no person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site (including fossilized footprints), inscriptions made by human agency, rock art, or any other archaeological, paleontological, or historical feature situated on public lands, except with the express permission of the public agency that has jurisdiction over the lands. Violation of this section is a misdemeanor.

PRC Section 5097.98 states that if Native American remains are identified within a project site, the lead agency must work with the appropriate Native Americans as identified by the Native American Heritage Commission and develop a plan for the treatment or disposition of, with appropriate dignity, the human remains and any items associated with Native American burials. These procedures are also addressed in Section 15046.5 of the CEQA Guidelines. California Health and Safety Code Section 7050.5 prohibits disinterring, disturbing, or removing human remains from a location other than a dedicated cemetery. Section 30244 of the PRC requires reasonable mitigation for impacts on paleontological and archaeological resources that occur as a result of development on public lands.

LOCAL

SACRAMENTO COUNTY 2030 GENERAL PLAN

The following policies from the Conservation Element of the Sacramento County 2030 General Plan are applicable to the proposed project.

- CO-150 Utilize local, state, and national resources, such as the NCIC, to assist in determining the need for a cultural resources survey during project review.
- CO-153 Refer projects with identified archeological and cultural resources to the Cultural Resources Committee to determine significance of resource and recommend appropriate means of protection and mitigation. The Committee shall coordinate with the Native American Heritage Commission in developing recommendations.
- CO-154 Protection of significant prehistoric, ethnohistoric and historic sites within open space easements to ensure that these resources are preserved in situ for perpetuity.
- CO-155 Native American burial sites encountered during preapproved survey or during construction shall, whenever possible, remain in situ. Excavation and reburial shall occur when in situ preservation is not possible or when the archeological significance of the site merits excavation and recording procedure. On-site reinternment shall have priority. The project developer shall provide the burden of proof that off-site reinternment is the only feasible alternative. Reinternment shall be the responsibility of local tribal representatives.
- CO-157 Monitor projects during construction to ensure crews follow proper reporting, safeguards, and procedures.
- CO-158 As a condition of approval of discretionary permits, a procedure shall be included to cover the potential discovery of archaeological resources during development or construction.

- CO-159 Request a Native American Statement as part of the environmental review process on development projects with identified cultural resources.
- CO-166 Development surrounding areas of historic significance shall have compatible design in order to protect and enhance the historic quality of the areas.
- CO-169 Restrict the circulation of cultural resource location information to prevent potential site vandalism. This information is exempt from the “Freedom of Information Act”.

DISCLOSURE OF CULTURAL RESOURCES INFORMATION

Public disclosure of site-specific cultural resources information is expressly exempt from the California Public Records Act, Government Code Sections 6250-6270. Furthermore, information obtained during Native American consultation or through consultation with the local and state agencies, including the North Central Information Center (NCIC), should remain confidential and is exempt from public disclosure under Senate Bill 922. Additionally, Sacramento County staff has signed an “Agreement to Confidentiality” with the NCIC that states that site-specific information will not be distributed or released to the public or unauthorized individuals. An authorized individual is a professional archaeologist or historian that qualifies under the Secretary of Interior’s standards to view confidential cultural resources materials.

IMPACTS AND ANALYSIS

The analysis in this Supplement to the 2022 Airport SEIR describes impacts identified in the 2022 Airport SEIR and describes how the impacts of the proposed project would differ, as applicable.

SIGNIFICANCE CRITERIA

For purposes of this Supplement to the 2022 Airport SEIR and consistent with the criteria presented in the 2022 Airport SEIR, which is based on Appendix G of the CEQA Guidelines, impacts on cultural resources may be considered significant if implementation of the proposed project would:

- Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5; or
- Disturb any human remains, including those interred outside of formal cemeteries.

METHODOLOGY AND ASSUMPTIONS

As discussed in Chapter 1, *Introduction*, the 2022 Airport Master Plan Update and the 2022 Airport SEIR considered a development and operational horizon of 20 years (2018 through 2038) with four Planning Activity Levels (PALs). The area south of I-5 within the Airport Master Plan area, which includes the project site, was included within PAL 4 (with anticipated development within the 2034-2038 time period) of the 2022 Airport Master Plan Update. Due to the extended 20-year planning horizon, Master Plan projects or facilities identified in PAL 4 were determined to be beyond the scope of the 2022 Airport SEIR. As discussed in Chapter 8, *Land Use*, of the 2022 Airport Draft SEIR (page 8-11), the 2022 Airport Master Plan Update identifies future commercial development south of I-5 in PAL 4. The discussion further notes that if PAL 4 becomes ripe for development additional environmental review will be necessary. Accordingly, proposed project impacts related to cultural resources on the project site are evaluated at a project level below.

The evaluation of potential impacts associated with cultural resources was based on a review of applicable documents, including the 2022 Airport SEIR, the Sacramento County General Plan, and other federal and State regulations as presented above.

IMPACT: HISTORICAL RESOURCES

The potential for an adverse change to historical resources due to the implementation of the 2022 Airport Master Plan Update was discussed on pages 6-9 to 6-10 of the 2022 Airport Draft SEIR. The analysis determined that implementation of the 2022 Airport Master Plan Update would not adversely affect historical resources associated with airport buildings and facilities as well as the Reclamation District 1000 complex of canals and drainages. For this reason, the 2022 Airport SEIR concluded that impacts with respect to historical resources would be less than significant.

There are no buildings or structures on the project site and the areas associated with the offsite improvements (i.e., roadway improvements, power line extension, etc.), and thus no resources that could be considered historical resources for the purposes of CEQA. Reclamation District 1000 and any associated features, including three ditches adjacent to the project site, has been determined by the California SHPO to no longer be a legally significant resource (i.e., historical resource). Therefore, the proposed project would not result in an adverse change to historical resources, and like the conclusion reached in the 2022 Master Plan Update SEIR, the impact would be **less than significant**.

MITIGATION MEASURES

None recommended.

IMPACT: ARCHAEOLOGICAL RESOURCES

The potential for an adverse change to archaeological resources due to the implementation of the 2022 Airport Master Plan Update was discussed on pages 6-11 to

6-13 of the 2022 Airport Draft SEIR. The analysis determined that implementation of the 2022 Airport Master Plan Update could adversely affect archaeological resources, thus resulting in a potential impact to these resources. However, with mitigation requiring steps to be taken if unanticipated cultural resources are discovered on the site during construction and that a tribal monitor be present on the site during ground disturbing activities, this impact was reduced to less than significant.

According to the 2022 Airport SEIR, the project site is located within an area of the County that has been subjected to frequent flooding events, which deposit alluvial sands and silts potentially burying artifacts. Additionally, the Sacramento River was an attractive resource and areas closer to the river have a higher potential for buried deposits.

The results of the background research and survey effort completed for the project site and the areas associated with the offsite improvements (i.e., roadway improvements, power line extension, etc.) did not identify any cultural materials or other evidence of past human use or occupation. In addition, the project site is over 0.5 mile from the Sacramento River. While unlikely, there is the potential of encountering unanticipated cultural resources during ground disturbing activity. However, with the implementation of Mitigation Measures CR-1 and CR-2, which are the same measures included in the 2022 Airport SEIR to address this impact, this impact would be reduced to **less than significant**.

MITIGATION MEASURES

CR-1 Cultural Resources Unanticipated Discoveries

In the event that human remains are discovered in any location other than a dedicated cemetery, work shall be halted, and the County Coroner contacted. For all other unexpected cultural resources discovered during project construction, work shall be halted until a qualified archaeologist may evaluate the resource encountered.

1. **Unanticipated human remains.** 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 the Office of Planning and Environmental Review 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.
2. **Unanticipated cultural resources.** In the event of an inadvertent discovery of cultural resources (excluding human remains) during

construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall be retained at the Applicant's expense to evaluate the significance of the find. If it is determined due to the types of deposits discovered that a Native American monitor is required, the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites as established by the Native American Heritage Commission shall be followed, and the monitor shall be retained at the Applicant's expense.

- a. Work cannot continue within the 100-foot radius of the discovery site until the archaeologist and/or tribal monitor conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially eligible for listing on the National Register of Historic Places or California Register of Historical Resources.
 - b. If a potentially-eligible resource is encountered, then the archaeologist and/or tribal monitor, 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.
3. **Tribal cultural resources worker awareness.** The County's Tribal Cultural Resources Awareness Brochure provides a definition and examples of Tribal Cultural Resources that may be encountered during construction. The brochure was developed to assist construction teams with the identification and protection of Tribal Cultural Resources. The brochure shall be shared with construction teams prior to ground disturbance.

CR-2 **Tribal Monitoring**

Prior to initiation of ground disturbance, the project proponents, or contractor, shall contact Wilton Rancheria to determine if a Tribal Monitor is required at least two weeks prior to ground disturbance. Provide a copy of Tribal correspondence to the Environmental Coordinator. If a Tribal Monitor is required, the following measures are necessary:

- a. A compensated (paid) Tribal Monitor from a traditionally and culturally affiliated Native American Tribe shall be retained to monitor specified ground disturbing project related activities.
- b. The duration of the monitoring and construction schedule shall be determined at this time.

- c. The Tribal Monitor will identify areas requiring monitoring in the project area during vegetation grubbing, stripping, grading, or other ground-disturbing activities. All field monitoring activities will be logged by the Tribal Monitor.
- d. The Tribal Monitor shall wear the appropriate safety equipment and shall have the necessary background training in construction safety protocols.
- e. Tribal Monitors or Tribal Representatives have the authority to request that work be temporarily stopped, diverted, or slowed within 100 feet of the direct impact area if sites or objects of significance are identified. Only a Tribal Monitor or Representative from a culturally affiliated tribe can recommend appropriate treatment and final disposition of Tribal Cultural Resources.

IMPACT: HUMAN REMAINS

The potential to disturb any human remains, including those interred outside of formal cemeteries, due to the implementation of the 2022 Airport Master Plan Update was discussed on page 6-13 of the 2022 Airport Draft SEIR. The analysis determined that implementation of the 2022 Airport Master Plan Update could disturb human remains, thus resulting in a potential impact to these resources. However, with mitigation requiring steps to be taken if unanticipated cultural resources are discovered on the site during construction and that a tribal monitor be present on the site during ground disturbing activities, this impact was reduced to less than significant.

The 2022 Airport SEIR noted that Section 5097.94 of the Public Resources Code and Section 7050 of the California Health and Safety Code protect Native American burials, skeletal remains and grave goods, regardless of age and provide methods and means for the appropriate handling of such remains. This is supported by County General Plan Policies CO-155. If human remains are encountered on the project site and the areas associated with the offsite improvements (i.e., roadway improvements, power line extension, etc.) during construction, work should halt in that vicinity and the County coroner should be notified immediately. 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, as described in Mitigation Measure CR-1. With the implementation of Mitigation Measure CR-1, which is the same measure included in the 2022 Airport SEIR to address this impact, this impact would be reduced to **less than significant**.

MITIGATION MEASURES

Implement Mitigation Measure CR-1.

10 ENERGY

INTRODUCTION

This chapter evaluates the effects of the proposed project related to energy, focusing on changes to the 2022 Airport SEIR that may result in new or more severe impacts, and describes any mitigation measures needed to address any such impacts.

FINDINGS OF THE AIRPORT MASTER PLAN UPDATE SEIR

Impacts of the 2022 Airport Master Plan Update related to energy were analyzed in Chapter 10, *Public Services/Utilities*, of the 2022 Airport Draft SEIR. The Airport Master Plan Update SEIR determined that implementation of the 2022 Airport Master Plan Update would have the following impacts with respect to energy:

- Implementation of the Airport Master Plan Update would not result in inefficient, wasteful, and unnecessary consumption of energy (*Less than Significant Impact*)

NOTICE OF PREPARATION COMMENTS

The Notice of Preparation (NOP) for the Supplement to the 2022 Airport SEIR was circulated on August 17, 2023. The County received comments on the NOP from SMUD related to energy demand and conservation; these comments are addressed in this chapter to the extent they pertain to the environmental impacts of the proposed project. Specifically, SMUD raised topics of interest to be considered in the which include utility line routing, electrical load and data requirements, energy efficiency, climate change, cumulative impacts related to the need for increased electrical delivery, and any needs to remove or relocate SMUD infrastructure. Impacts of the proposed project related to climate change and the goals of SMUD's 2030 Zero Carbon Plan are addressed in *Chapter 8, Climate Change*. Impacts of the proposed project related to utility line routing, electrical load, and project needs to remove or relocate SMUD infrastructure are addressed in *Chapter 14, Utilities*. Cumulative impacts related to the need for increased electrical delivery are addressed in *Chapter 18, Cumulative Impacts*. SMUD's concerns with respect to potential impacts to energy efficiency are addressed in the following analysis.

INFORMATION SOURCES

The analysis included in this chapter was adapted from an Energy Assessment Report prepared by Kimley-Horn in 2024 (Appendix EGY-1) and peer reviewed by ESA and Sacramento County and determined to be accurate and adequate for inclusion in this Supplement to the 2022 Airport SEIR. Additional data and information were obtained from the County, PG&E, SMUD, the California Energy Commission (CEC), and other published technical reports. The modeling for the air quality and greenhouse gas (GHG) emissions analyses conducted for this project also informs the analysis presented in this chapter.

ENVIRONMENTAL SETTING

STATE SETTING

In 2021 (the most recent year for which data are available), total energy usage in California was 7,359 trillion British thermal units (Btu), which equates to an average of 189 million Btu per capita. These figures place California second among the nation's 50 states in total energy use and 48th in per capita consumption. Of California's total energy usage, the breakdown by sector is roughly 41 percent transportation, 24 percent industrial, 17 percent commercial, and 18 percent residential (USEIA, 2023). In California, electricity and natural gas are generally consumed by stationary users such as residences and commercial and industrial facilities, whereas petroleum-based fuel consumption is generally accounted for by transportation-related energy use. California relies on a regional power system composed of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources.

ELECTRICITY

In 2021, California's energy mix totaled 280,738.4 gigawatt hours (GWh) of electricity, of which 70 percent was from in-state electricity generation and the remaining 30 percent was imported from adjacent states in the Northwest and Southwest.

Total system electric generation for California for 2021 increased by 2 percent from 2020's total generation of 272,576 GWh (CEC, 2023a). Electricity from non-carbon dioxide (CO₂) emitting electric generation categories (i.e., nuclear, large and small hydroelectric, and renewable generation) accounted for approximately 49 percent of total in-state generation for 2021, a decrease of 2 percent compared to 51 percent in 2020. This decrease was attributable to the continued impacts from California's ongoing drought, which contributed to a 32 percent reduction in in-state hydroelectric generation. Net imports of electricity increased by 2.4 percent in 2021, partially offsetting the decreased output from California's hydroelectric power plants.

In recent years, electricity demand has been relatively flat as energy efficiency programs have resulted in end-use energy reduction, and as customers install behind-the-meter solar photovoltaic (PV) systems that directly displace utility-supplied generation. In 2020, solar PV generation was estimated to be 27,179 GWh, a 56 percent increase since 2017. The strong growth in solar PV has had a measurable impact on utility-served load and, consequently, on the total system's electric generation.

California has approximately 82,776 megawatts (MW) of electric generation capacity installed across the State among more than 1,500 power plants that use a broad array of technologies. Total installed renewable generation capacity includes 15,221 MW from solar PV and 6,117 MW from wind. Large hydroelectric power plants, considered a zero-carbon resource, provide an additional 12,281 MW of capacity, while California's last remaining operational nuclear power plant, Diablo Canyon, provides approximately 2,393 MW. Natural gas-fired power plants make up 39,479 MW, or about half of the State's total generating capacity, but their energy is displaced by hydroelectric

generation during wet years when spring runoff from snowpack is plentiful. The tremendous growth in utility-scale renewable generation has also helped reduce the State's reliance on natural gas, favoring those power plants that can provide fast-ramping capabilities to integrate wind and solar generation while displacing the use of aging steam generators that are slow to respond to changing grid conditions.

Increasingly, electricity is used in multiple transportation modes, including light-duty vehicles, transit buses, and light and heavy rail. In California, its use is forecast to emerge in battery-electric medium-duty trucks, battery-electric buses, catenary-electric port drayage trucks, and high-speed rail. The CEC forecasts that the statewide electricity demand for electricity-powered transportation modes will increase from its current level of 2,000 GWh annually to between 12,000 and 18,000 GWh per year by 2030, depending on technology development and market penetration of the various vehicle types (CEC, 2018a).

NATURAL GAS

One-third of the energy commodities consumed in California consist of natural gas. Although natural gas is the most common energy source for electricity generation in California, 90 percent of the State's natural gas is imported from the Rocky Mountain region, the Southwest, and Canadian basins (USEIA, 2023). Californians consumed more than 11,710 million therms of natural gas in 2022, equal to 1,171,000,000 million Btu (MMBtu) (CEC, 2023b). The natural gas market continues to evolve and service options expand, but its use falls mainly into the following four sectors: residential, commercial, industrial, and electric power generation. In addition, natural gas is a viable alternative to petroleum fuels for use in cars, trucks, and buses.

Nearly 45 percent of the natural gas burned in California is used for electricity generation, and most of the remainder is consumed in the residential (21 percent), industrial (25 percent), and commercial (9 percent) sectors (CEC, 2023c). Natural gas has become an increasingly important source of energy because most of the State's power plants rely on this fuel, providing the largest portion of the total in-state capacity and electricity generation in California.

As discussed in Chapter 2, *Project Description*, the proposed project would be powered entirely by electricity; natural gas service would not be extended to the project site.

TRANSPORTATION FUELS

The energy consumed by the transportation sector accounts for roughly 38 percent of California's petroleum demand. Gasoline and diesel, both derived from petroleum (also known as crude oil), are the two most common fuels used for vehicular travel. According to the CEC, the state relies on petroleum-based fuels for 98 percent of its transportation needs. The transportation sector, including on-road and rail transportation (but excluding aviation), accounts for more than 96 percent of all motor gasoline use in the U.S., at roughly 3.4 million barrels in 2019. California is the third largest consumer of gasoline in the world, behind the U.S. (as a whole) and China (USEIA, 2021). In 2022, approximately 26 percent of California's crude oil was obtained from within the State, with about

15 percent from Alaska, and the remaining 60 percent from outside the United States (CEC, 2023d).

In 2023, taxable gasoline sales (including aviation gasoline) in California amounted to 13,584,697,639 gallons (CDTFA, 2023), and taxable diesel fuel sales amounted to 3,006,777,156 gallons (CDTFA, 2023). Statewide, there was an overall decrease in gasoline and diesel consumption from 2007 to 2011 because of the economic recession, but consumption has increased since then. The year 2020 saw another drop because of the COVID-19 pandemic which temporarily reduced travel.

The CEC forecasts that demand for gasoline in California will range from 12.3 billion to 12.7 billion gallons in 2030, with most of the demand generated by light-duty vehicles. While the models show an increase in light-duty vehicles along with population and income growth over the forecast horizon, total gasoline consumption is expected to decline, primarily because of increasing fuel economy (stemming from federal and state regulations) and displacement of gasoline vehicles by the increasing market penetration of zero-emission vehicles (ZEVs).

For diesel, demand is forecast to increase modestly by 2030, following the growth of California's economy; however, the demand will be tempered by an increase in fleet fuel economy and market penetration of alternative fuels, most prominently by natural gas in the medium- and heavy-duty vehicle sectors (CEC, 2018a).

California's oil fields make up the fourth largest petroleum-producing area in the United States, behind areas of federal offshore production, Texas, and North Dakota. Crude oil is moved from area to area within California through a network of pipelines that carry the oil from both onshore and offshore wells to refineries in the San Francisco Bay Area, the Los Angeles area, and the Central Valley. Currently, 14 petroleum refineries operate in California, processing approximately 1.71 million barrels of crude oil per day (CEC, 2023e).

Electricity consumption in the transportation sector is projected to increase to between 12,000 and 18,000 GWh by 2030, a six-fold to nine-fold increase from 2017. The growth of light-duty plug-in electric vehicles is mostly responsible for the change in electricity demand, but increasing electrification in other transportation sectors also contributes to the projected increase in electricity consumption (CEC, 2018a).

Other transportation fuel sources used in California include alternative fuels, such as methanol and denatured ethanol (alcohol mixtures that contain no less than 70 percent alcohol), natural gas (compressed or liquefied), liquefied petroleum gas, hydrogen, and fuels derived from biological materials (i.e., biomass). Transportation fuels used by the project would be limited to commute trips by employees and pass-by customers of the proposed convenience store.

REGIONAL SETTING

ELECTRICITY

SMUD is the publicly owned utility responsible for the generation, transmission, and distribution of electrical power to its 900-square-mile service area, which includes the project site. SMUD's service area includes most of Sacramento County and a small portion of Placer County. In 2022, SMUD obtained its electricity from the following sources: large hydroelectric (25 percent); natural gas (46 percent); and eligible renewable resources (24 percent), including biomass and waste, geothermal, eligible hydroelectric, solar, and wind. The remaining 5 percent came from nuclear and other unspecified power sources (SMUD, 2023). Sacramento County consumed 11,258.6 million GWh of electricity in 2021 (CEC, 2023f).

NATURAL GAS

PG&E provides natural gas distribution, procurement, and storage in Sacramento County and is the only supplier of natural gas to the project area. As a regulated utility, PG&E is required to update its systems to meet any additional demand. PG&E provides service to 48 counties in California, with a total service area of approximately 70,000 square miles in Northern and Central California. The utility provides service via 42,141 miles of natural gas distribution pipelines and 6,438 miles of transmission and distribution pipelines. PG&E serves approximately 4.5 million natural gas distribution customers (PG&E, 2023a). Natural gas distribution lines in new development are placed underground in accordance with California Public Utilities Commission (CPUC) regulations. Natural gas is supplied to the Sacramento area through a network of high- and low-pressure transmission and distribution systems. In 2021, natural gas consumption in Sacramento County was 30,070,670 MMBtu (CEC, 2023b).

PETROLEUM

Gasoline and diesel fuel are, by far, the largest volume transportation fuels used in Sacramento County. Estimated totals of 557 million gallons of gasoline and 45 million gallons of diesel were sold in Sacramento County in 2021 (CEC, 2023g).

REGULATORY SETTING

FEDERAL

NATIONAL ENERGY CONSERVATION POLICY ACT

The National Energy Conservation Policy Act (NECPA) serves as the underlying authority for federal energy management goals and requirements. Signed into law in 1978, it has been regularly updated and amended by subsequent laws and regulations. This act is the foundation of most federal energy requirements. NECPA established energy efficiency standards for consumer projects and includes a residential program for low-income weatherization assistance, grants and loan guarantees for energy conservation in schools and hospitals, and energy efficiency standards for new construction. Initiatives in these areas continue today.

NATIONAL ENERGY POLICY ACT OF 2005

The National Energy Policy Act of 2005 sets equipment energy efficiency standards and seeks to reduce reliance on nonrenewable energy resources and provide incentives to reduce current demand on these resources. For example, consumers and businesses can attain federal tax credits for purchasing fuel-efficient appliances and products, including hybrid vehicles; constructing energy-efficient buildings; and improving the energy efficiency of commercial buildings. Additionally, tax credits are available for installing qualified fuel cells, stationary microturbine power plants, and solar power equipment.

Executive Order 13423 (Strengthening Federal Environmental, Energy, and Transportation Management), signed in 2007, strengthens the key energy management goals for the federal government and sets more challenging goals than the Energy Policy Act of 2005. The energy reduction and environmental performance requirements of Executive Order 13423 were expanded upon in Executive Order 13514 (Federal Leadership in Environmental, Energy, and Economic Performance), signed in 2009.

ENERGY AND INDEPENDENCE SECURITY ACT OF 2007

The Energy and Independence Security Act of 2007 sets federal energy management requirements in several areas: energy reduction goals for federal buildings, facility management and benchmarking, performance and standards for new buildings and major renovations, high-performance buildings, energy savings performance contracts, metering, and energy-efficient product procurement. It also sets requirements for reductions in petroleum use, such as by setting automobile efficiency standards and encouraging increases in the use of alternative fuels. This act also amends portions of the National Energy Policy Conservation Act.

CORPORATE AVERAGE FUEL ECONOMY STANDARDS

Established by Congress in 1975, the Corporate Average Fuel Economy (CAFE) standards reduce energy consumption by increasing the fuel economy of cars and light trucks. The National Highway Traffic Safety Administration (NHTSA) and U.S. Environmental Protection Agency jointly administer the CAFE standards. Congress has specified that the CAFE standards must be set at the “maximum feasible level” with consideration given for technological feasibility, economic practicality, the effect of other standards on fuel economy, and the need for the nation to conserve energy.¹

FEDERAL ENERGY REGULATORY COMMISSION

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

¹ For more information on the Corporate Average Fuel Economy standards, see <https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy>.

STATE

WARREN-ALQUIST ACT

The 1975 Warren-Alquist Act established the California Energy Resources Conservation and Development Commission, now known as the California Energy Commission or CEC. The act established a state policy to reduce wasteful, uneconomical, and unnecessary uses of energy by employing a range of measures.

CALIFORNIA ENERGY ACTION PLAN

California's *2008 Energy Action Plan Update* revised the *2005 Energy Action Plan II*, the state's principal energy planning and policy document. The plan maintains the goals of the original *Energy Action Plan*, describes a coordinated implementation plan for state energy policies, and identifies action areas to ensure that California's energy is adequate, affordable, technologically advanced, and environmentally sound.

STATE OF CALIFORNIA INTEGRATED ENERGY POLICY

In 2002, the Legislature enacted Senate Bill (SB) 1389, which required the CEC to develop an integrated energy plan biannually for electricity, natural gas, and transportation fuels, for the California Energy Report. SB 1389 requires the CEC to prepare a biennial integrated energy policy report (IEPR) that assesses major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety (Public Resources Code Section 25301[a]). The IEPR has replaced the 2008 Energy Action Plan as the chief program intended to provide a comprehensive statewide energy strategy to guide energy investments, energy-related regulatory efforts, and GHG reduction measures.

The most recent update to the IEPR (2022) examines how California's energy system must be transformed to meet the state's 2030 GHG emissions reduction goal, including implementation of SB 350 (De Leon, Chapter 547, Statutes of 2015) to double the energy efficiency of existing buildings and SB 100's target of achieving 60 percent renewables in the electricity supply by 2030. The report also covers policies and trends in integrated resource planning, distributed energy resources, transportation electrification, barriers faced by disadvantaged communities, demand response, transmission and landscape-scale planning, the California Energy Demand Preliminary Forecast, the preliminary transportation energy demand forecast, renewable gas (in response to SB 1383), the natural gas outlook, and solutions to increase resiliency in the electricity sector. The key strategies identified in the 2022 IEPR Update are summarized below (CEC, 2023h).

TITLE 24 – CALIFORNIA GREEN BUILDING STANDARDS CODE

Part 11 of CCR Title 24 California Building Standards Code is referred to as the California Green Building Standards (CALGreen) Code. CALGreen is intended to encourage more sustainable and environmentally friendly building practices, require low-pollution-emitting substances that cause less harm to the environment, conserve

natural resources, and promote the use of energy-efficient materials and equipment. Since 2011, the CALGreen Code has been mandatory for all new residential and nonresidential buildings constructed in the state. Such mandatory measures include energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality.

The 2022 CALGreen Code updates, which took effect on January 1, 2023, incorporate amendments to electric vehicle charging spaces, outdoor water use provisions, and clarifications (CBSC, 2023).

RENEWABLES PORTFOLIO STANDARD

The State of California has adopted a Renewables Portfolio Standard (RPS) to increase the percentage that retail sellers of electricity, including investor-owned utilities and community choice aggregators, must provide from renewable resources. Qualifying renewables under the RPS include bioenergy such as biogas and biomass, small hydroelectric facilities (30 MW or less), wind, solar, and geothermal energy. The CPUC and CEC jointly implement the RPS program. The CPUC's responsibilities include the following:

- Determine annual procurement targets and enforce compliance.
- Review and approve each investor-owned utility's renewable energy procurement plan.
- Review contracts for RPS-eligible energy.
- Establish the standard terms and conditions used in contracts for eligible renewable energy.

EXECUTIVE ORDERS S-14-08 AND S-21-09

In November 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08, which expanded the state's RPS to 33 percent renewable power by 2020. In September 2009, Governor Schwarzenegger continued California's commitment to the RPS by signing Executive Order S-21-09, which directed the California Air Resources Board (CARB) under AB 32 authority to enact regulations to help the state meet its RPS goal of 33 percent renewable energy by 2020.

SENATE BILL 350—CLEAN ENERGY AND POLLUTION REDUCTION ACT OF 2015

SB 350, known as the Clean Energy and Pollution Reduction Act of 2015, was enacted on October 7, 2015, and provides a new set of objectives in clean energy, clean air, and pollution reduction by 2030. The objectives include the following:

- To increase from 33 percent to 50 percent the procurement of our electricity from renewable sources.
- To double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.

SENATE BILL 100

On September 10, 2018, Governor Jerry Brown signed SB 100, establishing that all electricity in California must be obtained from renewable and zero-carbon energy resources by December 31, 2045. SB 100 goes beyond the RPS goals established by SB 350 in 2015. Specifically, the law increases the percentage of energy that must come from renewable sources for both investor-owned utilities and publicly-owned utilities from 50 percent to 60 percent by 2030. Incrementally, the law required these energy providers to have a renewable energy supply of 33 percent by 2020, 44 percent by 2024, and 52 percent by 2027. The updated RPS goals are considered achievable because many California energy providers are already meeting or exceeding the RPS goals established by SB 350.

CALIFORNIA APPLIANCE EFFICIENCY REGULATIONS

California's Appliance Efficiency Regulations (20 CCR 1601–1608) contain standards for both federally regulated appliances and non-federally regulated appliances. The regulations are updated regularly to allow consideration of new energy efficiency technologies and methods. The current regulations were adopted by the CEC on November 18, 2009. The standards outlined in the regulations apply to appliances that are sold or offered for sale in California. More than 23 different categories of appliances are regulated, including refrigerators, freezers, water heaters, washing machines, dryers, air conditioners, pool equipment, and plumbing fittings.

TRANSPORTATION ENERGY**ASSEMBLY BILL 1007 (PAVLEY)—ALTERNATIVE FUEL STANDARDS**

AB 1007 (Pavley, Chapter 371, Statutes of 2005) required the CEC to prepare a state plan to increase the use of alternative fuels in California. The CEC prepared the State Alternative Fuels Plan in partnership with CARB and in consultation with other federal, state, and local agencies. The final State Alternative Fuels Plan, published in December 2007, attempts to achieve an 80 percent reduction in GHG emissions associated with personal modes of transportation, even as California's population increases.

ASSEMBLY BILL 1493 (PAVLEY)

Because the transportation sector accounts for more than half of California's CO₂ emissions, AB 1493 (commonly referred to as CARB's Pavley regulations), enacted on July 22, 2002, requires CARB to set GHG emissions standards for new passenger vehicles, light-duty trucks, and other vehicles manufactured in and after 2009 whose primary use is noncommercial personal transportation. Phase I of the legislation established standards for model years 2009 through 2016 and Phase II established standards for model years 2017 through 2025. See Chapter 8, *Climate Change*, for additional details regarding this regulation.

LOW CARBON FUEL STANDARD

The Low Carbon Fuel Standard (LCFS), established in 2007 through Executive Order S-1-07 and administered by CARB, requires producers of petroleum-based fuels to reduce the carbon intensity of their products that started with a 0.25 percent reduction in

2011, and culminated in a 10 percent total reduction in 2020. In September 2018, CARB extended the LCFS program to 2030, making significant changes to the design and implementation of the program, including a doubling of the carbon intensity reduction to 20 percent by 2030.

Petroleum importers, refiners, and wholesalers can either develop their own low-carbon fuel products or buy LCFS credits from other companies that develop and sell low-carbon alternative fuels, such as biofuels, electricity, natural gas, and hydrogen.

EXECUTIVE ORDER B-16-12—2025 GOAL FOR ZERO EMISSION VEHICLES

In March 2012, Governor Brown issued an executive order establishing a goal of 1.5 million ZEVs on California roads by 2025. In addition to the ZEV goal, Executive Order (EO) B-16-12 stipulated that by 2015, all major cities in California would have adequate infrastructure and be “zero-emission vehicle ready”; that by 2020, the state would have established adequate infrastructure to support 1 million ZEVs; and that by 2050, virtually all personal transportation in the state would be based on ZEVs, and GHG emissions from the transportation sector would be reduced by 80 percent below 1990 levels.

CALIFORNIA AIR RESOURCES BOARD ADVANCED CLEAN CAR PROGRAM

The Advanced Clean Cars emissions control program was approved by CARB in 2012 and is closely associated with the Pavley regulations. The program requires a greater number of ZEV models for the years 2015 through 2025 to control smog, soot, and GHG emissions. This program includes the Low-Emissions Vehicle (LEV) regulations to reduce emissions of criteria pollutants and GHGs from light- and medium-duty vehicles; and the ZEV regulations to require manufacturers to produce an increasing number of pure ZEVs (meaning battery and fuel cell electric vehicles) with the provision to produce plug-in hybrid electric vehicles (PHEVs) between 2018 and 2025.

CALIFORNIA AIR RESOURCES BOARD MOBILE SOURCE STRATEGY

The Mobile Source Strategy (2016) includes an expansion of the Advanced Clean Cars program (which further increases the stringency of GHG emissions for all light-duty vehicles, and 4.2 million zero-emission and plug-in hybrid light-duty vehicles by 2030). It also calls for more stringent GHG requirements for light-duty vehicles beyond 2025, as well as reduction of GHG emissions from medium-duty and heavy-duty vehicles and increased deployment of zero-emission trucks primarily for Class 3–7 “last-mile” delivery trucks in California. Statewide, the Mobile Source Strategy would result in a 45 percent reduction in GHG emissions and a 50 percent reduction in the consumption of petroleum-based fuels. CARB’s Mobile Source Strategy includes measures to reduce total light-duty vehicle miles traveled (VMT) by 15 percent compared to business as usual in 2050.

EXECUTIVE ORDER B-48-18

On January 26, 2018, Governor Brown issued an executive order establishing a goal of 5 million ZEVs on California roads by 2030 and spurring the installation and construction of 250,000 plug-in electric vehicle chargers, including 10,000 direct current fast chargers, and 200 hydrogen refueling stations by 2025.

LOCAL

SACRAMENTO COUNTY GENERAL PLAN

The following goals and policies from the Energy, Land Use, and Public Facilities elements of the Sacramento County 2030 General Plan are applicable to the proposed project.

ENERGY

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

LAND USE

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

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

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

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

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

PUBLIC FACILITIES

PF-76 The County supports the generation and use of energy produced from renewable resources.

PF-77 The County supports a variety of solar and other renewable energy sources, including:

- A dispersed system that feeds into the electric delivery system
- On-site facilities that primarily supply energy for on-site uses, and
- Properly sited large, centralized facilities consistent with Policy

SACRAMENTO COUNTY CLIMATE ACTION PLAN

On November 9, 2011, the County of Sacramento adopted the Climate Action Plan – Strategy and Framework document, which presented a framework for reducing GHG emissions and developing a second phase of the Climate Action Plan (CAP). On September 11, 2012, the Board of Supervisors adopted the Climate Action Plan –

Government Operations, which identifies GHG emissions associated with government operations and develops sector-level measures to reduce these GHG emissions. The County is currently working to develop the Communitywide CAP to address communitywide emissions. While the County of Sacramento CAP focuses specifically on reducing greenhouse gases, many of the plan's measures have the potential to both reduce countrywide energy use and improve energy efficiency. The County is currently in the process of updating the CAP after a hearing at the Board of Supervisors in September 2022. Staff are currently reviewing comments received and preparing a response to comments.

IMPACTS AND ANALYSIS

The analysis in this ~~Draft~~ **Final** Supplement to the 2022 Airport SEIR describes impacts identified in the 2022 Airport SEIR and describes how the impacts of the proposed project would differ, as applicable.

SIGNIFICANCE CRITERIA

For purposes of this Supplement to the 2022 Airport SEIR and consistent with the criteria presented in the 2022 Airport SEIR, which is based on Appendix G of the CEQA Guidelines, impacts related to energy may be considered significant if implementation of the proposed project would:

- Result in inefficient, wasteful, and unnecessary consumption of energy.

METHODOLOGY AND ASSUMPTIONS

As discussed in Chapter 1, *Introduction*, the 2022 Airport Master Plan Update and the 2022 Airport SEIR considered a development and operational horizon of 20 years (2018 through 2038) with four Planning Activity Levels (PALs). The area south of I-5 within the Airport Master Plan area, which includes the project site, was included within PAL 4 (with anticipated development within the 2034-2038 time period) of the 2022 Airport Master Plan Update. Due to the extended 20-year planning horizon, Master Plan projects or facilities identified in PAL 4 were determined to be beyond the scope of the 2022 Airport SEIR. As discussed in Chapter 8, *Land Use*, of the 2022 Airport Draft SEIR (page 8-11), the 2022 Airport Master Plan Update identifies future commercial development south of I-5 in PAL 4. The discussion further notes that if PAL 4 becomes ripe for development additional environmental review will be necessary. Accordingly, proposed project impacts related to energy on the project site are evaluated at a project level below.

This analysis considers the CEQA Guidelines Appendix G criteria and Appendix F guidance, as described in this chapter, in determining whether the proposed project would directly result in the inefficient, wasteful, or unnecessary use of energy. The potential impacts are analyzed based on an evaluation of whether construction and operational energy use estimates for the project would be considered excessive, wasteful, or inefficient taking into account that the project would provide a new source of

renewable energy. Energy emissions details supporting the project estimates presented in this section also are presented in *Section 8, Climate Change*.

As part of the analysis of the potential for the inefficient, wasteful, or unnecessary use of energy, the analysis considers the potential for conflicts with a State or local plan for renewable energy or energy efficiency involved reviewing regulations and determining their application to the proposed project. As discussed previously, there are several State and local plans and policies that are intended to increase energy conservation and the use of renewable energy. Consistency of the proposed project with these regulations would also ensure that the proposed project would not result in the inefficient, wasteful, or unnecessary use of energy.

CONSTRUCTION

The construction activities associated with the proposed project would consume energy primarily in the form of transportation fuels (e.g., diesel and gasoline) used by haul trucks, heavy-duty equipment, and worker vehicles traveling to and from construction areas. Electricity consumed by any electric-powered equipment would be minimal relative to the amount of diesel and gasoline consumed. Natural gas is generally not used during construction.

Construction activities and associated energy use could vary substantially from day to day, depending on the phase and type of construction activity and the number of workers and vendors traveling to the construction areas. The assumptions used for this analysis regarding the construction schedule, and regarding the types, number, and level of usage of construction equipment and vehicles for each activity, are consistent with the assumptions used for the air quality and GHG emissions analyses. This chapter provides the best possible estimates of energy consumption for informational purposes; overall, however, the analysis applies a qualitative assessment relative to the two Appendix G CEQA checklist criteria.

Diesel fuel consumption by onsite construction equipment has been estimated based on the GHG emissions estimates for off-road equipment from CalEEMod, in combination with The Climate Registry default factors for calculating CO₂ emissions from diesel fuel prepared by Kimley-Horn (see Appendix EN-1). All off-road construction equipment is assumed to be diesel-fueled.

With regard to on-road construction vehicles, this analysis assumes that light-duty automobiles and trucks used by commuting workers would be fueled by gasoline and that on-road construction vehicles (e.g., vendor and haul trucks for demolition debris, soil, and other material hauling) would use diesel fuel. The analysis further assumes that no electric on-road vehicles would be used during construction, only electricity use associated with water utilized for dust control. The fuel quantities required by on-road vehicles during construction have been calculated based on the GHG emissions associated with commuting workers and vendor and haul trips by Kimley-Horn. Such GHG emissions were estimated using CalEEMod defaults for estimated trip counts and trip lengths and The Climate Registry default factors for calculating CO₂ emissions from gasoline and diesel fuels.

OPERATIONS

A technical report with operational energy usage estimates was prepared by Kimley-Horn and presents estimated energy demand based on project-specific estimates and CalEEMod default values for the project's electricity demand, and water use.

Estimates of energy demand associated with operational water are based on the annual water use and the energy intensity factor is the CalEEMod default energy intensity per gallon of water for Sacramento County. CalEEMod default rates were used for the project-related water use which exceeded the estimates off the Water Demand Memo for the proposed project and are, therefore, conservative.

Mobile-source fuel usage associated with operation of the proposed project was estimated based on VMT data, which was conducted by Kimley-Horn and is a part of the Air Quality Assessment that was prepared for the project. Diesel and gasoline fuel usage was derived from EMFAC2021² for Sacramento County.

IMPACT: WASTEFUL, INEFFICIENT, OR UNNECESSARY CONSUMPTION OF ENERGY

The potential for wasteful, inefficient, or unnecessary consumption of energy due to the implementation of the 2022 Airport Master Plan Update was discussed on page 10-6 of the 2022 Airport Draft SEIR. The analysis concluded that implementation of the 2022 Master Plan Update would not result in a wasteful, inefficient, or unnecessary consumption of energy as standard practice for the design of Sacramento County Department of Airports (SCDA) facilities calls for early coordination with utility providers, including SMUD and PG&E, to ensure that facility siting and construction comply with Public Utilities Commission clearance requirements. For these reasons, the 2022 Airport SEIR concluded that the 2022 Airport Master Plan would not result in the wasteful, inefficient, or unnecessary consumption of energy, and the impact was determined to be less than significant.

CONSTRUCTION

Construction of the proposed project would require the use of fuels (primarily gasoline and diesel) for construction equipment and vehicles that would perform a variety of activities, including excavation, hauling, paving, and general vehicle travel. In addition, minimal amounts of electricity would be consumed by some pieces of construction equipment, such as electric power tools, compressors, and the like. To be conservative, this analysis assumes that diesel and gasoline would be the two primary fuels used for construction.

Table EGY-1 presents the estimated total construction energy consumption, by energy source, for the proposed project. Energy use would fluctuate depending on the type of development proposed and the construction activities underway during any particular

² EMFAC2021 is a model that estimates the official emissions inventories of on-road mobile sources in California. It is used by California state and local governments to meet Clean Air Act requirements.

period. The largest and most powerful equipment would be required during grading and excavation in order to excavate, lift, and transport large volumes of soil from the site. Gasoline and diesel fuel would be the primary energy sources for vehicles driven by construction crews and to power the large haul trucks used to deliver and retrieve construction equipment, materials, and debris.

Table EGY-1: Energy Use During Construction

Source	Total Construction Energy	Sacramento County Annual Energy	Percentage Increase Countywide
Electricity Use		GWh	
Water Use ¹	0.29	11,410	0.003%
Diesel Use		Gallons	
On-Road Construction Trips ²	40,424	93,939,584	0.04%
Off-Road Construction Equipment ³	25,363		0.03%
Construction Diesel Total	65,787		0.07%
Gasoline		Gallons	
On-Road Construction Trips	1,542	509,702,218	0.0003%
NOTE:			
1. Construction water use based on acres disturbed per day per construction sequencing and estimated water use per acre.			
2. On-road mobile fuel source based on vehicle miles traveled (VMT) from CalEEMod and fleet-average fuel consumption in gallons per mile from EMFAC2021 in Sacramento for 2024.			
3. Construction fuel use was calculated based on CalEEMod emissions outputs and conversion ratios from the Climate Registry.			
SOURCE: Kimley-Horn, 2024. Refer to energy calculations in Appendix EN-1: Energy Data.			

Construction of the proposed project, including annual fuel use, construction-related off-road equipment and on-road vehicles, would consume approximately 64,878 gallons of diesel fuel. Additionally, on-road worker vehicles traveling to and from the project site, would consume approximately 1,5423 gallons of gasoline (Tables EGY-1). These annual-average diesel and gasoline use amounts are equivalent to approximately 0.07 percent of the diesel and 0.0003 percent of the gasoline anticipated to be sold in Sacramento County in 2024, the anticipated year of construction.

Overall, the use of diesel fuel and gasoline during construction under the proposed project would not be substantial relative to the total sales of transportation fuels in Sacramento County.

Transportation fuels (gasoline and diesel) are produced from crude oil, which can be produced domestically or imported from various regions around the world. Based on current proven reserves, crude oil production would be sufficient to meet more than 50 years of worldwide consumption (BP Global, 2023). All project construction equipment and vehicles would be subject to vehicle and equipment fuel efficiency standards that are set at the federal and state levels. Vehicles used for construction would comply with CAFE fuel economy standards, which would result in more efficient use of transportation fuels (lower consumption). Vehicles used for project-related trips would also comply with AB 1493 and the Low Carbon Fuel Standard, which are designed to reduce vehicular GHG emissions, but would also result in additional fuel savings.

Construction of the development provided for under the proposed project would use fuel-efficient equipment consistent with federal and state regulations, such as fuel efficiency regulations in CARB's Pavley Phase II standards; the anti-idling regulation in 13 CCR Section 2485; and fuel requirements for stationary equipment in 17 CCR Section 93115 (concerning the Airborne Toxic Control Measures). In accordance with 13 CCR Sections 2485 and 2449, idling by commercial vehicles over 10,000 pounds and off-road equipment over 25 horsepower would be limited to a maximum of five minutes. The intent of these regulations is to reduce construction emissions; however, compliance with the anti-idling and emission reduction regulations discussed above would also result in fuel savings from the more efficient use of equipment.

For the reasons described above, construction activities associated with the proposed project would not result in wasteful, inefficient, or unnecessary consumption of fuel or energy, and like the conclusion reached in the 2022 Airport SEIR, the impact would be **less than significant**.

OPERATIONAL ENERGY DEMAND

Operation of the proposed project would require long-term consumption of energy primarily in the form of electricity, diesel, and gasoline. Electricity would be used as the primary power source for the proposed buildings, including to operate HVAC systems, lights, and other equipment. In addition, water used in buildings on the project site would require the consumption of electricity to supply, treat, and distribute potable water to the buildings and to convey and treat wastewater generated at the buildings. Energy for truck charging stations would be an additional electricity demand of the project.

The use of fuels (diesel and gasoline) by mobile sources during operation of the proposed project for commuting employees and pass-by customers of the convenience store has been estimated based on VMT and fleet-average fuel consumption from the EMFAC2021 model for Sacramento County.

Table EGY-2 summarizes the annual energy use requirements estimated for full-buildout operations under the proposed project by energy use type. Table EGY-2 provides estimates of total operational energy use for the year 2025, when the proposed project is expected to be operational.

Table EGY-2: Project Annual Energy Use During Operations

Source	Annual Operational Energy ³	Sacramento County Annual Energy	Percentage Increase Countywide
Electricity Use		GWh	
Total Building Electricity (Electricity Demand + Water Conveyance)	1.37	11,410	0.012%
Diesel Use		Gallons	
Mobile ²	1,712	93,286,176	0.002%
Gasoline		Gallons	
Mobile ²	13,897	498,678,443	0.003%
NOTE:			
1. The electricity, and water usage are based on project-specific estimates and CalEEMod defaults.			
2. Calculated based on the mobile source fuel based on vehicle miles traveled (VMT) and fleet-average fuel consumption (in gallons per mile) from EMFAC2021 for operational year 2025. Trips associated with EV charging are assumed to be all EV with no diesel or gasoline use.			
3. Annual Operational Energy represents the unmitigated operational from CalEEMod.			
SOURCE: Kimley-Horn, 2024. Refer to energy calculations in Appendix EN-1.			

As discussed in Section 2, Project Description, the proposed project would be powered entirely by electricity; natural gas service would not be extended to the project site.

OPERATIONAL ELECTRICITY GENERATION AND CHARGER DEMAND

The proposed solar facilities would use Photovoltaic (PV) technology to convert sunlight directly to electricity. The proposed solar facilities would power the proposed project’s electric vehicle charging stations and appurtenant uses expect during nighttime and cloudy weather. Any excess power would be exported to the SMUD system via an intertie with its existing 69 kilovolt (kV) distribution line along Power Line Road to the east.

At project buildout, on-site PV generation would be deployed to satisfy EV charging loads. Excess PV generation would be exported to the SMUD grid via the intertie during the daytime hours of the summer months and energy for charging would be imported from the SMUD grid during nighttime hours and fall and winter months. The highest export would occur in July. The proposed Battery Energy Storage System (BESS) would not have sufficient capacity to satisfy the energy needs after sunlight hours and, consequently, some energy would need to be pulled from the SMUD grid.

Table PD-2 shows estimated peak annual peak import and export between 2025 and 2035. As shown, peak export of energy would exceed peak import energy every year through 2035 with the amount of import and export almost balancing out by the end of

the period. Consequently, electricity demand for the charger system is not anticipated to result in meaningful electrical demand from the SMUD grid and would serve to address the state's reduction targets for carbon-based energy.

With the addition of on-site PV generation to satisfy EV charging demand, the project would generate more renewable solar energy than the total energy consumed which would be stored in the Battery Energy Storage System. As shown in Table PD-1 from Chapter 2, *Project Description*, the peak annual export of energy between 2025 and 2035 will exceed peak import energy every year. This would provide a net positive energy impact attributable to the project, and be a benefit to the County, as excess PV generation stored on-site could then be exported to SMUD's grid during off peak times, locally.

TRANSPORTATION FUELS

During project operation, consumption of diesel fuel in motor vehicle trips would be approximately 1,712 gallons per year and gasoline consumption would be approximately 13,897 gallons per year (Table EGY-2). The total amounts of annual diesel and gasoline use are equivalent to approximately 0.002 percent and 0.003 percent, respectively, of the diesel fuel and gasoline sold in Sacramento County. Overall, the use of gasoline and diesel fuels during operation of the proposed project would not be substantial relative to the total sales of fuels in Sacramento County.

To put the project's operational electricity requirements in context, in 2021 a total of 280,738.4 GWh of electricity was generated for California, of which consumers in Sacramento County used 11,258.6 (CEC, 2023). The CEC estimates that statewide energy demand will increase to 320,375 GWh in 2025, based on a moderate average annual energy demand growth rate of 1.32 percent (CEC, 2018b). As shown in Table EGY-2, the anticipated long-term, operational electricity usage requirements of the proposed project would be 1.37GWh per year. This represents approximately less than 0.0005 percent of the total 2021 statewide electricity usage and 0.012 percent of Sacramento County's 2021 electricity usage.

Based on a comparison to statewide and Sacramento County annual energy demand and the projected demand growth rate, the project-related increase in electricity consumption would not be expected to adversely affect local and/or regional energy supplies, or to require additional generation capacity beyond the statewide planned increase to accommodate projected energy demand growth. For the reasons described above, operation of the proposed project is not expected to result in a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of fuel or energy, and like the conclusion reached in the 2022 Airport SEIR, the impact would be **less than significant**.

CONFLICT WITH OR OBSTRUCT A STATE OR LOCAL PLAN FOR RENEWABLE ENERGY OR ENERGY EFFICIENCY

The proposed project would involve the construction, operation and maintenance of a solar facility that would produce a new renewable source of energy in Sacramento

County. The proposed project would provide a new source of renewable energy in the State and the specific existing sources of energy that would be replaced by the project would be related to combustion of diesel fuels for traditional diesel-powered trucks. The proposed project would occasionally supply excess solar energy which would be exported to the SMUD grid and would be available to reduce the potential demand of nonrenewable diesel fuels. The project's proposed energy storage system would allow energy to be reliably fed to the grid from an otherwise intermittent energy production source and would help maintain grid reliability. The proposed energy storage system would also assist SMUD in achieving its goal to reach zero carbon emissions in our power supply by 2030, and in meeting its obligations under State energy storage targets and the CPUC's energy storage program. Therefore, the proposed project would directly support SB 100 and California's RPS goal of increasing the percentage of electricity procured from renewable sources to 100 percent by 2045.

In terms of mobile energy use, as described above, State of California Executive Order N-79-20 establishes the goal for all new medium and heavy-duty vehicles to be zero-emission by 2045. It also directs CARB to develop and propose rulemaking for passenger vehicles and trucks, medium-and heavy-duty fleets where feasible, drayage trucks, and off-road vehicles and equipment "requiring increasing volumes" of new ZEVs "towards the target of 100 percent". By providing the infrastructure necessary to implement executive Order N-79-90, the proposed project would serve to protect against inefficient, wasteful, and unnecessary use of energy and would, in fact, contribute to achievement of State goals for renewable energy and energy efficiency.

Since the proposed project would provide a new source of renewable energy and infrastructure to deliver the renewable energy to the transportation sector that would support SB 100 and the State's energy goals, offset its fuel usage, and comply with fuel and energy efficiency regulations, it would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency, and like the conclusion reached in the 2022 Airport SEIR, the impact would be **less than significant**.

MITIGATION MEASURE

None required.

11 HAZARDS AND HAZARDOUS MATERIALS

INTRODUCTION

This chapter evaluates the effects of the proposed project related to hazards and hazardous materials, focusing on changes to the 2022 Airport SEIR that may result in new or more severe impacts, and describes any mitigation measures needed to address any such impacts.

FINDINGS OF THE AIRPORT MASTER PLAN UPDATE SEIR

The 2022 Airport SEIR did not include a chapter discussing hazards and hazardous materials but identified that impacts related to hazards and hazardous materials from implementation of the 2022 Master Plan Update would be less than significant (see pages 2 and 13-3 of the 2022 Airport Draft SEIR).

NOTICE OF PREPARATION COMMENTS

The Notice of Preparation (NOP) for the Supplement to the 2022 Airport SEIR was circulated on October 5, 2020. The County received comments from Caltrans stating that an encroachment permit would be required from Caltrans; issuance of a Caltrans encroachment permit includes a requirement for a traffic control plan. The County received comments from the Sacramento Area Council of Governments (SACOG) in its capacity serving as the Airport Land Use Commission (ALUC) for Sacramento County, stating that a review of the proposed project by the ALUC will be required with a focus on noise, safety, airspace protection, and overflight issues.

INFORMATION SOURCES

The analysis of historic and current hazardous materials sites within or near the project site in this chapter is based on the Phase I Environmental Site Assessment (Phase I assessment) prepared by Kimley-Horn (2023), as well as the Department of Toxic Substances Control (DTSC) EnviroStor and State Water Resources Control Board (SWRCB) GeoTracker online databases (DTSC/SWRCB, 2023). The analysis of hazardous materials relative to air quality is provided in Chapter 6, *Air Quality*. The analysis of safety hazards associated with excessive noise posed by the proximity of the project site to the Sacramento International Airport (SMF) is provided in Chapter 14, *Noise*. The analysis of emergency evacuation in this chapter is based in part on the Sacramento County Emergency Operations Plan (EOP) Evacuation Functional Annex.

ENVIRONMENTAL SETTING

HAZARDOUS MATERIALS

The project site is undeveloped with no structures and has been used for agricultural purposes since at least 1937 (Kimley-Horn, 2023). Agricultural activity ceased sometime between 2006 and 2009, and the project site has been unused for agriculture or other uses since then. The history of agricultural use suggests that pesticides and/or herbicides may have been used and residual levels may remain in project site soils.

A review of the DTSC Envirostor and SWRCB GeoTracker online databases for hazardous materials sites indicates that the project site is not listed for the release of hazardous materials (DTSC/SWRCB, 2023).

PROXIMITY TO SCHOOLS

There are no schools located within 0.25 mile of the project site. The nearest school is the Paso Verde Elementary School located at 5240 PV Scholars Lane, approximately 1.5 miles east-southeast of the project site.

PROXIMITY TO AIRPORTS

The project site is located approximately 0.8-miles south of the east runway (16L-34R) of the Sacramento International Airport (SMF) (SACOG, 2013). The flight path from this runway is directly over the eastern portion of the project site.

The Sacramento Area Council of Governments (SACOG) is the designated Airports Land Use Commission (ALUC) in Sacramento, Sutter, Yolo, and Yuba Counties. SACOG develops and implements the Sacramento International Airport Land Use Compatibility Plan (ALUCP) for the environs of SMF (SACOG, 2013). The SMF ALUCP applies to areas that are located within the Airport Influence Area (AIA) boundary established and defined by the ALUCP. AIA boundaries define areas where height, noise, overflight and safety standards, policies, and criteria are applied to certain proposed land use policy actions. The project site is located inside the AIA and Referral Area 1. Referral Area 1 encompasses locations where noise and/or safety represent compatibility concerns.

The eastern two-thirds of the project site is located within Safety Zone 2 – Inner Approach/Departure Zone and the western one-third is in Safety Zone 3 – Inner Turning Zone. Safety Zone 2 has height restrictions for structures that range from about 115 feet above mean sea level at the north project site property boundary to about 170 feet above mean sea level at the south project site property boundary (airspace protection surface/height limit surface). This translates to structure height limitations of about 105 to 160 feet above ground surface.

WILDLAND FIRE

A wildland fire is any non-structure fire that occurs in vegetation or natural fuels. The project site is an undeveloped property formerly used for agriculture. According to the California Department of Forestry and Fire Protection (CAL FIRE) Fire Hazard Severity Zone Maps of Sacramento County, the project site is not located within a very high fire hazard severity zone (CAL FIRE 2007, 2008).

REGULATORY SETTING

FEDERAL

The primary federal agencies with responsibility for hazards and hazardous materials management include the US Environmental Protection Agency (US EPA), US Department of Labor Occupational Safety and Health Administration (Fed/OSHA), and the US Department of Transportation (DOT). Federal laws, regulations, and responsible agencies are summarized in **Table HAZ-1**.

Table HAZ-1: Federal Laws and Regulations Related to Hazardous Materials Management

Classification	Law or Responsible State Agency	Description
Hazardous Waste Handling	Resource Conservation and Recovery Act of 1976 (RCRA) (Title 40 CFR Parts 239 through 282)	Under RCRA, the US EPA regulates the generation, transportation, treatment, storage, and disposal of hazardous waste from “cradle to grave.”
	Hazardous and Solid Waste Act (Public Law 98-616)	Amended RCRA in 1984, affirming and extending the “cradle to grave” system of regulating hazardous wastes. The amendments specifically prohibit the use of certain techniques for the disposal of some hazardous wastes.
Hazardous Materials Management	Community Right-to-Know Act of 1986 (also known as Title III of the Superfund Amendments and Reauthorization Act (SARA) (Public Law 99-499)	Imposes requirements to ensure that hazardous materials are properly handled, used, stored, and disposed of and to prevent or mitigate injury to human health or the environment in the event that such materials are accidentally released.
Hazardous Materials Transportation	US Department of Transportation (DOT) (49 CFR Parts 100-180)	DOT has the regulatory responsibility for the safe transportation of hazardous materials. The DOT regulations govern all means of transportation except packages shipped by mail (49 CFR).
Occupational Safety	Occupational Safety and Health Act of 1970 (29 CFR 1910)	Fed/OSHA sets standards for safe workplaces and work practices, including the reporting of accidents and occupational injuries (29 CFR).

Classification	Law or Responsible State Agency	Description
Structural and Building Components (Hazardous Building Materials [ACM, LBP, and PCBs])	Toxic Substances Control Act of 1976 (Public Law 94-469)	Regulates the use and management of hazardous building materials and sets forth detailed safeguards to be followed during the disposal of such items.
	US EPA	The US EPA monitors and regulates hazardous materials used in structural and building components and their effects on human health.
Navigable Airspace	Federal Aviation Administration (FAA) Title 14 CFR Part 77, Safe, Efficient Use, and Preservation of The Navigable Airspace	Title 14 CFR Part 77 establishes standards for determining obstructions in navigable airspace. These imaginary surfaces extend out from the runway in a manner that reflects where aircraft are likely to fly. The FAA conducts aeronautical studies of proposed activities that could impact airspace. These studies review physical incursions of proposed structures into airspace, interference with radar communications, and any other conditions that might negatively impact air traffic. For projects proposed on or near airport property, project applicants must file documentation with the FAA so that it can complete an airspace review and assess the potential impact of the project on air navigation and issue a determination of hazard or no hazard. In addition, prior to issuance of any demolition or construction permits, Sacramento County would require the project applicant to provide appropriate notification of proposed construction to the FAA via FAA Form 7460-1 (Notice of Proposed Construction or Alteration).

STATE

State and local agencies often have either parallel or more stringent rules than federal agencies. In most cases, State law mirrors or overlaps with federal law, and enforcement of these laws is the responsibility of the State or a local agency to which enforcement powers are delegated. The primary State agencies with responsibility for hazardous materials management in the region are DTSC and the Regional Water Quality Control Board, California Occupational Safety and Health Administration, California Department of Public Health, California Highway Patrol (CHP), and the California Department of Transportation (Caltrans). **Table HAZ-2** summarizes state laws, regulations, and responsible agencies.

Table HAZ-2: State Laws and Regulations Related to Hazardous Materials Management

Classification	Law or Responsible State Agency	Description
Hazardous Materials Management	Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program); CUPA (Health and Safety Code Sections 25404 et seq)	Cal EPA adopted regulations in January 1996 that implemented the Unified Program at the local level. The agency responsible for implementation of the Unified Program is called the Certified Unified Program Agency (CUPA), which for Sacramento County is the Sacramento County Environmental Management Department (SCEMD).
	California Fire Code, Title 24, Chapter 9, California Code of Regulations and California Building Code, Part 2	The California Fire Code regulates the storage and handling of hazardous materials, including the requirement for secondary containment, separation of incompatible materials, and preparation of spill response procedures.
Hazardous Waste Handling	California Hazardous Materials Release Response Plan and Inventory Law of 1985; CUPA (Health and Safety Code section 25500 through 25519)	The California Hazardous Materials Release Response Plan and Inventory Law of 1985 (Business Plan Act) requires that businesses that store hazardous materials onsite prepare a Hazardous Materials Business Plan (HMBP) and submit it to the local CUPA, which in this case is the SCEMD.
	California Hazardous Waste Control Act; California Health and Safety Code, Division 20, Chapter 6.5, Article 2, Section 25100, et seq.; DTSC	Under the California Hazardous Waste Control Act, DTSC regulates the generation, transportation, treatment, storage, and disposal of hazardous waste in California. The hazardous waste regulations establish criteria for identifying, packaging, and labeling hazardous wastes; dictate the management of hazardous waste; establish permit requirements for hazardous waste treatment, storage, disposal, and transportation; and identify hazardous wastes that cannot be disposed of in landfills. DTSC is also the administering agency for the California Hazardous Substance Account Act. California Health and Safety Code, Division 20, Chapter 6.8, Sections 25300 et seq., also known as the State Superfund law, providing for the investigation and remediation of hazardous substances pursuant to State law.
Hazardous Materials Transportation	Titles 13, 22, and 26 of the California Code of Regulations	Regulates the transportation of hazardous waste originating in and passing through the state, including requirements for shipping, containers, and labeling.
	CHP and Caltrans, California Vehicle Code, Chapter 5, Sections 31303 - 31309	These two state agencies are primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies.

Classification	Law or Responsible State Agency	Description
Occupational Safety	Cal/OSHA regulations (Title 8 CCR) (California Labor Code Section 6300 - 9254)	Cal/OSHA has primary responsibility for developing and enforcing workplace safety regulations in California. Because California has a federally approved OSHA program, it is required to adopt regulations that are at least as stringent as those found in Title 29 of the Code of Federal Regulations (CFR). Cal/OSHA standards are generally more stringent than federal regulations. Requires employee safety training, safety equipment, accident and illness prevention programs, hazardous substance exposure warnings, and emergency action and fire prevention plan preparation.
Construction Storm Water	Construction Storm Water General Permit (Construction General Permit; Order 2022-0057-DWQ, NPDES No. CAS000002 RWQCB	Dischargers whose project disturbs one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the <i>NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities</i> (Construction General Permit; Order 2022-0057-DWQ, NPDES No. CAS000002). Construction activity subject to this permit includes clearing, grading, grubbing, and other disturbances to the ground such as excavation and stockpiling, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of a facility. The Construction General Permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) that includes specific Best Management Practices (BMPs) designed to prevent sediment and pollutants from contacting stormwater from moving offsite into receiving waters. The BMPs fall into several categories, including erosion control, sediment control, waste management and good housekeeping, and are intended to protect surface water quality by preventing the off-site migration of eroded soil and construction-related pollutants from the construction area.
Water Quality Control Policy for Siting, Design, Operation and Maintenance of Onsite Wastewater Treatment Systems (OWTS) Policy	Water Quality Control Policy for Siting, Design, Operation and Maintenance of Onsite Wastewater Treatment Systems (OWTS) Policy Sacramento County	This policy establishes a statewide, risk-based, tiered approach for the regulation and management of OWTS installations and replacements and sets the level of performance and protection expected from OWTS. This policy establishes minimum requirements for the permitting, monitoring, and operation of OWTS for protecting beneficial uses of waters of the State and preventing or correcting conditions of pollution and nuisance.

Classification	Law or Responsible State Agency	Description
Underground Infrastructure	California Code of Regulations Section 4216-4216.9 Underground Services Alert or Dig Alert	Section 4216-4216.9 "Protection of Underground Infrastructure" requires an excavator to contact a regional notification center (e.g., Underground Services Alert or Dig Alert) at least two days prior to excavation of any subsurface installations. Any utility provider seeking to begin a project that could damage underground infrastructure can call Underground Service Alert, the regional notification center for southern California. Underground Service Alert will notify the utilities that may have buried lines within 1,000 feet of the project. Representatives of the utilities are then notified and are required to mark the specific location of their facilities within the work area prior to the start of project activities in the area.

ADDITIONAL STATE REGULATIONS

The California Code of Regulations (CCR) contains additional requirements that would apply to the project that regulate electrical facilities, including:

- Title 8 CCR §2700 et seq., High Voltage Electrical Safety Orders, which establish essential requirements and minimum standards for installation, operation, and maintenance of electrical equipment to provide practical safety and freedom from danger.
- Title 14 CCR. §§1250-1258, Fire Prevention Standards for Electric Utilities, which provide specific exemptions from electric pole and tower firebreak and electric conductor clearance standards and specifies when and where standards apply. It establishes minimum clearance requirements for flammable vegetation and materials surrounding structures.
- Title 22 CCR. §66273 Standards for Universal Waste Management, which regulate the management of universal wastes. These wastes are not fully regulated as hazardous waste in order to encourage their recycling. Batteries, electronic devices, mercury-containing equipment, lamps, cathode ray tubes and tube glass, and aerosol cans are considered universal wastes in California. A person or business who generates universal waste is required to follow the Management Requirements for Universal Waste Handlers (22 CCR §§66273.30-66273.39), which include storage, spill protection, and disposal rules designed to minimize risk of harm to public health and the environment.

LOCAL

SACRAMENTO COUNTY LAND GRADING AND EROSION CONTROL ORDINANCE

A grading permit is required if the project grades, fills, excavates, stores or disposes of 350 cubic yards or more of soil or earthy material or clears and grubs 1 acre or greater of land. Any building permit issued in connection with the activities described above or

in connection with any building permit issued for a single-family residence on an individual lot may be conditioned or compliance with the standards and requirements of Sacramento County Code Chapter 16.44, Land Grading and Erosion Control Ordinance. This ordinance is consistent with the state's NPDES Construction General permit, described above under state regulations. The Sacramento Stormwater Management Program has developed the guidance document titled *Best Management Practices For Industrial Storm Water Pollution Control* to describe the best management practices (BMPs) to achieve compliance (Sacramento Stormwater Management Program, undated). The BMPs include design recommendations and measures to manage stormwater, prevent and cleanup spills, and manage waste.

SACRAMENTO INTERNATIONAL AIRPORT LAND USE COMPATIBILITY PLAN

The Sacramento International Airport Land Use Compatibility Plan (ALUCP) was first adopted in October 1984 and last amended in 2013 (SACOG, 2013). The ALUCP contains land use compatibility guidelines for height, noise, and safety. The ALUCP was prepared by the Sacramento Area Council of Governments (SACOG) Airport Land Use Commission (ALUC), which is the designated Airports Land Use Commission (ALUC) in Sacramento, Sutter, Yolo, and Yuba Counties. The ALUC is responsible for adopting basic airport land use policies, adopting ALUCPs for area airports, incorporating land use compatibility guidelines established in the ALUCPs into the general plans of the jurisdictions that have land use authority in areas subject to the ALUCPs, and reviewing development proposals and land use plans for areas around the airports.

The SMF ALUCP applies to areas that are located within the Airport Influence Area (AIA) boundary established and defined by the ALUCP. AIA boundaries define areas where height, noise, overflight and safety standards, policies, and criteria are applied to certain proposed land use policy actions. Applicable ALUCP noise policies are discussed further in Section 15, *Noise*.

Relevant ALUCP compatibility policies include the following:

- 3.4.1 Evaluating Airspace Protection / Object Height Compatibility for New Development: The object height compatibility of proposed land uses within the influence area of Sacramento International Airport shall be evaluated in accordance with the policies in this section, including the Airspace Protection Surfaces depicted on Maps 4a, 4b, and 4c, Compatibility Policy Maps: Airspace Protection / Object Heights.
- 3.4.2 Object Height Criteria: The criteria for determining the acceptability of a Project with respect to height shall be based upon the standards set forth in Federal Aviation Regulations (FAR) Part 77, Subpart C, Safe, Efficient Use and Preservation of the Navigable Airspace and applicable airport design standards published by the FAA. Additionally, where an FAA aeronautical study of a proposed object is required as described in Policy 3.4.5, the results of that study shall be taken into account by the ALUC and the Local Agency.

- 3.4.4 Other Flight Hazards: Land uses that may cause visual or electronic hazards, to aircraft in flight or taking off or landing at the Airport shall be allowed within the Airport Influence Area only if the uses are consistent with FAA rules and regulations.
- (a) Specific characteristics to be avoided, especially within areas beneath the Airspace Protection Surfaces (see Map 5), include:
- (1) Sources of glare (such as from mirrored or other highly reflective buildings or building features) or bright lights (including search lights and laser light displays);
 - (2) Distracting lights that could be mistaken for airport lights;
 - (3) Sources of dust, steam, or smoke that may impair pilots' vision;
 - (4) Sources of steam or other emissions that cause thermal plumes or other forms of unstable air; and
 - (5) Sources of electrical interference with aircraft communications or navigation.
- (b) To resolve any uncertainties with regard to the significance of the above types of flight hazards, Local Agencies should consult with FAA and Sacramento International Airport officials.
- 3.4.5 Requirements for FAA Notification of Proposed Construction or Alteration: Project proponents are responsible for notifying the FAA about proposed construction that may affect navigable airspace. The following is ALUC policy on this topic:
- 3.4.6 ALUC Review: The requirement for notification to the FAA shall not by itself trigger an airport compatibility review of an individual Project by the ALUC. If the general plan of the Local Agency in which the Project is to be located has been determined by the ALUC to be consistent with this Compatibility Plan, then no ALUC review is required. If the general plan has not been made consistent, then the proposed Project must be referred to the ALUC for review if it qualifies as a Major Land Use Action.

SACRAMENTO COUNTY EMERGENCY OPERATIONS PLAN

The Sacramento County Emergency Operations Plan (EOP) addresses the County's planned response to extraordinary emergency situations as a result of natural or human-caused disasters (SCOES, 2022). The EOP does not apply to normal day-to-day events, or the procedures used to respond to such emergencies. Instead, the EOP focuses on operational concepts that would be implemented in large-scale disasters, which can have major threats to life, property, and the environment, and that require an uncommon emergency response. The EOP accomplishes the following:

- Establishes the Emergency Management Organization required to mitigate an emergency disaster affecting the County.

- Identifies the roles and responsibilities required to protect the health and safety of County residents, public and private property, and the environment, during emergency disasters.
- Establishes the operational concepts associated with a field response to emergency disasters, the County's Emergency Operation Center (EOC) activities and the recovery process.

As an annex to the EOP, the Sacramento County Evacuation Functional Annex documents strategies and procedures to document the agreed upon strategy for the Operational Area's response to emergencies that involve the evacuation of people from an impacted area (SCOES, 2021). This involves coordination and support for the safe and effective evacuation of the population, including people with disabilities and access and functional needs and other diverse populations that may need additional support to evacuate. Focus areas within the Evacuation Annex include public alert and warning, transportation, and evacuation triggers. Organizations, operational concepts, responsibilities, and a documented process to accomplish an evacuation are defined within the Annex. The Annex outlines local government (cities and special districts), the Sacramento Operational Area, and State responsibilities for the managed movement of people.

SACRAMENTO COUNTY HAZARDOUS MATERIALS RESPONSE PLAN

In California, all State agencies are required to use the Standardized Emergency Management System (SEMS), as outlined in Section 8607 of the California Government Code. SEMS standardizes the principles and methods of emergency response in California. The Incident Command System (ICS) operates under SEMS as the mechanism for responding to all types of incidents. All local fire departments, including the Sacramento International Airport Fire Department, use the ICS when responding to incidents. Under the Incident Command Structure, the Incident Commander (IC) has the primary responsibility and the authority to activate a response consistent with the Area Plan. In 2005, the California Office of Emergency Services (CalOES) integrate the National Incident Management System (NIMS) into SEMS to provide Statewide consistency with emergency response activities and a nationwide approach for federal, State, local, and tribal governments to work together more effectively and efficiently.

The State legislature, in recognizing the risks that hazardous materials and wastes pose to emergency responders and the community, created a hazardous material disclosure program under Chapter 6.95, Section 25500, et seq., of the Health and Safety Code. This program requires the Sacramento County Environmental Management Department (EMD) to develop a Hazardous Material Emergency Response Area Plan (Area Plan) detailing the duties and responsibilities of governmental and other response agencies in a hazardous material incident (SACEMD, 2016). The Area Plan provides information for agencies involved in hazardous material response within Sacramento County.

For Sacramento International Airport, the Sacramento International Airport Fire Department responds to fires and hazardous materials incidents at the airport. The Hazardous Materials Program is responsible for emergency hazardous materials

response in the Sacramento area. This is accomplished in partnership with the Sacramento County Environmental Management Division. The program provides 24-hour response for the County of Sacramento. The project site would also be serviced by the Sacramento County Airport Fire Department.

SACRAMENTO MUNICIPAL UTILITY DISTRICT SOLAR FACILITY ENGINEERING SPECIFICATION T015

Sacramento Municipal Utility District (SMUD) requirements for the establishment of connecting small and large commercial distributed generation (DG) to SMUD's electric grid along with optional battery energy storage system (BESS) devices is provided in Engineering Specification T015 (SMUD, 2018). Small commercial operators are those that intend to install DG of less than 500 kW; large commercial operators are those intend to install DG equal to or greater than 500 kW. The specification includes identifying nationally recognized standards, codes, and recommended practices to be used by projects; describing the submittal, review, and approval process; describing SMUD installation and interconnection technical specifications; and describing telemetry and metering requirements.

SACRAMENTO COUNTY ENCROACHMENT PERMIT AND TRAFFIC CONTROL PLAN

Encroachment Permits from County Engineering are required when proposed construction encroaches into the public right-of-way pursuant to Sacramento County Code, Chapter 12.08, *Construction in Streets*, and Streets and Highway Code Section 1460-1470. As part of this permit, a Traffic Control Plan and/or Detour Plan is required for all construction work within the road right of way which modifies vehicular, bicycle and/or pedestrian traffic patterns and are necessary to ensure the safe and efficient movement of traffic through construction work zones.

SACRAMENTO COUNTY UNIFIED HAZARDOUS WASTE AND HAZARDOUS MATERIALS MANAGEMENT REGULATORY PROGRAM

The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program), codified in California Health and Safety Code Sections 25404 et seq., requires the administrative consolidation of six hazardous materials and waste programs under one agency, a Certified Unified Program Agency (CUPA). The following programs are consolidated under the unified program:

- Hazardous Materials Release Response Plans, and Inventory (also referred to as Hazardous Materials Business Plans)
- California Accidental Release Program
- Underground Storage Tanks
- Aboveground Petroleum Storage Spill Prevention Control and Countermeasures
- Hazardous Waste Generation and Onsite Treatment
- Uniform Fire Code Plans and Inventory Requirements

The State Secretary for Environmental Protection designated Sacramento County's Environmental Management Department (SCEMD) as the Sacramento region's CUPA. The CUPA is charged with the responsibility of conducting compliance inspections of over hazardous materials facilities in Sacramento County. These facilities and businesses handle hazardous materials, generate or treat a hazardous waste, and/or operate underground storage tanks. The CUPA uses education and enforcement to minimize the risk of chemical exposure to human health and the environment. The CUPA forwards important facility information to local fire prevention agencies that enables them to take appropriate protective action in the event of an emergency at regulated facilities. In order to legally store and use hazardous materials above the trigger quantities, users must apply for permits and demonstrate satisfactory compliance with regulations. The quantities that trigger disclosure are based on the maximum quantity on site at any time:

- 55 gallons, 500 pounds, or 200 cubic feet for 30 days or more at any time in the course of a year;
- Any amount of hazardous waste;
- Category I or II pesticides;
- Explosives; or
- Extremely hazardous substances above the threshold planning quantity

SACRAMENTO COUNTY TITLE 6, HEALTH AND SANITATION, CHAPTER 6.32, ON-SITE MANAGEMENT OF WASTEWATER

The Sacramento County Environmental Management Department Liquid Waste Program oversees the permitting, design, construction, and installation of onsite wastewater treatment systems and wastewater holding tanks. Details of the process and requirements are provided in the County's 2018 Onsite Wastewater Treatment System Guidance Manual (SCEMD, 2018).

SACRAMENTO COUNTY GENERAL PLAN

The following policies from the Hazard Materials and Safety elements of the Sacramento County 2030 General Plan are applicable to the proposed project.

HAZARDOUS MATERIALS

- HM-1 Work with industry, community groups, and government agencies to develop effective, workable, and equitable hazardous materials regulations and provide information to the general public and interested parties on technical and administrative developments in the field of hazardous materials management.

- HM-4 The handling, storage, and transport of hazardous materials shall be conducted in a manner so as not to compromise public health and safety standards.

- HM-7 Encourage the implementation of workplace safety programs and to the best extent possible ensure that residents who live adjacent to industrial or commercial facilities are protected from accidents and the mishandling of hazardous materials.
- HM-8 Continue the effort to prevent ground water and soil contamination.
- HM-9 Continue the effort to prevent surface water contamination.
- HM-10 Reduce the occurrences of hazardous material accidents and the subsequent need for incident response by developing and implementing effective prevention strategies.
- HM-11 Protect residents and sensitive facilities from incidents which may occur during the transport of hazardous materials in the County.

SAFETY

- SA-23 The County shall require that all new development meets the local fire district standards for adequate water supply and pressure, fire hydrants, and access to structures by firefighting equipment and personnel.
- SA-24 The County shall require, unless it is deemed infeasible to do so, the use of both natural and mechanical vegetation control in lieu of burning or the use of chemicals in areas where hazards from natural cover must be eliminated, such as levees and vacant lots.
- SA-25 The County shall work with local fire districts to develop high visibility fire prevention programs, including those which provide voluntary home inspections and awareness of home fire prevention measures.
- SA-26 The County and fire districts shall develop programs to provide citizens with self-preparedness and community readiness skills for large or extended accidental, natural, and terrorist emergencies/incidents.
- SA-27 The County shall require, where appropriate, the use of fire-resistant landscaping and building materials for new construction developments that are cost effective.
- SA-28 The County shall encourage and require, to the maximum extent feasible, automatic fire sprinkler systems for all new commercial and industrial development to reduce the dependence on fire department equipment and personnel.
- SA-29 The County and fire districts will work together to regulate hazardous materials to mitigate emergency responses.

- SA-30 The County, medical community, and fire districts shall work to improve EMS response system that includes first responder emergency care and transportation services.
- Properly locating resources to provide timely response
 - Paramedic services from every fire station
- SA-31 The County shall continue to maintain, periodically update, and test the effectiveness of its Emergency Response Plan.
- SA-32 The County will implement the Local Hazard Mitigation Plan in the planning and operations of the County to achieve the goals, objectives, and actions of the County's Local Hazard Mitigation Plan.
- SA-33 The County shall continue its coordinative efforts, including evacuation planning, with service agencies, the cities within the County, and cities within surrounding counties.

IMPACTS AND ANALYSIS

SIGNIFICANCE CRITERIA

For purposes of this Supplement to the 2022 Airport SEIR and consistent with the criteria presented in the 2022 Airport SEIR, which is based on Appendix G of the CEQA Guidelines, impacts related to hazards and hazardous materials may be considered significant if implementation of the proposed project would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- 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 it create a significant hazard to the public or the environment;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or

- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

ISSUES NOT DISCUSSED IN IMPACTS

Based on the project site location, there would no impact related to the following topics for the reasons described below:

Hazardous materials in proximity to schools – There are no schools located within 0.25 mile of the project site. As discussed in the Environmental Setting, the nearest school is 1.5 miles east-southeast of the project site. Therefore, there would be no impact, and this issue is not evaluated further in this Supplement to the 2022 Airport SEIR.

Be located on a hazardous materials site compiled pursuant to Government Code Section 65962.5 – As discussed in the Environmental Setting, Hazardous Materials, the project site is not located on a hazardous materials site listed on Government Code Section 65962.5. Therefore, there would be no impact, and this issue is not evaluated further in this Supplement to the 2022 Airport SEIR.

Risk involving wildland fire – As discussed in the *Environmental Setting*, the project site is not located within or near a very high fire hazard severity zone. Therefore, there would be no impact, and this issue is not evaluated further in this Supplement to the 2022 Airport SEIR.

METHODOLOGY AND ASSUMPTIONS

As discussed in the introduction of this chapter, the 2022 Airport SEIR did not include a chapter discussing hazards and hazardous materials but identified that impacts related to hazards and hazardous materials from implementation of the 2022 Master Plan Update would be less than significant. As discussed in Chapter 1, *Introduction*, the 2022 Airport Master Plan Update and the 2022 Airport SEIR considered a development and operational horizon of 20 years (2018 through 2038) with four Planning Activity Levels (PALs). The area south of I-5 within the Airport Master Plan area, which includes the project site, was included within PAL 4 (with anticipated development within the 2034-2038 time period) of the 2022 Airport Master Plan Update. Due to the extended 20-year planning horizon, Master Plan projects or facilities identified in PAL 4 were determined to be beyond the scope of the 2022 Airport SEIR and were not analyzed at the project level.

As discussed in Chapter 8, *Land Use*, of the 2022 Airport Draft SEIR (page 8-11), the 2022 Airport Master Plan Update identifies future commercial development south of I-5 in PAL 4. The discussion further notes that if PAL 4 becomes ripe for development additional environmental review will be necessary. Although the project site is within the boundary of the project addressed in the 2022 Airport Master Plan SEIR, because of the acceleration of development to a year prior to the anticipated development under PAL 4, this Supplement to the 2022 Airport SEIR constitutes such additional environmental review. Accordingly, this chapter evaluates the effects of the proposed project related to hazards and hazardous materials at a project level.

This environmental analysis of the potential impacts related to hazards and hazardous materials from the construction and operation of the proposed project is based on a review of the results of the site-specific investigations, a review of literature and database research, and the Sacramento County General Plan; information regarding proposed project construction details; and the description of potential uses and associated operations at the project site with construction and operation of the proposed project.

As discussed in Chapter 2, *Project Description*, the proposed project would include the construction and operation of advanced high-powered public charging stations and associated facilities powered by a 12.5 megawatt alternating current (MWac) solar generation field, with nameplate power of 31.2 megawatts of direct current (MWdc), to support zero-electric freight movement in Sacramento and along the I-5 corridor.

The proposed project would be regulated by the wide range of laws, regulations, and policies summarized above in the *Regulatory Setting* subsection. Compliance by the proposed project with applicable federal, State, and local laws and regulations is assumed in this analysis, and it is reasonable to assume that local and State agencies will continue to enforce applicable requirements to the extent that they do so now. Note that compliance with many of the regulations would be required to receive the various County permits needed to construct and operate the project.

A significant impact would occur if, after considering the features described in Chapter 2, *Project Description*, and the required compliance with regulatory requirements, a significant impact would still occur. For those impacts considered to be significant, mitigation measures are proposed to reduce the identified impacts.

IMPACT: ROUTINE TRANSPORT, USE, OR DISPOSAL OF HAZARDOUS MATERIALS OR ACCIDENTAL RELEASE OF HAZARDOUS MATERIALS

The significance criteria for routine use and accidental release are discussed together as many of the same regulations apply to both criteria.

CONSTRUCTION

The 2022 Airport SEIR did not include a chapter discussing hazards and hazardous materials but identified that impacts related to hazards and hazardous materials from implementation of the 2022 Master Plan Update would be less than significant. In accordance with the required project-level evaluation described above under *Methodology and Assumptions*, the following analysis addresses proposed project impacts related to the routine transport, use, or disposal of hazardous materials or accidental release of hazardous materials during construction.

During project construction, construction equipment and materials would include fuels, oils and lubricants, solvents and cleaners, cements and adhesives, paints and thinners, degreasers, cement and concrete, and asphalt mixtures, which are all commonly used in construction. The routine use or an accidental spill of hazardous materials could result in inadvertent releases, which could adversely affect construction workers, the public, and the environment.

Construction activities would be required to comply with numerous hazardous materials regulations described in the *Regulatory Setting* subsection, designed to ensure that hazardous materials would be transported, used, stored, and disposed of in a safe manner to protect worker safety, and to reduce the potential for a release of construction-related fuels or other hazardous materials into the environment, including stormwater and downstream receiving water bodies. Contractors would be required to prepare and implement Hazardous Materials Business Plans (HMBPs) that would require that hazardous materials used for construction would be used properly and stored in appropriate containers with secondary containment to contain a potential release. The California Fire Code would also require measures for the safe storage and handling of hazardous materials.

As described under *Regulatory Setting* above, the construction contractor would be required to prepare a SWPPP for construction activities that would list the hazardous materials proposed for use during construction; describe spill prevention measures, equipment inspections, equipment and fuel storage; protocols for responding immediately to spills; and describe best management practices (BMPs) for controlling site runoff.

In addition, the transportation of hazardous materials would be regulated by the USDOT, Caltrans, and the CHP. Together, federal and State agencies determine driver-training requirements, load labeling procedures, and container specifications designed to minimize the risk of accidental release.

Finally, in the event of an accidental spill that could release hazardous materials at the project site, a coordinated response would occur at the State and local levels, including, but not limited to, the Sacramento International Airport Fire Department, which is the local hazardous materials response team, along with the California Highway Patrol and the Sacramento County Sheriff's Department, to respond to and assess the situation, as needed.

The required compliance with the numerous laws and regulations discussed above that govern the transportation, use, handling, and disposal of hazardous materials would limit the potential for creation of hazardous conditions due to the use or accidental release of hazardous materials and, like the conclusion reached in the 2022 Airport SEIR, would render this impact **less than significant**.

OPERATION

Routine operation and maintenance activities at the EV charging facility may involve the transportation, use, or temporary storage of hazardous materials during the ordinary course of work.

GENERAL

The 2022 Airport SEIR did not include a chapter discussing hazards and hazardous materials but identified that impacts related to hazards and hazardous materials from implementation of the 2022 Master Plan Update would be less than significant. In accordance with the required project-level evaluation described above under

Methodology and Assumptions, the following analysis addresses proposed project impacts related to the routine transport, use, or disposal of hazardous materials or accidental release of hazardous materials during operation.

For the overall facility, hazardous materials may include solar panels and batteries (analyzed further below), hydraulic fluid, diesel fuel, insulation oil for the transformers, grease, lubricants, paint, solvents, and adhesives. Smaller quantities (i.e., consumer-size containers) of common, commercially available maintenance chemicals also would be used at the facilities, including solvents, degreasers, lubricants, paints, and other coatings. All hazardous materials used onsite would be stored, handled, and disposed of in accordance with the manufacturers' specifications and consistent with all applicable regulatory requirements through a HMBP. Workers would be trained to engage in safe work practices and to properly identify and handle any hazardous materials onsite and to prevent accidental release.

Operation and maintenance of the solar facility would generate little hazardous waste. Upsets or accidents would be controlled via the secondary containment provided in accordance with applicable federal, state, and local laws and regulations. The insulating oil contained in each transformer does not normally require replacement, minimizing the potential for upsets or accidents involving its use. Further, Health and Safety Code Section 25500 et seq. requires the preparation of hazardous materials release response plans such as a HMBP under specified circumstances. Adherence to the HMBP would ensure that all handling, storage, and disposal of hazardous materials would be conducted in accordance with proven practices to minimize exposure to workers or the public.

Operation and maintenance vehicles that would service the facility would include light duty trucks (e.g., pickup, flatbed) and other light equipment for maintenance and module washing. Heavy equipment is not expected to be utilized during normal operation. Large or heavy equipment may be brought to the facility infrequently for equipment repair or replacement. Long-term maintenance and equipment replacement would be scheduled in accordance with manufacturer recommendations to ensure equipment integrity is maintained. Moving parts, such as motors and tracking module drive equipment, motorized circuit breakers and disconnects, and inverter equipment would be serviced on a regular basis, and unscheduled maintenance would be conducted as necessary.

The proposed project would not involve the routine transport, use, or disposal of hazardous materials, as defined by the Hazardous Materials Transportation Uniform Safety Act. The closest designated route for the transport of hazardous materials is Interstate 5, which is located adjacent to the facility. Adherence to regulations and applicant-proposed protocols during the storage, transportation, and usage of any hazardous materials would minimize and avoid the potential for significant upset and accident condition impacts.

Operation and maintenance activities generally would be limited to performing visual inspections, monitoring EV charging facility performance and executing minor repairs and adjustments for the solar panels. On intermittent occasions, repairs or replacement

of equipment, and other specialized maintenance may occur. Repair and maintenance activities may involve the transportation, use, or temporary storage of a variety of hazardous materials such as batteries, hydraulic fluid, diesel fuel, insulation oil for the transformers, grease, lubricants, paints, solvents, and adhesives. However, due to the largely self-operating nature of the facilities, such actions would occur infrequently. In addition, the quantities of hazardous materials used would be relatively small.

In summary, and like the conclusion reached in the 2022 Airport SEIR, the potential impact relative to routine use or accidental spills for the overall facility would be **less than significant**.

PV SOLAR PANELS

The 2022 Airport SEIR did not include a chapter discussing hazards and hazardous materials but identified that impacts related to hazards and hazardous materials from implementation of the 2022 Master Plan Update would be less than significant. In accordance with the required project-level evaluation described above under *Methodology and Assumptions*, the following analysis addresses proposed project impacts related to the routine transport, use, or disposal of hazardous materials or accidental release of hazardous materials associated with proposed PV solar panels.

The exact type of photovoltaic (PV) solar panels that would be installed on the facility have yet to be determined, however, it is anticipated that the proposed PV solar panels would be made from a polycrystalline silicon or thin-film technology. Polycrystalline silicon PV panels may include cadmium telluride (CdTe) or lithium (Li) technology. Consequently, the panels may contain hazardous materials.

Polycrystalline silicon PV panels may include cadmium telluride (CdTe) technology. Elemental cadmium (Cd), which forms CdTe when reacted with tellurium (Te), is a lung carcinogen, and long-term exposure can cause detrimental effects on kidney and bone (Fthenakis and Zweibel, 2003). However, CdTe is in the environmentally stable form of a compound rather than the leachable form of a metal. OSHA treats CdTe similarly to Cd and thus all facilities working with CdTe should use the same precautions that apply to Cd. Because such materials are in a solid and non-leachable state, broken polycrystalline silicon PV panels would not be a source of pollution to surface water, stormwater, or groundwater.

The CdTe compound is encapsulated in the PV module with the PV module containing a very small amount of Cd. The amount of Cd within a CdTe module is proportional to the area of the module and thickness of the layers. Most CdTe layers are 1 to 3 microns thick, which could contain anywhere from 3 to 9 grams per meter squared (g/m²) of Cd. For comparison, a 1-kilowatt (kW) CdTe PV system contains as little cadmium as seven C-sized nickel cadmium batteries. In addition, as technology advances, it is anticipated layer thickness would decrease therefore decreasing the amount of Cd in the modules.

It has been demonstrated that standard operation of CdTe PV systems does not result in cadmium emissions to air, water, or soil (Fthenakis, 2003). During the PV module manufacturing process, CdTe is bound under high temperature to a sheet of glass by

vapor transport deposition, coated with an industrial laminate material, insulated with solar edge tape, and covered with a second sheet of glass. The module design results in the encapsulation of the semiconductor material between two sheets of glass, thereby preventing the exposure of CdTe to the environment (Fthenakis and Zweibel, 2003).

Several peer-reviewed studies have evaluated the environmental, health, and safety aspects of CdTe PV modules (Fthenakis, 2003). These studies have consistently concluded that during normal operations and foreseeable accidents (e.g., fires, breakage), CdTe PV modules do not present an environmental risk. No emissions from CdTe PV would be released during a possible fire because Cd would dissolve into the molten glass. CdTe is a highly stable semiconductor compound due to strong chemical bonding that translates to extremely low solubility in water, low vapor pressure, and a melting point greater than 1,800°F. Potential impacts to soil, air, and groundwater quality from broken CdTe PV modules are highly unlikely to pose a potential health risk as they are below human health screening levels (Sinha et al., 2012; Fthenakis et al., 2005). Disposal risks of end-of-life CdTe PV modules are minimized because of the low solubility of CdTe and because the modules can be effectively recycled. CdTe PV modules have been proven to pass the Federal toxicity characteristic leaching procedure (TCLP) criteria for non-hazardous waste allowing the modules to be disposed of in landfills (Fthenakis, 2003).

Under a recent fate and transport analysis, a worst-case scenario of the total release of Cd from PV panels and residential screening levels were used to evaluate the potential health impacts to onsite workers and offsite residents (Sinha et al., 2012). Results indicate that the exposure point concentrations in residential soil, air, and drinking water are one to six orders of magnitude below human health screening levels and below background levels, indicating that it is highly unlikely that Cd exposures would pose potential health risks to on-site workers or off-site residents.

In summary, as discussed above, hazardous materials are unlikely to be released during any accidental breakage of the PV panels because they have been found to be sufficiently encapsulated within sheets of glass. Similarly, fire damage would not result in the release of hazardous materials because at typical flame temperatures, the CdTe compounds were not found to vaporize but instead Cd would dissolve into the molten glass. CdTe is a highly stable semiconductor compound due to strong chemical bonding that translates to extremely low solubility in water, low vapor pressure, and a melting point greater than 1,800°F. Potential impacts to soil, air, and groundwater quality from broken CdTe PV modules are highly unlikely to pose a potential health risk as they are below human health screening levels.

Potential CdTe emissions from broken PV modules exposed to precipitation are also unlikely. Based on warranty return data, the breakage rate of CdTe PV modules is one percent over 25 years, which translates to an average of 0.04 percent per year. This breakage rate is an overestimate because over one-third of PV module breakage occurs during shipping and installation. Modules that break during shipping and installation are removed from the construction site and returned to a manufacturing

facility for recycling. Because CdTe has a low solubility in water the likelihood of it being released to the environment is low.

Ultimately, and like the conclusion reached in the 2022 Airport SEIR, the potential impact relative to use or breakage of the solar panels is **less than significant**.

BATTERY ENERGY STORAGE SYSTEM

The 2022 Airport SEIR did not include a chapter discussing hazards and hazardous materials but identified that impacts related to hazards and hazardous materials from implementation of the 2022 Master Plan Update would be less than significant. In accordance with the required project-level evaluation described above under *Methodology and Assumptions*, the following analysis addresses proposed project impacts related to the routine transport, use, or disposal of hazardous materials or accidental release of hazardous materials associated with the proposed BESS.

The project would incorporate a Tesla Megapack for AC-coupled BESS sized for 1.9 MW of power and 3.9 MWh of energy storage. The enclosure would be placed outdoors on a concrete pad near the substation and main switch gear. The BESS enclosure would be approximately 25 feet in width, 8.5 feet in height, and 5.5 feet in depth. The BESS technology would use lithium-ion battery cells.

Hazardous materials that would be present in the BESS modules would be contained as required by applicable federal State and local requirements and would include necessary safety features such as appropriate ventilation, acid resistant materials, and presence of spill protection supplies. The BESS would be designed, constructed, and operated in accordance with applicable industry best practices and regulatory requirements, including, but not limited to, National Fire Protection Association 855 (Standard for the Installation of Stationary Energy Storage Systems), Section 1206 of the California Fire Code, and, if applicable, certified to UL 9540.

The BESS equipment containing hazardous materials would be equipped with spill containment areas and would be in accordance with OSHA requirements such as inclusion of heating, ventilation, air conditioning, fire protection systems, and spill response supplies. All components would have a comprehensive Spill Prevention, Control, and Countermeasure Plan, in accordance with all applicable federal, State, and local regulations. The preparation and implementation of an HMBP that would describe proper handling, storage, transport, and disposal techniques and methods to be used to avoid spills and minimize impacts in the event of a spill, would further reduce impacts related to hazards to a less-than-significant level.

The required compliance with the numerous laws and regulations discussed above that govern the transportation, use, handling, and disposal of hazardous materials would limit the potential for creation of hazardous conditions due to the routine use or accidental release of hazardous materials. Therefore, with compliance with these regulatory requirements, and like the conclusion reached in the 2022 Airport SEIR, the impact would be **less than significant**.

IMPACT: SAFETY HAZARD OR EXCESSIVE NOISE FROM AN AIRPORT

As previously stated in the Introduction to this section, impacts relative to noise are analyzed in Chapter 14, *Noise*. The analysis for noise considered increases of noise levels over ambient levels, exposure to people residing or working in the area, and groundborne vibration. As concluded in Chapter 14, all noise and vibration impacts would be less than significant.

AIRSPACE PROTECTION SURFACE

The 2022 Airport SEIR did not include a chapter discussing hazards and hazardous materials but identified that impacts related to hazards and hazardous materials from implementation of the 2022 Master Plan Update would be less than significant. In accordance with the required project-level evaluation described above under *Methodology and Assumptions*, the following analysis addresses proposed project impacts related to safety hazards due to the height of the proposed structures.

The project site is located inside the AIA, Referral Area 1, which includes Safety Zone 2 – Inner Approach/Departure Zone, an area with noise and/or safety compatibility concerns. This area has height restrictions for structures that range from about 115 feet above mean sea level at the north project site property boundary to about 170 feet above mean sea level at the south project site property boundary (airspace protection surface/height limit surface). This translates to structure height limitations of about 105 to 160 feet. As discussed in Chapter 2, *Project Description*, the tallest structure on the project site would be Building 2 at two stories. Therefore, the project structures would not interfere with the airport protection surface and like the conclusion reached in the 2022 Airport SEIR, the impact would be **less than significant**.

GLARE

The 2022 Airport SEIR did not include a chapter discussing hazards and hazardous materials but identified that impacts related to hazards and hazardous materials from implementation of the 2022 Master Plan Update would be less than significant. In accordance with the required project-level evaluation described above under *Methodology and Assumptions*, the following analysis addresses proposed project impacts related to safety hazards due to the glare associated with the proposed solar panels.

To analyze the potential for glare from the solar panels to interfere with aircraft flying over the solar panels or with the air traffic control tower, a glare analysis was conducted in accordance with FAA approved methodology (ForgeSolar, 2023), which is included as Appendix AE-1. The analysis assumed that the solar panels would be fixed in place and would not rotate or tilt toward the sun. The analyses considered several different orientations of the panels (i.e., orientation and tilt angle). The analysis concluded that there would be no glare that would be visible to pilots or air traffic controllers. The glare analysis is currently undergoing FAA review, and the FAA's concurrence with the analysis would necessarily be a condition of project construction and operation, per FAA's regulatory oversight of aeronautical uses on SMF. Additional analysis of glare is

provided in Section 4, *Aesthetics*. Therefore, relative to glare, like the conclusion reached in the 2022 Airport SEIR, the impact would be **less than significant**.

IMPACT: IMPAIR IMPLEMENTATION OF OR PHYSICALLY INTERFERE WITH AN EMERGENCY OPERATIONS PLAN

The 2022 Airport SEIR did not include a chapter discussing hazards and hazardous materials but identified that impacts related to hazards and hazardous materials from implementation of the 2022 Master Plan Update would be less than significant. In accordance with the required project-level evaluation described above under *Methodology and Assumptions*, the following analysis addresses proposed project impacts related to the impairment of or physical interference with an emergency operations plan.

The construction and operation of the proposed project would not impair implementation of or physically interfere with emergency operations. This facility would be located in a sparsely populated, rural area. Access to the project site would be from the two-lane east-to-west Bayou Way, along the north side of the facility. I-5 is located adjacent and north of Bayou Road. Emergencies that occur at the airport would use I-5; Bayou Way has limited utility as an emergency access route because it has limited entry points (none to the west of the airport and only Powerline Line Road and Metro Air Parkway to the east. Emergency vehicles would use I-5, the faster route with more lanes. The only emergency circumstance under which Bayou Way would be used for emergency access would be for the unlikely event of I-5 being closed between the airport and Powerline Line Road and Metro Air Parkway to the east. However, as discussed in Chapter 2, *Project Description, Offsite Improvements*, the proposed project would include paving and widening at the intersections of Bayou Way and Airport Boulevard and Bayou Way and Power Line Road. This improvement would also serve to improve the movement of vehicles, including emergency vehicles if necessary. Therefore, the project would improve the existing road network and thus improve traffic circulation during emergencies when compared to existing conditions.

During construction, the project would not require closures or lane restrictions of Bayou Way. However, during site clearing and construction, heavy construction-related vehicles could interfere with emergency response to the site or emergency evacuation procedures in the event of a nearby emergency (e.g., slowing vehicles traveling behind a truck). As discussed above under *Regulatory Setting*, the project would be required to apply for an Encroachment Permit. per County requirements, issuance of an Encroachment Permit requires preparation of a Traffic Control Plan, which would describe procedures to ensure that emergency vehicles could pass by and into the site, as needed. As a result, the project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, like the conclusion reached in the 2022 Airport SEIR, the impact would be **less than significant**.

12 HYDROLOGY AND WATER QUALITY

INTRODUCTION

This chapter evaluates the effects of the proposed project related to hydrology and water quality, focusing on changes to the 2022 Airport SEIR that may result in new or more severe impacts, and describes any mitigation measures needed to address any such impacts.

FINDINGS OF THE AIRPORT MASTER PLAN UPDATE SUPPLEMENTAL EIR

Impacts of the 2022 Airport Master Plan Update related to hydrology and water quality were analyzed in Chapter 7, *Hydrology*, of the 2022 Airport Draft SEIR. The 2022 Airport SEIR determined that implementation of the 2022 Airport Master Plan Update would have the following impacts with respect to hydrology and water quality:

- Construction and operation of activities allowed under the Airport Master Plan Update would not violate any water quality standards or waste discharge requirements (*Less than Significant*).
- Implementation of the Airport Master Plan Update would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantially additional sources of polluted runoff and/or substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on or off site (*Less than Significant*).
- Implementation of the Airport Master Plan Update would develop in an area that is subject to 200-year urban levels of flood protection (ULOP) area that could not make one of the four required findings (*Less than Significant*).

NOTICE OF PREPARATION COMMENTS

The Notice of Preparation (NOP) for this Supplement to the 2022 Airport SEIR was circulated on August 17, 2023. No comments were received related to hydrology and water quality.

INFORMATION SOURCES

The information and analysis included in this chapter was informed by a sewer feasibility study (Kimley-Horn, 2023), a water supply assessment (Kimley-Horn, 2024a) and a drainage study (Kimley-Horn, 2024b), which are provided in Appendices UTL-1, UTL-2 and HWQ-1 of this Supplemental EIR. Additional resources used in the preparation of this section include information from Reclamation District 1000 (RD 1000 2023a, 2023b) and the Sustainable Groundwater Management Plan prepared for the Sacramento Groundwater Authority (GEI, 2021).

ENVIRONMENTAL SETTING

SURFACE WATER RESOURCES

SURFACE WATER HYDROLOGY

The project site is located east and north of the Sacramento River in the Natomas Basin (RD 1000 2023a, 2023b). The Natomas Basin covers approximately 55,000 acres and is bounded by the Natomas Cross Canal on the north, the Sacramento River on the west and south, the American River on the southeast, and the Natomas East Main Drainage Canal on the east. RD 1000 operates and maintains a drainage system consisting of 30 miles of main drainage canals, approximately 150 miles of drainage ditches, and seven main pumping stations. Runoff water from precipitation and agricultural drainage is collected in various small ditches, street drains, or pipes. Pipes and ditches carry the water into a main drainage canal. Each main drainage canal leads to the Sacramento River. Pumping plants are located between the canals and the river, which release water in a controlled manner into the river and throughout the flood control system. The levees were built to prevent the American and Sacramento Rivers from flooding the Natomas Basin annually and allowing for agricultural and urban land uses.

Locally, the project site is bordered by the following drainages (Kimley-Horn, 2024b):

- Bayou Way/I-5 drainage ditch along the north side that drains to the east to the RD 1000 North Drain Canal
- RD 1000 North Drain Canal along the east side that drains south to the West Drainage Canal
- West Drainage Canal along the south side that drains to the east and eventually into the Sacramento River
- An open channel along the west side that drains south to the West Drainage Canal.

The interior of the project site is very flat, with drainage generally south and east towards surrounding canals and ditches. Most of the project site is defined by a series of minor low points that provide some storage before overtopping and continuing to flow south. The project site does not have surface water (e.g., streams or ponds).

FLOODING

Most of the project site is designated as Zone A floodplain, where base flood elevations have also not been established (see Figure 3 in Kimley-Horn, 2024b). Sacramento County has established a provisional 100-year floodplain delineation along with a 100-year floodplain elevation of 14 feet. The far northern edge of the project site is within Zone A99, which corresponds to areas of the 1 percent annual chance floodplain that will be protected by a federal flood protection system where construction has reached specified statutory milestones. The project site is located within the 200-year Urban Level of Flood Protection (ULOP) applicability area.

A seismic seiche causes standing waves to set up on rivers, reservoirs, ponds, and lakes when seismic waves from an earthquake pass through the area. The project site is not located near such a water body. A tsunami is an ocean wave usually created by undersea fault movement or by a coastal or submerged landslide. The project site is not located near the ocean.

GROUNDWATER RESOURCES

GROUNDWATER BASIN

A groundwater basin is defined as a hydrogeologic unit containing one large aquifer or several connected and interrelated aquifers. The project site is located within the North American Subbasin (GEI, 2021). The subbasin encompasses about 342,000 acres in Sutter, Placer, and Sacramento counties and is bounded by the American, Bear, Feather, and Sacramento Rivers. The subbasin is in the Sacramento Valley and is filled largely with sediments derived from the adjacent Sierra Nevada foothills, which contain fresh water. In general, these freshwater bearing sediments beneath the subbasin are thinnest to the east and thicken up to 2,000 feet to the west. The sediments consist of alternating layers of clays, silts, sand, and gravel. The sand and gravel layers into which wells are constructed are referred to as aquifers. These sand and gravel layers were deposited by meandering rivers and creeks, so they are not continuous across the entire subbasin. Although the sediments are not present as continuous layers, they are interconnected, as demonstrated by observing that groundwater levels in the various sand and gravel layers have similar levels and trends. Based on this information, the subbasin is interpreted as having one principal aquifer.

GROUNDWATER QUALITY

With no groundwater wells onsite, the groundwater quality is unknown. Generally, the quality of groundwater in the subbasin is suitable for nearly all uses, with the exception of contamination plumes and localized, naturally-occurring and human-caused quality issues, which may affect the supply, beneficial uses, and potential management of groundwater in the subbasin if not properly managed (GEI, 2021). Total dissolved solids (TDS) and nitrate were identified as constituents that represent general conditions in the subbasin, with some wells displaying upward trends. Nitrate is below the drinking water standards for all wells in the subbasin. TDS exceeds the drinking water standards in some wells, predominantly in the western and eastern portions of the subbasin. The higher salinity concentrations are generally considered to be present due to natural sources.

GROUNDWATER LEVELS AND LAND SUBSIDENCE

No wells are present on the project site. Given the proximity to numerous irrigation canals and ditches, as well as the Sacramento River, the depth to groundwater is likely on the order of a few feet. Regional studies estimate the depth to groundwater at about 9 feet in this local area (GEI, 2021).

Groundwater levels in the western portion of the subbasin, where the project is located, are generally stable through time dating back to early in the 20th century. Limited land

subsidence due to groundwater pumping was documented up to the early 1990s, but there were no documented impacts associated with the subsidence. Since then, the subsidence has been negligible.

WATER SUPPLIES

No water supply wells are present on the project site and the site does not currently have water service. Water supplies in this area are provided by the City of Sacramento through their agreement with the Sacramento County Water Agency (SCWA) (Kimley-Horn, 2024a). The City sources its water from a combination of surface water diverted from the Sacramento River, which is treated at the Sacramento Water Treatment Plant; surface water diverted from the American River, which is treated at the E.A. Fairbairn Water Treatment Plant; and groundwater pumped from City-owned and operated wells from the underlying North American and South American subbasins. The sources of water supply in 2020 were surface water (70,916 acre-feet per year [AFY]), groundwater (21,141 AFY), purchased or imported water (8,427 AFY), and recycled water (29 AFY).

SUSTAINABLE GROUNDWATER MANAGEMENT ACT

The Sustainable Groundwater Management Act (SGMA) and corresponding regulations require that each groundwater basin designated as a “high” or “medium” priority be operated to a sustainable yield, balancing natural and artificial groundwater recharge with groundwater use. Groundwater agencies located within high- or medium-priority basins were required to adopt groundwater sustainability plans by January 31, 2020 (if the basin was determined by DWR to be in a condition of critical overdraft), or by January 31, 2022, for all other high- and medium-priority basins.

The North American Subbasin is classified as a high-priority basin and the Sacramento Groundwater Authority (SGA) submitted a Groundwater Sustainability Plan (GSP) dated December 2021 as required by SMGA (GEI, 2021). Information provided in the GSP has been incorporated into the analysis below.

REGULATORY SETTING

FEDERAL

CLEAN WATER ACT

The federal Clean Water Act and subsequent amendments, under the enforcement authority of the U.S. Environmental Protection Agency (USEPA), was enacted “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” The purpose of the Act is to protect and maintain the quality and integrity of the nation’s waters by requiring states to develop and implement state water plans and policies. The Act also sets water quality standards for surface waters and established the National Pollutant Discharge Elimination System (NPDES) program to protect water quality, such as under Section 402, which outlines the NPDES program, including Section 402(p), which governs stormwater permitting. The Clean Water Act authorizes the USEPA to implement pollution control programs such as setting wastewater

standards for industry. In California, implementation and enforcement of the Act is conducted through the California State Water Resources Control Board and the nine Regional Water Quality Control Boards (RWQCBs).

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT

Section 402 of the Clean Water Act contains the NPDES permit system, which regulates municipal and industrial point discharges to surface waters of the U.S. Each NPDES permit for point discharges contains limits on allowable concentrations of pollutants contained in discharges.

The NPDES program also regulates non-point source (i.e., stormwater) pollutants in discharges. Stormwater sources are diffuse and originate over a wide area rather than from a definable point. The goal of NPDES stormwater regulations is to improve the quality of stormwater discharged to receiving waters to the “maximum extent practicable” using structural and non-structural Best Management Practices (BMPs). BMPs can include the development and implementation of various practices including educational measures (workshops informing public of what impacts results when household chemicals are dumped into storm drains), regulatory measures (local authority of drainage facility design), public policy measures, and structural measures (e.g., silt fences, straw wattle, grass swales, and detention ponds). The NPDES permits that apply to the project include the Construction General Permit, as described further below.

FEDERAL EMERGENCY MANAGEMENT AGENCY

Under Executive Order 11988, the Federal Emergency Management Agency (FEMA) is responsible for management of floodplain areas defined as the lowland and relatively flat areas adjoining inland and coastal waters subject to a 1 percent or greater chance of flooding in any given year (the 100-year floodplain). FEMA’s overall mission is to support citizens and first responders to ensure that the United States builds, sustains, and improves capabilities to prepare for, protect against, respond to, recover from, and mitigate all hazards. Regarding flooding, FEMA provides information, guidance, and regulation associated with flood prevention, mitigation, and response. Under Executive Order 11988, FEMA requires that local governments covered by the federal flood insurance program pass and enforce a floodplain management ordinance that specifies minimum requirements for any construction within the 100-year floodplain. Through its Flood Insurance and Mitigation Administration, FEMA manages the National Flood Insurance Program (NFIP), which includes flood insurance, floodplain management, and flood hazard mapping functions. FEMA determines flood elevations and floodplain boundaries and distributes the FIRM maps used in the NFIP. These maps identify the locations of special flood hazard areas, including 100-year floodplains.

Federal regulations governing development in a floodplain are set forth in Code of Federal Regulations (CFR) Title 44, Part 60. Those regulations enable FEMA to require municipalities participating in the NFIP to adopt certain flood hazard reduction standards for construction and development in 100-year floodplains.

STATE

PORTER-COLOGNE WATER QUALITY CONTROL ACT

The Porter-Cologne Water Quality Control Act (Water Code Section 13000 et seq.) is the primary water quality control law in California. The Porter-Cologne Act established the State Water Resources Control Board and divided the state into nine regional basins, each overseen by a RWQCB. The nine RWQCBs have the primary responsibility for the coordination and control of water quality within their respective jurisdictional boundaries. The Porter-Cologne Act requires the RWQCBs to establish water quality objectives while acknowledging that water quality may be changed to some degree without unreasonably affecting beneficial uses. Water quality objectives are limits or levels of water quality constituents or characteristics established for the purpose of protecting beneficial uses. Designated beneficial uses, together with the corresponding water quality objectives, also constitute water quality standards under the federal Clean Water Act. Therefore, the water quality objectives form the regulatory references for meeting state and federal requirements for water quality control. Designated beneficial uses for water bodies in the study area are described in the regional regulatory section (under Basin Plan).

NPDES CONSTRUCTION GENERAL PERMIT

Construction associated with projects that would disturb more than 1 acre of land surface affecting the quality of stormwater discharges into waters of the U.S. are subject to the *NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities* (Order 2022-0057-DWQ, NPDES No. CAS000002). The Construction General Permit regulates discharges of pollutants in stormwater associated with construction activity to waters of the U.S. from construction sites that disturb 1 acre or more of land surface, or that are part of a common plan of development or sale that disturbs more than 1 acre of land surface. The permit regulates stormwater discharges associated with construction or demolition activities, such as clearing and excavation; construction of buildings; and linear underground projects, including installation of water pipelines and other utility lines.

The Construction General Permit requires that construction sites be assigned a Risk Level of 1 (low), 2 (medium), or 3 (high), based both on the sediment transport risk at the site and the receiving waters risk during periods of soil exposure (e.g., grading and site stabilization). The sediment risk level reflects the relative amount of sediment that could potentially be discharged to receiving water bodies and is based on the nature of the construction activities and the location of the site relative to receiving water bodies. The receiving waters risk level reflects the risk to the receiving waters from the sediment discharge. Depending on the risk level, the construction projects could be subject to the following requirements:

- Effluent standards;
- Good site management “housekeeping;”
- Non-stormwater management;

- Erosion and sediment controls;
- Run-on and runoff controls;
- Inspection, maintenance, and repair; or
- Monitoring and reporting requirements.

The Construction General Permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) that includes specific BMPs designed to prevent sediment and pollutants from contacting stormwater from moving off site into receiving waters. The BMPs fall into several categories, including erosion control, sediment control, waste management and good housekeeping, and are intended to protect surface water quality by preventing the off-site migration of eroded soil and construction-related pollutants from the construction area. Routine inspection of all BMPs is required under the provisions of the Construction General Permit. In addition, the SWPPP is required to contain a visual monitoring program, a chemical monitoring program for non-visible pollutants, and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment.

The SWPPP must be prepared before construction begins. The SWPPP must contain a site map(s) that delineates the construction work area, existing and proposed buildings, parcel boundaries, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the project area. The SWPPP must list BMPs and the placement of those BMPs that the applicant would use to protect stormwater runoff. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for “non-visible” pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Examples of typical construction BMPs include scheduling or limiting certain activities to dry periods, installing sediment barriers such as silt fence and fiber rolls, and maintaining equipment and vehicles used for construction. Non-stormwater management measures include installing specific discharge controls during certain activities, such as paving operations, vehicle and equipment washing and fueling. The Construction General Permit also sets post-construction standards (i.e., implementation of BMPs to reduce pollutants in stormwater discharges from the site following construction).

In the Project area, the Construction General Permit is implemented and enforced by the Central Valley RWQCB, which administers the stormwater permitting program. Dischargers must electronically submit a notice of intent and permit registration documents to obtain coverage under this Construction General Permit. Dischargers are to notify the Central Valley RWQCB of violations or incidents of non-compliance and submit annual reports identifying deficiencies in the BMPs and explaining how the deficiencies were corrected. The risk assessment and SWPPP must be prepared by a State Qualified SWPPP Developer, and implementation of the SWPPP must be overseen by a State Qualified SWPPP Practitioner. A legally responsible person, who is legally authorized to sign and certify permit registration documents, is responsible for obtaining coverage under the permit.

URBAN LEVEL OF PROTECTION (ULOP)

In 2007, several bills were passed that amended the California Water Code and Government Code to strengthen flood protection and link land use planning to flood planning, including SB 5 (2007), as amended by SB 1278 (2012) and AB 1259 (2013). One of the primary purposes of SB-5 and related legislation is to better tie local land use decisions that allow development in floodplains to the potential consequences in the event of a levee break.

A key requirement of SB 5 is that local jurisdictions amend their General Plans and Zoning Code to require 200-year flood protection standard in urban or urbanizing areas, and establish the requirement that when land uses are approved in Flood Hazard Zones, the county must make one of the following findings:

1. The facilities of the State Plan of Flood Control or other flood management facilities protect the property to the Urban Level of Flood Protection (ULOP) in urban and urbanizing areas or the Federal Emergency Management Agency (FEMA) standard of flood protection in non-urbanized areas.
2. The county has imposed conditions on the entitlement or permit that will protect the property to the ULOP in urban and urbanizing areas or the FEMA standard of flood protection in non-urbanized areas.
3. The local flood management agency has made adequate progress on the construction of a flood protection system that will result in flood protection equal to or greater than the ULOP in urban or urbanizing areas by 2025.
4. The property is in an undetermined risk area and has met the ULOP.

In most cases, the ULOP is defined as protection against a 200-year flood, although there are exceptions for shallow flooding or flooding from small watersheds. Levee systems in the Sacramento region require major improvements to provide 200-year flood protection.

SUSTAINABLE GROUNDWATER MANAGEMENT ACT

The Sustainable Groundwater Management Act (SGMA) authorizes local agencies to manage groundwater in a sustainable manner and allows limited state intervention when necessary to protect groundwater resources. SGMA defined “sustainable groundwater management,” established a framework for local agencies to develop plans, and implement strategies to sustainably manage groundwater resources, established basin prioritization (ranked from very low to high priority) and set a 20-year timeline for implementation. Basins are prioritized under the SGMA by the Department of Water Resources (DWR).

The project is located within the North American Subbasin (subbasin). Groundwater within the southern part of the subbasin is managed by SGA. The SGA, along with four other agencies within the subbasin, prepared the groundwater sustainability plan for the subbasin, which describes the subbasin conditions, sustainability management criteria

and goals, and projects and management actions to achieve those goals (SAG et al., 2021).

LOCAL

WATER QUALITY CONTROL PLAN (BASIN PLAN)

The Central Valley RWQCB (Region 5S) *Water Quality Control Plan* (commonly referred to as the Basin Plan) for the Sacramento River Basin and the San Joaquin River Basin was adopted by the RWQCB as revised in 2019 (RWQCB, 2019). The Basin Plan is the master water quality control planning document used to designate beneficial uses and surface and ground water quality objectives. The RWQCB is tasked with implementing the adopted Basin Plan through planning, permitting, and enforcement of established water quality objectives. In accordance with State Policy for Water Quality Control, the RWQCB employs a range of beneficial use designations for surface waters (including creeks, streams, lakes, and reservoirs), groundwater, marshes, and mudflats that serve as the basis for establishing water quality objectives, discharge conditions, and prohibitions. The Basin Plan has identified existing and potential beneficial uses supported by the key surface water drainages throughout its jurisdictional planning area, and for groundwater. The Basin Plan designates the beneficial uses for the nearby Sacramento River as municipal and domestic supply (MUN), agricultural supply (AGR), contact and non-contact water recreation (REC-1 and REC-2), freshwater habitat (WARM and COLD), migration (MIGR), spawning (SPWN), wildlife habitat (WILD), and navigation (NAV). The beneficial uses for groundwater in the area are municipal and domestic water supply (MUN), agricultural supply (AGR), industrial service supply (IND), and industrial process supply (PRO).

SACRAMENTO COUNTY LAND GRADING AND EROSION CONTROL ORDINANCE

Sacramento County Municipal Code Title 16, Chapter 16.44, was enacted to minimize water quality degradation, minimize damage to and disruption of drainage flows, and to comply with the County's NPDES MS4 Permit. A Grading and Erosion Control Permit from the County is required if a project involves grading, filling, excavation, storage, or disposal of 350 cubic yards or more of soil or other earthen material, or if a project requires clearing and grubbing of one acre or more of land. Agricultural cropland is exempt from this requirement. The permit application must include copies of all applicable state and federal permits (such as CWA Section 404 permits for fill of wetlands), and proposed grading plans that include the following information (among other requirements):

- Location of all watercourses, wetlands, and drainage systems;
- Location of all roads and structures;
- Proposed grading, slopes, and elevation shown by contours;
- Quantity of material to be excavated;
- Location, implementation schedule, and maintenance schedule of all erosion control measures and sediment control measures to be implemented or constructed prior to, during, or after the proposed activity;

- Description of measures designed to control dust and stabilize the construction site road and entrance; and
- Description of the location and methods of storage and disposal of construction materials.

SACRAMENTO COUNTY FLOODPLAIN MANAGEMENT ORDINANCE

Sacramento County Municipal Code Title 16, Chapter 16.02, Section 16.02.060 (Ordinance SZC-2016-0023) requires a Floodplain Management Permit for any new construction, substantial improvements, or alteration of land within a special flood hazard area (FEMA Zones A, AO, AI-A30, AE, A99, AH, or AR). These standards control filling, grading, and other development which may increase flood damage; and are intended to prevent or regulate the construction of flood barriers that would unnaturally divert flood waters or which may increase flood hazards in other areas. Per Ordinance SZC-2016- 0023, Section 905-01, a project applicant must apply for a development permit for construction in a FEMA flood zone, and approval by the County's floodplain administrator is required. The permit application must include plans showing elevations of proposed structures and the elevations of areas proposed for materials and equipment storage; the proposed elevation in relation to mean sea level, of the lowest floor of all structures; the proposed elevation in relation to mean sea level to which any structure will be floodproofed; the location, volume, and depth of proposed fill and excavation within the 100-year floodplain and floodway; and a description of the extent to which any watercourse will be altered or relocated as a result of project development.

Per Ordinance SZC-2016-0023, Section 906-05, commercial solar power plants are treated as development (governed by Section 906-06), and any structures or electrical panels for such facilities must be elevated or floodproofed at least 1.5 feet above the base flood elevation and designed and anchored in accordance with the standards of Section 906-06. A declaration of land use restriction in a format approved by County Counsel must be recorded if any part of the commercial solar development will be lower than 1.5 feet above the base flood elevation.

SACRAMENTO COUNTY LIQUID WASTE PROGRAM

Onsite wastewater treatment systems (e.g., septic tanks and leach fields) within Sacramento County are regulated by the Sacramento County Environmental Management Department Liquid Waste Program. The authority for Sacramento County Environmental Management Department to develop and adopt onsite wastewater treatment system (OWTS) regulations is established in the California Health and Safety Code, Section 101000 et seq. and Sacramento County Code (SCC), Section 2.15.030. The County's Board of Supervisors adopted Chapter 6.32 (On-site Management of Wastewater) of the Sacramento County Code (SCC) which regulates OWTS. A full set of regulations can be found in the Onsite Wastewater Treatment System Guidance Manual (Sacramento County EMD, 2013).

The Guidance Manual describes requirements for the capacity of septic tanks, design criteria for leach fields, setbacks, and anti-buoyancy components. A site evaluation is

required before design of an OWTS and is composed of an assessment of property characteristics to determine suitability for an OWTS.

SACRAMENTO COUNTY GENERAL PLAN

The following policies from the Conservation and Safety elements of the Sacramento County 2030 General Plan are applicable to the proposed project.

CONSERVATION

- CO-7. Support the Water Forum Agreement Groundwater Management Element. Prior to approving any new development, a water supply plan shall be approved that demonstrates consistency with an adopted groundwater management plan.
- CO-8. Applicants proposing developments in areas with significant groundwater recharge characteristics shall evaluate the impact of said development on groundwater recharge and quality. This evaluation should recognize criteria defined in any broader Countywide determination and/or evaluation of groundwater recharge areas.
- CO-26. Protect areas susceptible to erosion, natural water bodies, and natural drainage systems.
- CO-28. Comply with other water quality regulations and NPDES permits as they apply to County projects or activities, such as the State's Construction General Permit and Aquatic Pesticides Permit.
- CO-30. Require development projects to comply with the County's stormwater development/design standards, including hydromodification management and low impact development standards, established pursuant to the NPDES Municipal Permit. Low impact development design and associated landscaping may serve multiple purposes including reduction of water demand, retention of runoff, reduced flooding, and enhanced groundwater recharge.
- CO-31. Require property owners to maintain all required stormwater measures to ensure proper performance for the life of the project.
- CO-35. New development that will generate additional water demand shall not be approved and building permits shall not be issued if sufficient water supply is not available, as demonstrated by a Water Supply Assessment and Written Verification processes.
- CO-107. Maintain and protect natural function of channels in developed newly developing, and rural areas.

SAFETY

- SA-5. A comprehensive drainage plan for major planning efforts shall be prepared for streams and their tributaries prior to any development within the 100-year floodplain, and/or the 200-year floodplain in areas subject to the Urban Level of Flood Protection, defined by full watershed development without channel modifications. The plan shall:
- a. Determine the elevation of the future 100-year flood, and/or the 200-year flood in areas subject to the Urban Level of Flood Protection, associated with planned and full development of the watershed;
 - b. Determine the boundaries of the future 100-year floodplain, and/or the 200-year floodplain in areas subject to the Urban Level of Flood Protection, for both flood elevations (planned and full development) based on minimum 2- foot contour intervals;
- SA-14. The County shall require, when deemed to be physically or ecologically necessary, all new urban development and redevelopment projects to incorporate runoff control measures to minimize peak flows of runoff and/or assist in financing or otherwise implementing Comprehensive Drainage Plans.
- SA-15. The County shall regulate, through zoning and other ordinances, land use and development in all areas subject to potential flooding and prohibit urban uses on unprotected flood land.
- SA-22 b. New development shall be elevated as required by the applicable flood standards (100-year, or 200-year in areas subject to the Urban Level of Flood Protection) and should be constructed to be resistant to flood damage consistent with the Floodplain Management Ordinance.

IMPACTS AND ANALYSIS

The analysis in this Draft Final Supplement to the 2022 Airport SEIR describes impacts identified in the 2022 Airport Master Plan Update Supplemental EIR and describes how the impacts of the proposed project would differ, as applicable.

SIGNIFICANCE CRITERIA

For purposes of this Supplemental EIR and consistent with the criteria presented in the 2022 Airport Master Plan Update Supplemental EIR, which is based on Appendix G of the CEQA Guidelines, impacts related to hydrology and water quality may be considered significant if implementation of the proposed project would:

- Violate any water quality standards or waste discharge requirements.
- Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantially additional sources of polluted runoff.

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on or off site.
- Develop in an area that is subject to 200-year urban levels of flood protection (ULOP) area that could not make one of the four required findings.

METHODOLOGY AND ASSUMPTIONS

As discussed in Chapter 1, *Introduction*, the 2022 Airport Master Plan Update and the 2022 Airport SEIR considered a development and operational horizon of 20 years (2018 through 2038) with four Planning Activity Levels (PALs). The area south of I-5 within the Airport Master Plan area, which includes the project site, was included within PAL 4 (with anticipated development within the 2034-2038 time period) of the 2022 Airport Master Plan Update. Due to the extended 20-year planning horizon, Master Plan projects or facilities identified in PAL 4 were determined to be beyond the scope of the 2022 Airport SEIR. As discussed in Chapter 8, *Land Use*, of the 2022 Airport Draft SEIR (page 8-11), the 2022 Airport Master Plan Update identified future commercial development south of I-5 in PAL 4. The discussion further noted that if PAL 4 became ripe for development additional environmental review would be necessary. Accordingly, proposed project impacts related to hydrology and water quality on the project site are evaluated at a project level below.

This environmental analysis of the potential impacts related to hydrology and water quality is informed by the results of a sewer feasibility study (Kimley-Horn, 2023), a water supply assessment (Kimley-Horn, 2024a) and a drainage study (Kimley-Horn, 2024b), which are provided in Appendices UTL-1, UTL-2 and HWQ-1 of this document, a review of literature and database research, and the general plan for Sacramento County.

The project would be regulated by the various laws, regulations, plans, and policies summarized in the *Regulatory Setting* for this chapter. Compliance by the proposed project with applicable, independently enforceable requirements is assumed in this analysis, and local and State agencies would be expected to continue to enforce applicable requirements to the extent that they do so now.

After considering the implementation of the proposed project described in Chapter 2, *Project Description*, and compliance with the required regulatory requirements, the analysis below identifies if the defined significance thresholds are exceeded and, therefore, a significant impact would occur. For those impacts considered to be significant, mitigation measures are proposed to the extent feasible to reduce the identified impacts.

IMPACT: VIOLATE ANY WATER QUALITY STANDARDS OR WASTE DISCHARGE REQUIREMENTS

CONSTRUCTION

The potential for the 2022 Airport Master Plan Update to violate water quality standards or waste discharge requirements during construction were discussed on page 7-9 of the 2022 Airport Draft SEIR. The analysis found that ground-disturbing activities associated with future development under the 2022 Airport Master Plan Update could temporarily increase the potential for erosion to discharge sediment and other pollutants to local surface waters (i.e., irrigation and drainage canals and ditches, and the Sacramento River). In addition, construction-related activities associated with future development under the 2022 Airport Master Plan Update would require the use of hazardous materials (e.g., fuels, oil, lubricants for equipment paints, solvents, or other potentially hazardous materials commonly used in construction), which could be mobilized and transported offsite potentially degrading the water quality of local surface waters. However, future development under the 2022 Airport Master Plan Update would be required to obtain coverage under the NPDES Construction General Permit, which would require the preparation and implementation of a SWPPP. The SWPPP would describe BMPs such as settlement basins, silt fences, and straw wattles to prevent sediment and other pollutants from leaving the work site and entering waterways. Therefore, the 2022 Airport SEIR concluded that impacts relative to water quality during construction would be less than significant.

The project site is flat, with only a modest potential for any concentrated runoff to occur. This condition would not substantially change with project construction, which would include vegetation removal, grubbing, grading, and installation of roads and other facilities. Construction activities would involve the use of bulldozers, graders, trucks, and various other types of equipment, and would involve modest changes to onsite topography. These activities would potentially loosen existing surface soils and sediments, increasing the potential for erosion during storm events. Additionally, the use of construction equipment may involve the accidental release of fuel, oils, brake dust, lubricants, antifreeze, and other potentially hazardous substances at the construction site. Application of water for dust suppression could generate runoff that may entrain and transport pollutants (e.g., sediment and other pollutants). These water quality pollutants could be delivered to surface water bodies during storm events, and/or be infiltrated into groundwater and the underlying aquifer, resulting in the degradation of water quality. As noted in the *Environmental Setting*, the canals and ditches that surround the project site all eventually drain to the Sacramento River.

As explained in the *Regulatory Setting*, the proposed project would be subject to compliance with the NPDES Construction General Permit, which would include development and implementation of a SWPPP that would include site-specific BMPs (e.g., strategically placed silt fences, straw wattles, and other erosion control measures) to prevent conditions of erosion and stormwater runoff.

Any activity that results in the accidental release of hazardous materials could result in water quality degradation. During construction of the proposed project, fuels, oils and lubricants, solvents and cleaning solutions, hydraulic fluids, and paints and thinners commonly associated with construction may be stored and used onsite. As discussed in Chapter 11, *Hazards and Hazardous Materials*, these materials would be stored and handled in compliance with federal, State, and local regulations that cover the transportation, storage, use, and disposal of hazardous materials. With compliance with the Construction General Permit and hazardous materials regulations, and similar to the conclusion reached in the 2022 Airport SEIR, the project's impact on water quality would be **less than significant**.

OPERATION

The potential for development allowed under the 2022 Airport Master Plan Update to violate water quality standards or waste discharge requirements during operation were discussed on pages 7-9 to 7-10 of the 2022 Airport Draft SEIR. The analysis found that the discharge of water during industrial or commercial activities associated with the 2022 Airport Master Plan Update during operation could adversely affect water quality. However, development allowed under the 2022 Airport Master Plan Update that discharge water would be required to obtain NPDES permit coverage either under the general permit or as an individual permit for discharges once operational. Outfall discharges would need to comply with discharge limits or numeric action levels, and regular outfall monitoring would occur to demonstrate compliance. Furthermore, dischargers would be required to implement non-structural (operational) BMPs (e.g., preventative maintenance, good housekeeping, employee training) to the extent feasible, as well as supplementary structural BMPs as needed to comply with permitted discharge requirements. Finally, the design of facilities would incorporate industrial activity-based source control measures, low-impact development measures, stormwater detention facilities, water quality treatment controls, hydromodification controls, and full capture trash control as outlined by the Stormwater Quality Design Manual. For these reasons, the 2022 Airport SEIR concluded that impacts relative to water quality during operations would be less than significant.

For the proposed project, up to 4.5 AFY of water would be required during operation and maintenance for PV solar panel washing and general maintenance. The need for panel washing would be about four to five times per year and would be determined based on operating considerations. No chemicals would be added to the water used to wash the panels. Therefore, relative to solar panel washing, and similar to the conclusion reached in the 2022 Airport SEIR, the project's impact would be **less than significant**.

As discussed in Chapter 2, *Project Description*, the Vehicle Charging/Rest Area facility would discharge wastewater to an OWTS. The OWTS must be designed and operated in accordance with the County regulations described in the OWTS Guidance Manual, summarized above in *Regulatory Setting*. The feasibility study conducted for the project concluded that the OWTS would require a septic tank(s) capacity of 5,080 gallons and leach field sizing of 5,080 to 12,700 square feet depending on the permeability of soils

on the site (Kimley-Horn, 2023). The feasibility study concluded that it is feasible to operate an OWTS with the soils encountered on the site. Therefore, with the design and operation of the OWTS in compliance with County regulations, and similar to the conclusion reached in the 2022 Airport SEIR, the project's impact relative to the OWTS would be **less than significant**.

As discussed in Chapter 2, *Project Description*, stormwater on the northern 13.5 acres of the project site would sheet flow to one of the five vegetated swales shown in Figure PD-3. The flow through the vegetated swales would treat the stormwater from the parking areas, plaza, charging stations, and buildings removing sediment and other pollutants from the stormwater before it flows beneath Bayou Way via culverts to an existing drainage channel that runs between I-5 and Bayou Way.

All drainage infrastructure on the northern 13.5 acres of the project site would conform to established low impact development (LID) and County standards. Stormwater flow on the southern 96.5 acres of the project site where the solar panel arrays are located would infiltrate into the ground or flow south to the West Drainage Canal along the southern border of the project site, as it does now. Therefore, with the design of the stormwater drainage system in compliance with LID and County regulations, and similar to the conclusion reached in the 2022 Airport SEIR, the project's impact relative to stormwater quality would be **less than significant**.

IMPACT: CREATE OR CONTRIBUTE RUNOFF WATER THAT WOULD EXCEED THE CAPACITY OF EXISTING OR PLANNED STORMWATER DRAINAGE SYSTEMS OR PROVIDE SUBSTANTIALLY ADDITIONAL SOURCES OF POLLUTED RUNOFF

The potential for development allowed under the 2022 Airport Master Plan Update to create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantially additional sources of polluted runoff were discussed on pages 7-7 to 7-8 of the 2022 Airport Draft SEIR. The analysis concluded that development allowed under the 2022 Airport Master Plan Update would result in changes to the previous agricultural drainage system by adding new impervious surfaces and re-routing stormwater. This, in turn, could result in increases in stormwater peak runoff rates and volumes, which without appropriate stormwater quality controls, could exceed the capacity of existing or planned stormwater drainage systems. To address the proposed changes, development allowed under the 2022 Airport Master Plan Update would be required to incorporate project design features to manage stormwater runoff, including new stormwater conveyance systems with flow attenuation features such as stormwater inlets, trench drains, storm sewers, culverts, manholes, and culvert crossings, along with lift stations as needed. With the incorporation of project design features to manage stormwater, development allowed under the 2022 Airport Master Plan would not exceed the capacity of stormwater drainage systems, and stormwater generated onsite would continue into the Reclamation District 1000 (RD 1000) drainage system, as it does now. For these reasons, the 2022 Airport SEIR concluded that the resulting impacts would be less than significant.

The project site is flat, with only a modest potential for any concentrated runoff to occur. This condition would not substantially change with project construction, which would include vegetation removal, grubbing, grading, and installation of roads and other facilities. As discussed in Chapter 2, *Project Description*, and above in the impact analyses for water quality, stormwater would be collected on the new impervious surfaces on the northern 13.5 acres of the project site and then be routed into the proposed facility stormwater system. The stormwater system would consist of curbs and gutters that route stormwater to one of five vegetated swales, which would capture runoff, remove sediment and other pollutants from the stormwater, and infiltrate some stormwater into the subsurface, as it does now. This infiltration would reduce the volume of stormwater exiting the site. After passing through the vegetated swales, the reduced volume of treated stormwater on the northern 13.5 acres of the project site would be directed to vegetated swales and then to culverts that would pass beneath Bayou Way to an existing drainage channel that runs between I-5 and Bayou Way. Stormwater on the southern 96.5 acres of the project would fall on the solar array modules, which would be set into the ground surface; the solar array fields would remain unpaved. Consequently, some of the stormwater would infiltrate into the subsurface, as it does now which would also remove sediment and other pollutants. Stormwater that does not infiltrate would then flow as overland sheet flow to the West Drainage Canal along the southern border of the project site, as it does now.

To quantitatively evaluate changes between existing and proposed drainage conditions, a drainage study was conducted for the site (Kimley-Horn, 2024b). The drainage analysis concluded that the proposed development and storm drainage improvements would not cause an increase in total peak discharge rate from the site to the RD 1000 drainage system (i.e., I-5/Bayou Way drainage ditch and West Drainage Canal) in 100-year 24-hour, or the 100-year 10-day rainfall events. The drainage analysis concluded that the proposed facility stormwater system would control stormwater flow, utilize infiltration, and would not exceed the existing or planned drainage system capacity. Therefore, like the conclusion reached in the 2022 Airport SEIR, this project's impact would be **less than significant**.

IMPACT: SUBSTANTIALLY ALTER THE EXISTING DRAINAGE PATTERN OF THE SITE OR AREA, INCLUDING THROUGH THE ALTERATION OF THE COURSE OF A STREAM OR RIVER, IN A MANNER THAT WOULD RESULT IN SUBSTANTIAL EROSION OR SILTATION ON OR OFF SITE

The potential for development allowed under the 2022 Airport Master Plan Update to create or contribute runoff water that would substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site were discussed on pages 7-7 to 7-8 of the 2022 Airport Draft SEIR. The analysis concluded that implementation of projects under the 2022 Airport Master Plan Update would result in changes to the previous agricultural drainage system by adding new impervious surfaces and re-routing stormwater, resulting in increases in stormwater peak runoff rates and volumes, which without appropriate stormwater quality controls, could result in

erosion and siltation. To address the proposed changes, development allowed under the 2022 Airport Master Plan Update would be required to incorporate several of project design features discussed above to manage stormwater runoff. With the incorporation of project design features to manage stormwater, overall drainage patterns would not change significantly, sediment would be captured, and stormwater generated onsite would continue into the RD 1000 drainage system, as it does now. For these reasons, the 2022 Airport SEIR concluded that the resulting impacts would be less than significant.

As discussed above, the project site is flat, with only a modest potential for any concentrated runoff to occur. This condition would not substantially change with project construction, which would include vegetation removal, grubbing, grading, and installation of roads and other facilities. As discussed in Chapter 2, *Project Description*, and above in the impact analyses for water quality, stormwater on the northern 13.5 acres of the project site would be collected on the new impervious surfaces and be routed into the proposed facility stormwater system.

The stormwater system would consist of curbs and gutters that route stormwater to one of five vegetated swales, which would capture runoff and infiltrate some water into the subsurface. The vegetated swales would also capture sediment that would prevent siltation in receiving drainage channels. After passing through the vegetated swales, stormwater on the northern 13.5 acres of the project site would be directed to culverts that would pass beneath Bayou Way and thus to an existing drainage channel that runs between I-5 and Bayou Way. Stormwater on the southern 96.5 acres of the project would fall on the solar array modules, which would be set into the ground surface; the solar array fields would remain unpaved. Consequently, some of the stormwater would infiltrate into the subsurface, as it does now which would also remove sediment from any overland sheet flow of stormwater.

Stormwater that does not infiltrate would flow as overland sheet flow to the West Drainage Canal along the southern border of the project site, as it does now. This flow over the flat vegetated surface would flow slowly due to the flat topography and drop sediment as it flows to the West Drainage Canal. As discussed above in the analysis for impacts to stormwater drainage systems, the drainage study concluded that the proposed development and storm drainage improvements would not cause an increase in total peak discharge rate from the site, which indicates that the stormwater flow rates under the proposed conditions are not expected to cause erosion (Kimley-Horn, 2024b). Therefore, like the conclusion reached in the 2022 Airport SEIR, this project impact would be **less than significant**.

IMPACT: DEVELOP IN AN AREA THAT IS SUBJECT TO 200-YEAR URBAN LEVELS OF FLOOD PROTECTION (ULOP) AREA THAT COULD NOT MAKE ONE OF THE FOUR REQUIRED FINDINGS

The potential for airport property to be affected by flooding was discussed on pages 7-10 to 7-13 of the 2022 Airport Draft SEIR. The airport and surrounding areas are located in two ULOP areas within the Natomas Basin; one area is classified as levee-

protected and the other is non-levee protected. The non-levee protected areas within the project area are associated with the RD 1000 West Drainage Canal floodplain, located south of the airport. The non-levee protected area south of I-5 represents the modeled flood extent expected until RD 1000's pump stations can pump to the Sacramento River. The surrounding levee systems protect lands within the Natomas Basin from external flooding by the Sacramento and American Rivers. However, since the basin is relatively flat, localized flooding can occur when runoff exceeds the ability of RD 1000's pumps to discharge it to the Sacramento River.

In 2007, the Sacramento Area Flood Control Agency (SAFCA) commenced the Natomas Levee Improvement Program (NLIP) to meet the 200-year flood protection standard. The NLIP project improved levees on the north perimeter and a portion of the west perimeter of the Natomas Basin. SAFCA completed NLIP construction in 2016. The American River Common Features Natomas Basin Project is improving the basin's remaining west, east, and south levees and is expected to be completed by 2025.

The completion of the NLIP project and the progress towards expected completion of the American River Common Features Natomas Basin Project in 2025 will reduce the potential for flooding that will result in flood protection equal to or greater than the ULOP in urban or urbanizing areas by 2025. This also complies with Condition 3 of the ULOP (see *Regulatory Setting*).

As discussed above in the *Environmental Setting*, the project site is located within a 100-year flood zone and has a provisional 100-year flood elevation of 14 feet. Flood events could inundate the project site and release sediment or other pollutants. However, as discussed in the 2022 Airport SEIR and summarized above, recent levee improvements have increased the level of flood protection. In addition, the proposed project would include drainage improvements to efficiently route stormwater to infiltration swales and then to the drainage canals on the north and south sides of the project site, as it does now. With the improvements in flood control in the surrounding area and improvements to drainage within the project site, and like the conclusion reached in the 2022 Airport SEIR, this project impact would be **less than significant**.

13 LAND USE

INTRODUCTION

This chapter evaluates the effects of the proposed project related to land use, focusing on changes to the 2022 Airport SEIR that may result in new or more severe impacts.

While an EIR may provide information regarding land use and planning issues, CEQA does not consider inconsistency with land use plans and policies to be a physical effect on the environment unless the plan or policy was adopted for the purpose of avoiding or mitigating a significant environmental effect. Adverse physical effects on the environment that could result from construction and operation of the proposed project, including the changes to land use addressed in this chapter, are evaluated and disclosed in the appropriate topical sections of this Supplement to the 2022 Airport SEIR.

FINDINGS OF THE AIRPORT MASTER PLAN UPDATE SEIR

Impacts of the 2022 Airport Master Plan Update related to land use were analyzed in Chapter 8, *Land Use*, of the 2022 Airport SEIR. The 2022 Airport SEIR determined that implementation of the 2022 Airport Master Plan Update would have the following impacts with respect to land use:

- Implementation of the Airport Master Plan Update would not cause a significant environmental impact due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect (*Less than Significant Impact*)

As discussed on page 8-10 of Chapter 8, *Land Use*, of the 2022 Airport Draft SEIR, the Master Plan Update would not result in significant impacts related to physical division of an established community, as the 2022 Airport Master Plan Update would occur on an established airport use, and there would be no new expansion of the project boundaries.

NOTICE OF PREPARATION COMMENTS

The Notice of Preparation (NOP) for the Supplement to the 2022 Airport SEIR was circulated on August 17, 2023. One comment letter related to land use was received. The Sacramento Area Council of Governments, acting in its role as the Airport Land Use Commission for Sacramento County, stated that a formal Airport Land Use Compatibility determination for the proposed project is pending the project applicant's preparation and submittal of additional design details and analyses of land use compatibility factors required by the state Airport Land Use Planning Handbook, including noise, safety, airspace protection, and overflight. The comments stated that documentation of these details and analyses should be included in the Draft EIR or attachments thereto.

INFORMATION SOURCES

The information and analysis included in this chapter was developed based on a review of the 2022 Airport SEIR, the Sacramento County 2030 General Plan, the Sacramento County Zoning Code, the Sacramento International Airport Land Use Compatibility Plan, and a usage intensity calculation memo prepared by Kimley-Horn in 2023 (Appendix LU-1), which was peer reviewed by ESA and Sacramento County and determined to be accurate and adequate for inclusion in this Supplement to the 2022 Airport SEIR.

ENVIRONMENTAL SETTING

EXISTING AND ADJACENT LAND USES

The project site is located in the northwest portion of Sacramento County, approximately 7.5 miles from downtown Sacramento. Specifically, the project site is located south of Interstate 5 (I-5) immediately south of Sacramento International Airport (SMF). The project site is bounded by Bayou Way and I-5 to the north, fallow farmland and water tanks that are a part of the airport's water system to the east adjacent to Power Line Road, the West Drainage Canal and farmland to the south, and fallow farmland to the west.

The area immediately surrounding the project site includes airport facilities to the north across I-5 and farmland that is both in production and out of production to the east, south, and west. Metro Air Park, which includes industrial, manufacturing, distribution, and high-tech uses, is located approximately a quarter mile to the northeast. Low-rise residential buildings and neighborhoods within the City of Sacramento limits are located 1.6 miles to the east, and the Sacramento River is located approximately 1.5 miles to the west/southwest.

EXISTING LAND USE DESIGNATIONS AND ZONING

GENERAL PLAN

The current General Plan land use designation for the project site is Public/Quasi-Public. This designation establishes areas for uses such as education, solid and liquid waste disposal, and cemeteries. This designation identifies public and quasi-public areas that are of significant size, under County jurisdiction, regional in scope, specified by State law, or have significant land use impacts.

ZONING

The current zoning designation for the project site is Agricultural 20 (AG-20) and Agricultural 80 (AG-80). Agricultural zoning districts are established, among other objectives, to eliminate the encroachment of land uses incompatible with the long-term agricultural use of land and to preserve the maximum amount of the limited supply of agricultural land within the County. Each of the agricultural districts is distinguished by a

minimum lot size measured in acres (e.g., Agricultural 20, Agricultural 40, Agricultural 80, and Agricultural 160).

Permitted uses within the AG-20 and AG-80 zoning designations include raising and harvesting crops, commercial bee keeping, primary processing of agricultural products, stables and corrals, roadside crop sales, single-family dwelling units, farm worker housing, parks, wildlife preserves, and gas and oil wells (Sacramento County, 2021). Uses permitted with approval of a Use Permit include agricultural equipment repair, maintenance, and manufacturing; food processing industries; large wineries; places of worship; private schools; campgrounds; hunting clubs; major utilities; solar energy facilities; wind turbine facilities; and wireless communication towers (Sacramento County, 2021).

SACRAMENTO INTERNATIONAL AIRPORT MASTER PLAN

The Sacramento International Airport Master Plan currently designates the project site for commercial use. Specifically, the project site is envisioned to be developed with a Travel Center (Truck Stop).

REGULATORY SETTING

FEDERAL

FEDERAL AVIATION ADMINISTRATION

The FAA's foremost mission is to ensure a safe national air navigation system. To meet this objective, 14 CFR Part 77, imaginary surfaces, establish standards for determining obstructions in navigable airspace. These imaginary surfaces extend out from the runway in a manner that reflects where aircraft are likely to fly. The FAA conducts aeronautical studies of proposed activities that could impact airspace. These studies review physical incursions of proposed structures into airspace, interference with radar communications, and any other conditions that might negatively impact air traffic. For projects proposed on airport property, airport sponsors must file documentation with the FAA so that it can complete an airspace review and assess the potential impact of the project on air navigation and issue a determination of hazard or no hazard.

LOCAL

SACRAMENTO COUNTY GENERAL PLAN

The Sacramento County 2030 General Plan provides an inventory of land supply within the County and projects the amount and location of land and development that will be required to accommodate future populations and economic growth through 2030. The land use strategies and policies of the Sacramento County 2030 General Plan are designed to promote the efficient use of land, encourage economic vitality and job growth, reduce urban sprawl and its impacts, preserve habitat and open space, and protect agricultural and rangeland operations.

The following policies from the Land Use and Public Facilities elements of the Sacramento County 2030 General Plan are applicable to the proposed project.

LAND USE

- LU-17 Support implementation of the design review program on a project-by-project basis to ensure that all development applications positively contribute to the immediate neighborhood and the surrounding community.
- LU-29 Promote voluntary participation in incentive programs to increase the use of solar photovoltaic systems in new and existing residential, commercial, institutional, and public buildings.
- LU-71 Reduce the energy impacts from new residential and commercial projects through investigation and implementation of energy-efficiency measures during all phases of design and development.
- LU-73 The County will consult with state and federal regulatory and resource agencies during initial review of development projects to identify potential environmental conflicts and establish, if appropriate, concurrent application processing schedules.
- LU-87 Because land use decisions around airports by local governments have a direct impact on an airport's long-term viability and utility, proposed new land use projects and land use practices near airports within Sacramento County shall consider consistency with current federal, State, and local airport land use compatibility regulations, orders, policies, plans, standards and guidance pertaining to public safety and minimization of hazardous wildlife attractants within five statute miles of County airports.

PUBLIC FACILITIES

- PF-78 Large multi-megawatt solar and other renewable energy facilities should be sited at locations that will minimize impacts. The following guidelines should be considered, though it is [sic] recognized that each project is different and must be analyzed individually, and that other factors may affect the suitability of a site. Locational criteria for wind turbines should be determined on a case-by-case basis and referred to the Sacramento County Airport System and the FAA for review and comment.
- Desirable sites are those which will minimize impacts to county resources and will feed into the electrical grid efficiently, including:
 - Lands with existing appropriate land use designations, e.g., industrial.
 - Brownfield or other disturbed properties (e.g., former mining areas, mine tailings) or land that has been developed previously and has lost its natural values as open space, habitat or agricultural land.

- Sites close to existing facilities necessary for connection to the electrical grid to minimize the need for additional facilities and their impacts, and to improve system efficiency.
- Other sites may be used for siting renewable energy facilities after consideration of important natural and historic values of the land, including:
 - Farmlands. Site on farmlands of the lowest quality, e.g., land classified by the DOC as “other land” or “grazing land,” then consider farmlands of local, unique, or statewide importance. Avoid high-quality farmlands, especially land classified by the DOC as prime and lands under active Williamson Act contracts.
 - Habitat and Other Open Space Lands. Site on lands with the lowest habitat and open space values, and consider how a site will affect conservation planning, e.g., the Conservation Strategy in the South Sacramento HCP. Avoid areas containing vernal pool complexes and associated uplands.
 - Scenic Values. Site in areas of lowest scenic values and avoid visually prominent locations e.g., ridges, designated scenic corridors and designated historic sites.
 - Cultural Resources. Site in areas that are known to have limited potential for containing cultural resources. Otherwise, avoid sites with known cultural resources.

PF-79 New solar and other renewable energy facilities should be designed and developed so as to minimize impacts to sensitive biological resources such as oak woodlands and vernal pools, cultural resources (including designated historic landscapes), or farmlands as defined by the California DOC. Nearby farm operations shall not be negatively affected by renewable energy facilities, per the policies of the Right-to-Farm Ordinance and the Agricultural Element.

SACRAMENTO COUNTY ZONING CODE

The Zoning Code establishes land use zones and standards and regulations for development in those zones within unincorporated Sacramento County. Chapter 2, “Zoning Districts,” establishes the base zoning districts and district-specific regulations. Chapter 3, “Use Regulations,” sets forth the uses and use standards allowed within the districts. Chapter 4, “Special and Combining Zoning Districts” establishes zoning districts in which additional standards may apply. Chapter 5, “Development Standards” contains standards that apply to development in the zoning districts.

SACRAMENTO INTERNATIONAL AIRPORT LAND USE COMPATIBILITY PLAN

The Sacramento International Airport Land Use Compatibility Plan (ALUCP) was first adopted in October 1984 and last amended in 2013. The ALUCP contains land use compatibility guidelines for height, noise, and safety. The ALUCP was prepared by the

Sacramento Area Council of Governments (SACOG) Airport Land Use Commission (ALUC). The ALUC is responsible for adopting basic airport land use policies, adopting ALUCPs for area airports, incorporating land use compatibility guidelines established in the ALUCPs into the general plans of the jurisdictions that have land use authority in areas subject to the ALUCPs, and reviewing development proposals and land use plans for areas around the airports.

The following policy from the ALUCP is applicable to the discussion of allowable intensity within ALUCP-designated safety zones below.

3.3.3. Nonresidential Development Criteria: Proposed Nonresidential Development shall be evaluated in accordance with the following criteria:

- a) The usage Intensity (people per acre) limit indicated in Table 2 for each safety zone is the fundamental criterion against which the safety compatibility of most nonresidential land uses shall be measured. The Intensity limits set the total number of occupants allowed on the project site during normal busy use. Other criteria may be applicable to uses of special concern (see Policy 3.3.7).
- b) All nonresidential uses, including uses listed in Table 1, Safety Compatibility Criteria [Table LU-1 of this Supplement to the 2022 Airport SEIR], as “Normally Compatible,” must comply with both the “sitewide average” and “single-\acre” usage Intensity limits indicated below and listed in Table 1 for each safety zone.

Table LU-1: Safety Compatibility Criteria

Safety Zone	1	2	3	4	5	6
Maximum Sitewide Average Intensity	10	60	100	160	130	400
Maximum Single Acre Intensity	20	120	250	480	390	1,200

- 1) The “sitewide average” Intensity equals the total number of people expected to be on the entire site divided by the site size in acres (i.e., the gross acreage of the project site).
- 2) The “single-acre” Intensity equals the number of people expected to occupy the most intensively used 1.0-acre area(s) of the site.
- c) The need to calculate the usage Intensity of a particular project proposal for compliance with the Intensity criteria in the Paragraph (b) table is to be governed by the following:
 - 1) Land use categories indicated in Table 2 as “Normally Compatible” for a particular safety zone are presumed to meet the Intensity criteria indicated in the Paragraph (b) table. Unless the particular project

proposal represents an atypical example of the usage type, calculation of the usage Intensity is not required.

- 2) Calculation of the usage Intensity must be done for all proposed projects where the land use category for the particular safety zone is indicated in Table 2 as “Conditional” and the criteria column says “Ensure Intensity criteria are met.”
 - 3) Where Table 2 indicates that land use category is “Conditional” for the particular safety zone, but the criteria are other than “Ensure Intensity criteria are met,” calculation of the usage Intensity is not necessary for typical examples of the use. However, the project proposal must comply with the other criteria listed for the applicable land use category and safety zone.
- d) No new structures intended to be occupied regularly are allowed in Safety Zone 1.
 - e) Usage Intensity calculations shall include all people (e.g., employees, customers/visitors) who may be on the project site at any single point in time, whether indoors or outdoors.

IMPACTS AND ANALYSIS

The analysis in this Supplement to the 2022 Airport SEIR describes impacts identified in the 2022 Airport SEIR and describes how the impacts of the proposed project would differ, as applicable.

SIGNIFICANCE CRITERIA

For purposes of this Supplement to the 2022 Airport SEIR and consistent with the criteria presented in the 2022 Airport SEIR, which is based on Appendix G of the CEQA Guidelines, impacts related to land use may be considered significant if implementation of the proposed project would:

- Physically divide an established community; and
- Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

ISSUES NOT DISCUSSED IN IMPACTS

Physically divide an established community – Division of an established community typically involves constructing a physical barrier to neighborhood access, such as a new freeway, or removing a means of access, such as a bridge or a roadway. The project site is in a rural area of unincorporated Sacramento County, and the nearest established community, North Natomas in the City of Sacramento, is located 1.5 miles

to the east/southeast of the project site. The proposed project does not include any linear features, such as new roadways, or any physical feature that would create a barrier, divide, or separate adjacent land uses or hinder access. Therefore, this issue is not evaluated further in this Supplement to the 2022 Airport SEIR.

METHODOLOGY AND ASSUMPTIONS

As discussed in Chapter 1, *Introduction*, the 2022 Airport Master Plan Update and the 2022 Airport SEIR considered a development and operational horizon of 20 years (2018 through 2038) with four Planning Activity Levels (PALs). The area south of I-5 within the Airport Master Plan area, which includes the project site, was included within PAL 4 (with anticipated development within the 2034-2038 time period) of the 2022 Airport Master Plan Update. Due to the extended 20-year planning horizon, Master Plan projects or facilities identified in PAL 4 were determined to be beyond the scope of the 2022 Airport SEIR. As discussed in Chapter 8, *Land Use*, of the 2022 Airport SEIR (page 8-11), the 2022 Airport Master Plan Update identifies future commercial development south of I-5 in PAL 4. The discussion further notes that if PAL 4 becomes ripe for development additional environmental review will be necessary. Accordingly, proposed project impacts related to land use are evaluated at a project level below.

The evaluation of the potential land use impacts associated with implementation of the proposed project is based on a review of the 2022 Airport Master Plan Update, the Sacramento County 2030 General Plan, the Sacramento County Zoning Code, the Sacramento International Airport Land Use Compatibility Plan, and a usage intensity calculation memo prepared by Kimley-Horn in 2023 (Appendix LU-1).

As noted in the introduction to this chapter, while an EIR may provide information regarding land use and planning issues, CEQA does not consider inconsistency with land use plans and policies to be a physical effect on the environment unless the plan or policy was adopted for the purpose of avoiding or mitigating a significant environmental effect. Adverse physical effects on the environment that could result from construction and operation of the proposed project, including the changes to land use addressed in this chapter, are evaluated and disclosed in the appropriate topical sections of this Supplement to the 2022 Airport SEIR. This chapter evaluates effects related to land use and planning that would occur with implementation of the proposed project.

IMPACT: CONFLICT WITH SACRAMENTO COUNTY'S LAND USE PLANS

Potential conflicts with Sacramento County's land use plans due to the implementation of the 2022 Airport Master Plan Update were discussed on page 8-11 of the 2022 Airport Draft SEIR. The analysis identified that the Sacramento County General Plan Land Use designation for the Airport Master Plan area is Public/Quasi Public. The analysis identified that the County Zoning Code designates SMF's property north of I-5 as AG-80 and property south of I-5 as AG-20 and AG-80, which permits a minimum lot size of 20 or 80 acres (respectively) for agricultural land uses. The analysis identified that this zoning designation also permits public uses such as the airport, and, therefore,

the proposed facilities shown in the 2022 Master Plan Update are consistent with the provisions of these zoning designations.

The analysis identified that, beyond zoning consistency, the prior Master Plan EIR contained Mitigation Measure LU-1 to move the Urban Services Boundary (USB) south of I-5 to include proposed parking and commercial uses. The analysis identified that the USB defines the ultimate urban boundary for the County. The analysis identified that within the USB is the Urban Policy Area (UPA), which defines the limits of urban services (water and sewer). The analysis identified that movement of the USB was accomplished through resolution 2008-0391, but the UPA was not moved through this process.

In a subsequent action, and pursuant to Sacramento County Code Section 20.02.050(d), which provides the authority for the County's Environmental Coordinator to modify or delete adopted mitigation measures under specific circumstances, the County modified Master Plan EIR Mitigation Measure LU-1 to also move the UPA to include the area south of I-5 proposed for parking and commercial uses and which includes the project site. In recognition that the USB and UPA work in tandem to manage and direct future development, as well as to provide infrastructure and service providers with intermediate and ultimate growth boundaries to use to plan for future expansion, the County staff implemented the substitute mitigation measure administratively, as the UPA is within the USB, and the requisite public services cannot be provided without the USB and UPA boundaries being coterminous (Sacramento County, 2023).

The analysis concluded that implementation of the 2022 Airport Master Plan Update is consistent with Sacramento County General Plan and Zoning Code and impacts would be less than significant.

The project site is currently designated Public/Quasi-Public in the General Plan and zoned AG-20 and AG-80. According to the Zoning Consistency Matrix in the General Plan Land Use Element (Table 8), the Public/Quasi-Public land use designation is consistent with nearly all zoning designations (except Food Processing Combining Zone and Recreation Reserve). Therefore, as the proposed project is located on property that is designated Public/Quasi-Public, its proposed uses are consistent with the underlying AG-20 and AG-80 zoning designations. Therefore, the proposed project is consistent with Sacramento County General Plan and Zoning Code, and like the conclusion reached in the 2022 Airport SEIR, the impact would be **less than significant**.

MITIGATION MEASURES

None required.

IMPACT: CONFLICT WITH SACRAMENTO INTERNATIONAL AIRPORT LAND USE COMPATIBILITY PLAN

Potential conflicts with ALUCP due to the implementation of the 2022 Airport Master Plan Update were discussed on pages 8-11 to 8-14 of the 2022 Airport Draft SEIR. The analysis identified that the ALUCP is intended to guide development in and around the airport to ensure that development is compatible with airport operations. The analysis

identified that the 2022 Airport Master Plan Update would alter the size and location of commercial uses within the airport property. The analysis identified that the proposed land uses of the 2022 Airport Master Plan Update were evaluated using the methods presented in the ALUCP with regard to noise contours, safety zones, and height restrictions. The analysis identified that all of the proposed Airport Master Plan facilities and land uses are located in safety zones in which the use is normally or conditionally permitted. The analysis determined that since specific uses have not been identified within the proposed commercial development areas, all development would be reviewed by County Department of Airports staff for consistency with the ALUCP prior to building permit approval. Based on these findings, the analysis concluded that impacts related to conflicts with ALUCP due to the implementation of the 2022 Airport Master Plan Update would be less than significant.

In accordance with the required project-level evaluation described in Chapter 1, *Introduction*, of this Supplement to the 2022 Airport SEIR, the following analysis addresses proposed project impacts related to related to conflicts with the ALUCP, using the methods presented in the ALUCP.

NOISE CONTOURS

According to Map 2, Compatibility Policy Map: Noise, of the ALUCP, the eastern portion of the project site is located within a community noise equivalent noise level (CNEL) noise contour of 75 while the western portion of the project site is located within a CNEL noise contour of 70-75. According to Table 1, Noise Compatibility Criteria, vehicle fueling uses (e.g., gas stations, trucking, and transportation terminals), which are like the uses proposed by proposed project, are conditionally acceptable in areas where exterior noise levels reach over CNEL 75 although interior noise levels must not exceed 50 decibels. Therefore, given the existing exterior noise environment, the proposed uses would be compatible with exterior noise level standards found in the ALUCP. Furthermore, it is expected that interior noise levels within the proposed structures would not exceed the ALUCP's 50 decibel noise level standard with adherence to standard building construction techniques.

SAFETY ZONES

According to Map 3, Compatibility Policy Map: Safety, of the ALUCP, the western-most portion of the project site is within ALUCP Safety Zone 3 (Inner Turning Zone). This portion of the project includes one of the truck charging areas and approximately one-third of the proposed solar field. The remainder of the project, including the proposed 5.25-acre central plaza area, the eastern truck charging area, and the remaining approximately two-thirds of the solar field would be within ALUCP Safety Zone 2 (Inner Approach/Departure Zone).

The ALUCP has policies to provide compatibility criteria for land uses within the Airport Safety Zones. The proposed project includes retail and office uses. According to Table 2 of the ALUCP, retail uses are normally compatible, and office uses are conditional within Safety Zone 3, while both uses are conditional within Safety Zone 2. For those

uses that are conditional, they must meet the intensity criteria for nonresidential uses established in Table LU-1 to be permitted on any given site governed by the ALUCP.

As shown in Table LU-1 above, the maximum sitewide and single acre intensities for Safety Zone 2 are 60 and 120 persons per acre, respectively, while the maximum sitewide and single acre intensities for Safety Zone 3 are 100 and 250 persons per acre, respectively. The maximum sitewide average intensity for the vehicle charging areas on the project site as well as the maximum single acre intensity for each of the buildings located within the public plaza on the project site was calculated based on guidance found in the ALUCP Policy 3.3.3 (see Appendix LU-1) and is summarized below in **Table LU-2**.

Table LU-2: Project Intensity Calculations

	Single Acre Intensity (persons per acre)	Sitewide Average Intensity (persons per acre)
Building 1	10	N/A
Building 2	82	N/A
Building 3	14	N/A
Vehicle Charging Areas	100	46
SOURCE: Kimley-Horn, 2023.		

As shown, the single acre intensity calculations for the structures on the project site are below the ALUCP's single acre intensity threshold of 120 persons per acre for Safety Zone 2 while the sitewide average intensity calculation for the vehicle charging areas on the project site is below the ALUCP's sitewide average intensity threshold of 60 and 100 persons per acre for Safety Zones 2 and 3. As a result, the proposed project would be compatible with the safety zone intensity standards for Safety Zones 2 and 3 established by the ALUCP.

HEIGHT RESTRICTIONS

According to Map 4a, Compatibility Policy Map: Airspace Protection – Existing Runway Configuration, of the ALUCP, the project site is located within Critical Airspace Area, which has lower building height restrictions – generally 100 to 177 feet. As the proposed structures within the project site would only reach a maximum height of two stories (approximately 25 feet), the proposed project would be compatible with the height standards for Critical Airspace found in the ALUCP.

SUMMARY

Based on the discussion above, the proposed project would not conflict with the ALUCP, and like the conclusion reached in the 2022 Airport SEIR, the impact would be **less than significant**.

MITIGATION MEASURES

None required.

14 NOISE

INTRODUCTION

This chapter evaluates the effects of the proposed project related to noise and vibration, focusing on changes to the 2022 Airport SEIR that may result in new or more severe impacts, and describes any mitigation measures needed to address any such impacts. Project-related noise and vibration effects on biological resources are discussed in Chapter 7, *Biological Resources*.

FINDINGS OF THE AIRPORT MASTER PLAN UPDATE SEIR

Impacts of the 2022 Airport Master Plan Update related to noise and vibration were analyzed in Chapter 9, *Noise*, of the 2022 Airport Draft SEIR. The Airport Master Plan Update SEIR determined that implementation of the 2022 Airport Master Plan Update would have the following impacts with respect to noise and vibration:

- Implementation of the 2022 Airport Master Plan Update would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies (*Less than Significant Impact*)
- Implementation of the 2022 Airport Master Plan Update would not generate excessive groundborne vibration or groundborne noise levels (*Less than Significant Impact*)
- Implementation of the 2022 Airport Master Plan Update would not expose people residing or working in the project area to excessive noise levels (*Less than Significant Impact*)

NOTICE OF PREPARATION COMMENTS

The Notice of Preparation (NOP) for the Supplement to the 2022 Airport SEIR was circulated on August 17, 2023. The County received scoping comments from California Department of Fish and Wildlife (CDFW) that the Supplement to the 2022 Airport SEIR avoid and minimize impacts of nesting birds and birds of prey by incorporating measures to the project's phasing and timing, monitoring of project-related noise (where applicable), sound walls, and buffers, where appropriate.

The information and analysis included in this chapter was adapted from a noise and vibration study prepared by Kimley-Horn in 2024 (Appendix NOI-1) and peer reviewed by ESA and Sacramento County and determined to be accurate and adequate for inclusion in this Supplement to the 2022 Airport SEIR.

INFORMATION SOURCES

Resources referenced to prepare this section include the Sacramento County General Plan, proposed project plans, a project-specific acoustical study (Kimley-Horn, 2024), the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) (FHWA, 2008) and algorithms of the FHWA Traffic Noise Model (FHWA, 2004) used to estimate project noise emissions, the California Department of Transportation (Caltrans) Technical Noise Supplement to the Traffic Noise Analysis Protocol (Caltrans, 2013), and Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment (FTA, 2018).

ENVIRONMENTAL SETTING

BACKGROUND

Sound is mechanical energy transmitted by pressure waves through a medium such as air. Noise is defined as unwanted sound. Sound is characterized by various parameters that include the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level has become the most common descriptor used to characterize the “loudness” of an ambient sound level. Sound pressure level is measured in decibels (dB), with zero dB corresponding roughly to the threshold of human hearing, and 120 to 140 dB corresponding to the threshold of pain.

Sound pressure fluctuations can be measured in units of hertz (Hz), which correspond to the frequency of a particular sound. Typically, sound does not consist of a single frequency, but rather a broad band of frequencies varying in levels of magnitude (sound power). The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that de-emphasizes the frequencies below 1,000 Hz and above 5,000 Hz in a manner corresponding to the human ear’s decreased sensitivity to low and extremely high frequencies. This method of frequency weighting is referred to as A-weighting and is expressed in units of decibels (dBA).¹ Frequency A-weighting follows an international standard methodology of frequency de-emphasis and is typically applied to community noise measurements.

Some representative noise sources and their corresponding A-weighted noise levels are shown in **Table NOI-1**.

¹ All noise levels reported herein reflect A-weighted decibels unless otherwise stated.

Table NOI-1: Typical Noise Levels

Noise Level (dBA)	Outdoor Activity	Indoor Activity
90+	Gas lawn mower at 3 feet, jet flyover at 1,000 feet	Rock Band
80-90	Diesel truck at 50 feet	Loud television at 3 feet
70-80	Gas lawn mower at 100 feet, noisy urban area	Garbage disposal at 3 feet, vacuum cleaner at 10 feet
60-70	Commercial area	Normal speech at 3 feet
40-60	Quiet urban daytime, traffic at 300 feet	Large business office, dishwasher next room
20-40	Quiet rural, suburban nighttime	Concert hall (background), library, bedroom at night
10-20	Remote open space	Broadcast/recording studio
0	Lowest threshold of human hearing	Lowest threshold of human hearing
Note: dBA = A-weighted decibels SOURCE: Modified from Caltrans, 2013		

NOISE EXPOSURE AND COMMUNITY NOISE

An individual's noise exposure is a measure of the noise experienced by the individual over a period of time. A noise level is a measure of noise at a given instant in time. The noise levels presented in Table NOI-1 represent noise measured at a given instant in time; however, noise levels rarely persist consistently over a long period of time. Rather, community noise varies continuously over time because of the contributing sound sources of the community noise environment. Community noise is primarily the product of many distant noise sources, which constitute a relatively stable background noise, with the individual contributors unidentifiable. The background noise level changes throughout a typical day, but does so gradually, corresponding with the addition and subtraction of distant noise sources such as traffic and wind. What makes community noise constantly variable throughout a day, besides the slowly changing background noise, is the addition of short duration single event noise sources (e.g., aircraft flyovers, motor vehicles, sirens), which are readily identifiable to the individual.

These successive additions of sound to the community noise environment varies the community noise level from instant to instant requiring the measurement of noise exposure over a period of time to accurately characterize a community noise environment and evaluate cumulative noise impacts. This time-varying characteristic of environmental noise is described using statistical noise descriptors. The most frequently used noise descriptors are summarized below:

L_{eq}: The equivalent sound level is used to describe noise over a specified period of time, typically one hour, in terms of a single numerical value. The L_{eq} is the

constant sound level, which would contain the same acoustic energy as the varying sound level, during the same time period (i.e., the average noise exposure level for the given time period).

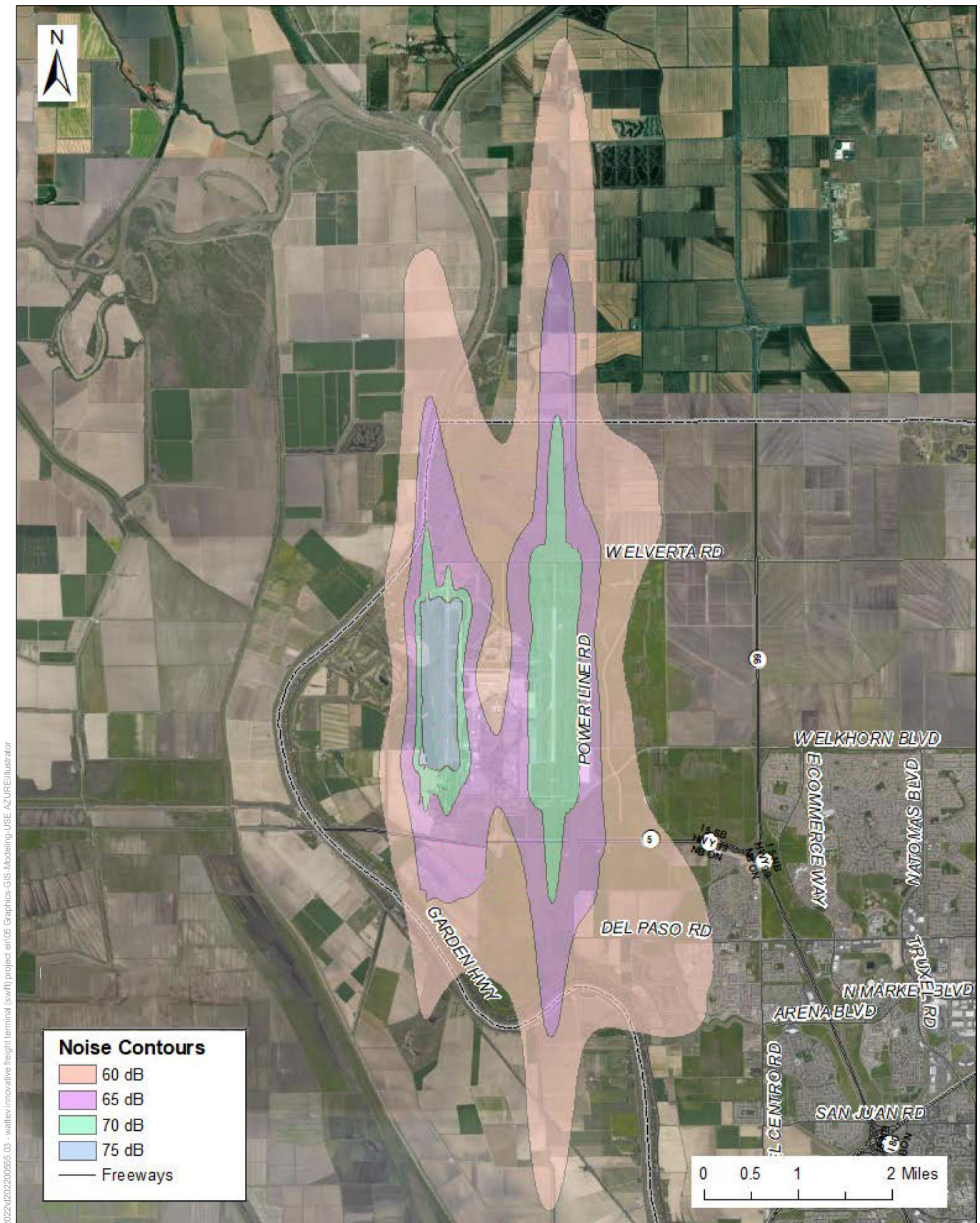
- L_{max} : The instantaneous maximum noise level for a specified period of time.
- L_{50} : The noise level that is equaled or exceeded 50 percent of the specified time. This is the median noise level during the specified time. So an L_{50} represents the noise level exceeded 30 minutes in a given hour. The numerical subscript may be changed to reflect other percentages. For example, a noise level exceeded for 5 minutes in a given hour would be the noise level exceeded 8.3 percent of the time or the $L_{8.3}$.
- L_{90} : The noise level that is equaled or exceeded 90 percent of the specified time. The L_{90} is often considered the background noise level averaged over the specified time.
- DNL: The Day/Night Average Sound Level is the 24-hour day and night A-weighted noise exposure level, which accounts for the greater sensitivity of most people to nighttime noise by weighting noise levels at night. Noise between 10:00 p.m. and 7:00 a.m. is weighted (penalized) by adding 10 dBA to take into account the greater annoyance from nighttime noise. (Also referred to as “Ldn.”)
- CNEL: Similar to the DNL, the Community Noise Equivalent Level (CNEL) adds a 5-dBA “penalty” for the evening hours between 7:00 p.m. and 10:00 p.m. in addition to a 10-dBA penalty between the hours of 10:00 p.m. and 7:00 a.m. The CNEL is the metric used in the assessment of noise generated by aircraft and airports.

EFFECTS OF NOISE ON PEOPLE

The effects of noise on people can be placed into three categories:

- Subjective effects of annoyance, nuisance, dissatisfaction;
- Interference with activities such as speech, sleep, learning; and
- Physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories (see **Plate NOI-1**). Workers in industrial plants generally experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise, or the corresponding reactions of annoyance and dissatisfaction. A wide variation exists in the individual thresholds of annoyance, and different tolerances to noise tend to develop based on an individual’s past experiences with noise.



SOURCE: Sacramento Airport Master Plan

WattEV Innovative Freight Terminal (SWIFT) Project

Plate NOI-1
 Sacramento International Airport Noise Contours

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so called “ambient noise” level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it. Regarding increases in A-weighted noise level, the following relationships occur:

- Under controlled conditions in an acoustics laboratory, the trained healthy human ear is able to discern changes in sound levels of 1 dBA;
- Outside these controlled conditions, the trained ear can detect changes of 2 dBA in normal environmental noise;
- It is widely accepted that the average healthy ear, however, can barely perceive changes in the noise level of 3 dBA;
- A change in level of 5 dBA is a readily perceptible increase in noise level; and
- A 10 dBA change is recognized as twice as loud as the original source (Caltrans, 2013).

These relationships occur in part because of the logarithmic nature of sound and the decibel system. The human ear perceives sound in a non-linear fashion; hence the decibel scale was developed. Because the decibel scale is based on logarithms, two noise sources do not combine in a simple additive fashion, rather logarithmically. For example, if two identical noise sources produce noise levels of 50 dBA, the combined sound level would be 53 dBA, not 100 dBA.

NOISE ATTENUATION

Stationary point sources of noise, including stationary mobile sources such as idling vehicles, attenuate (lessen) at a rate of 6 to 7.5 dBA per doubling of distance from the source, depending on the topography of the area and environmental conditions (i.e., atmospheric conditions and noise barriers, vegetative or manufactured, etc.). Widely distributed noise, such as a large industrial facility spread over many acres or a street with moving vehicles (known as a “line” source), would typically attenuate at a lower rate, approximately 3 to 4.5 dBA each time the distance doubles from the source, which also depends on environmental conditions (Caltrans, 2009). Noise from large construction sites would exhibit characteristics of both “point” and “line” sources, and attenuation will therefore generally range between 4.5 and 7.5 dBA each time the distance doubles.

VIBRATION BACKGROUND

Vibration is an oscillatory motion through a solid medium in which the motion’s amplitude can be described in terms of displacement, velocity, or acceleration. Several different methods are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe physical vibration impacts on buildings. Typically, groundborne vibration generated by human activities attenuates rapidly with distance from the source of the vibration. Sensitive receptors to vibration include people

(especially residents, the elderly, and sick people), structures (especially older masonry structures), and vibration-sensitive equipment.

Another useful vibration descriptor is known as vibration decibels or VdB. This measure is generally used when evaluating human response to vibration, as opposed to structural damage (for which PPV is the more commonly used descriptor). Vibration decibels are established relative to a reference quantity, typically 1×10^{-6} inches per second (FTA, 2018).

HEALTH EFFECTS OF NOISE

The consequences of exposure of people to excessive noise can include annoyance and disturbance of human activities, as well as effects on human health. The following discussion is provided so that the health implications of noise exposure are fully understood.

Exposure to high levels of noise can cause permanent hearing impairment. The levels at which noise exposure can lead to hearing loss (140 dB) or pain (120 dB) is a common method of measuring health effects or impacts of noise. The federal Occupational Safety and Health Administration (OSHA) has established an occupational noise exposure program which includes hearing conservation standards for long-term noise exposure. Employers are required to measure noise levels; provide free annual hearing exams, hearing protection, and training; and conduct evaluations of the adequacy of the hearing protection in use where noise environments exceed 85 dBA for an eight-hour daily exposure.

The World Health Organization (WHO) is a noted source of current knowledge regarding the health effects of noise impacts because European nations have continued to study noise and its health effects, while the United States Environmental Protection Agency all but eliminated its noise investigation and control program in the 1970s. According to WHO, sleep disturbance can occur when intermittent interior noise levels reach 45 dBA, particularly if background noise is low. WHO also notes that maintaining noise levels within the recommended levels during the first part of the night is believed to be effective for the ability of people to initially fall asleep. (WHO, 1999) Excessive noise during sleep periods can result in difficulty falling asleep, awakenings, and alterations in sleep stages and depth (e.g., a reduction in proportion of REM-sleep [REM = rapid eye movement]). Exposure to high levels of noise during sleep can also result in increased blood pressure, increased heart rate, increased finger pulse amplitude, vasoconstriction, changes in respiration, cardiac arrhythmia, and an increase in body movements. Secondary physiological effects of exposure to excessive noise during sleep can occur the following day, including reduced perception of quality sleep, increased fatigue, depressed mood or well-being, and decreased performance of cognitive tasks.

The County of Sacramento has an interior noise level standard of 45 dBA. (Sacramento County, 2017) Additionally, this interior noise level is used in the development of exterior noise standards within the General Plan Noise Element Guidelines published by

the Governor's Office of Planning and Research for the purposes of land use compatibility assessment.

Other potential health effects of noise identified by WHO include decreased performance for complex cognitive tasks, such as reading, attention span, problem solving, and memorization; physiological effects such as hypertension and heart disease (after many years of constant exposure, often by workers, to high noise levels); and hearing impairment (again, generally after long-term occupational exposure, although shorter-term exposure to very high noise levels, for example, exposure several times a year to concert noise at 100 dBA, can also damage hearing). Finally, noise can cause annoyance and can trigger emotional reactions like anger, depression, and anxiety. WHO reports that, during daytime hours, few people are seriously annoyed by activities with noise levels below 55 dBA.

Vehicle traffic and continuous sources of machinery and mechanical noise contribute to ambient noise levels. Short-term noise sources, such as truck backup beepers, the crashing of material being loaded or unloaded onto trucks, contribute very little to 24-hour noise levels but can cause sleep disturbance and annoyance. The importance of noise to receptors depends on both time and context. For example, long-term high noise levels from large traffic volumes can make conversation at a normal voice level difficult or impossible, while short-term peak noise levels, if they occur at night, can disturb sleep.

EXISTING CONDITIONS

NOISE SOURCES AND LEVELS

Transportation sources, such as automobiles, trucks, trains, and aircraft, are the principal sources of noise in the urban environment. Along major transportation corridors, noise levels can reach 80 DNL, while along arterial streets, noise levels typically range from 65 to 70 DNL. However, noise levels on roadways, like all areas, can be affected by intervening development, topography, or landscaping. Industrial and commercial equipment and operations also contribute to the ambient noise environment in their vicinities.

Sacramento International Airport is the primary generator of noise in this area of the County. Other existing sources of noise in the vicinity of the project site are vehicular traffic, agricultural equipment, and aircraft overflights from other airports in the region. Interstate 5 (I-5) is a major highway in close proximity to the airport; additional vehicle traffic on Power Line Road and Bayou Way also contribute to the localized noise environment.

The main land use in the vicinity of the project site is agricultural. However, industrial and residential development is encroaching from the east. Agricultural land uses produce noise from the use of various types of equipment and is seasonal in nature. Finally, with respect to noise from airport activity, several published routes result in aircraft flying over the airport. The minimum altitude for these aircraft is 18,000 feet above mean sea level (MSL).

TRAFFIC NOISE

Existing roadside noise levels along roadway segments near the project site were modeled to provide estimates of existing weekday noise levels. **Table NOI-2** presents existing roadside noise levels during 24-Hour traffic distribution. These modeled noise levels reflect only the noise generated by traffic on identified roadway segments; they do not include other sources in the area, such as aircraft, and highway noise where these other sources are nearby.

Table NOI-2: Existing Traffic Noise along Roads in the Project Vicinity

Roadway Segment	ADT	dBA L_{dn} 100 Feet from Roadway Centerline
BAYOU WAY		
Airport Boulevard and Power Line Road	2,155	52.7
Power Line Road and Metro Air Parkway	1,283	50.5
Notes: ADT = average daily trips; dBA = A-weighted decibels; L _{dn} = day-night average noise level		
Source: Based on traffic data provided by Kimley-Horn, 2024. Refer to Appendix NOI-1 for traffic noise modeling assumptions and results.		

AIRPORT/AIRCRAFT NOISE

The nearest runway of the Sacramento International Airport is approximately 0.85 miles north of the project site. As shown in Plate NOI-1, the project site is inside of the 70-75 dB CNEL noise contours for the airport. Specifically, the project site is located within Referral Area 1 of the Airport Influence Area, where airspace protection (other than wildlife hazards) and/or overflight are compatibility concerns, but not noise or safety concerns (Sacramento County, 2013).

SENSITIVE RECEPTORS

Some land uses include populations that are more sensitive to noise than others. Consistent with the Governor's Office of Planning and Research's General Plan Guidelines 2017, noise sensitive receptors are defined in this document as: residences, hospitals, convalescent homes, schools, churches and sensitive wildlife habitat (e.g., nesting birds and the habitat of rare, threatened or endangered species). As discussed above, the potential for noise-related impacts on biological resources is assessed in Chapter 7, *Biological Resources*, of this Supplement to the 2022 Airport SEIR. In addition, hotels and motels may be considered as noise sensitive receptors during nighttime hours.

The nearest sensitive receptors are shown in **Table NOI-3**. Airport noise contours are presented in Plate NOI-1.

Table NOI-3: Sensitive Receptors

Receptor Description	Distance and Direction from the Proposed Project¹
Single-Family Residence (zoned AG-80)	400 feet southeast
Single-Family Residence	3,830 feet southeast
Single-Family Residence	5,240 feet southeast
Single-Family Residence	6,680 feet east
NOTES: 1. Distance measured from the proposed solar array to the receiver property line. SOURCE: Google Earth Pro, 2023	

REGULATORY SETTING

FEDERAL

FAA Order 1050.1E considers that if an increase of 1.5 dB occurs at any noise-sensitive area within the CNEL 65 dB contour, further analysis is warranted. To comply with FAA guidance provided in Order 1050.1E and the recommendations of the 1992 Federal Interagency Committee on Noise, noise-sensitive areas between CNEL 60 and 65 dB should be evaluated for an increase of 3 dB or greater if an increase of 1.5 dB occurs at any noise-sensitive area within the CNEL 65 dB contour. Noise-sensitive areas between CNEL 45 and 60 dB should be evaluated for an increase of 5 dB or greater if an increase of 1.5 dB occurs at any noise-sensitive area within the CNEL 65 dB contour. In compliance with FAA Order 5050.4B, the assessment of aircraft noise levels utilizes flight track data from SMF's flight track monitoring system, while the analysis is primarily based upon the CNEL metric.

FEDERAL NOISE STANDARDS

The primary federal noise standards that directly regulate noise related to the operation of the proposed project pertain to noise exposure and workers. The United States OSHA enforces regulations to safeguard the hearing of workers exposed to occupational noise. OSHA has established worker noise exposure limits that vary with the duration of the exposure and require that a hearing conservation program be implemented if employees are exposed to noise levels in excess of 85 dBA.

Federal regulations also establish noise limits for medium and heavy trucks (more than 4.5 tons, gross vehicle weight rating) under Code of Federal Regulations Title 40, Part 205, Subpart B. The federal truck pass-by noise standard is 80 dBA at 15 meters from the vehicle pathway centerline. These controls are implemented through regulatory controls on truck manufacturers.

FEDERAL TRANSIT AUTHORITY VIBRATION STANDARDS

FTA has adopted vibration standards that are used to evaluate potential building damage impacts from construction activities. **Table NOI-4** shows FTA's vibration damage criteria.

Table NOI-4: Construction Vibration Damage Criteria

Building Category	PPV (in/sec)	Vibration Decibels (VdB)
I. Reinforced concrete, steel, or timber (no plaster)	0.5	102
II. Engineered concrete and masonry (no plaster)	0.3	98
III. Non-engineered timber and masonry buildings	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.12	90
NOTES: in/sec = inches per second; PPV = peak particle velocity; VdB = vibration decibels SOURCE: FTA, 2018.		

These human annoyance standards are presented in **Table NOI-5** below.

Table NOI-5: Human Response to Groundborne Vibration

Vibration Velocity Level (1 micro in./sec)	Noise Level		Human Response
	Low Frequency¹	Mid Frequency²	
65 VdB	25 dBA	40 dBA	Approximate threshold of perception for many humans. Low-frequency sound usually inaudible, mid-frequency sound excessive for quiet sleeping areas.
75 VdB	35 dBA	50 dBA	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find transit vibration at this level annoying. Low-frequency noise acceptable for sleeping areas, mid-frequency noise annoying in most quiet occupied areas.
85 VdB	45 dBA	60 dBA	Vibration acceptable only if there are an infrequent number of events per day. Low-frequency noise annoying for sleeping areas, mid-frequency noise annoying even for infrequent events with institutional land uses such as schools and churches.
NOTES: dBA = A-weighted decibels; micro in/sec = microinches per second; VdB = vibration decibels 1. Approximate noise level when vibration spectrum peak is near 30 hertz (Hz). 2. Approximate noise level when vibration spectrum peak is near 60 Hz.			

STATE

CALIFORNIA NOISE CONTROL ACT OF 1973

Sections 46000 through 46080 of the California Health and Safety Code, known as the California Noise Control Act of 1973, declares that excessive noise is a serious hazard to the public health and welfare and that exposure to certain levels of noise can result in physiological, psychological, and economic damage. It also identifies a continuous and increasing bombardment of noise in the urban, suburban, and rural areas. The California Noise Control Act declares that the State of California has a responsibility to protect the health and welfare of its citizens by the control, prevention, and abatement of noise. It is the policy of the State to provide an environment for all Californians free from noise that jeopardizes their health or welfare.

CALIFORNIA BUILDING CODE

The California Building Code requires that walls and floor/ceiling assemblies separating dwelling units from each other, or from public or service areas, have a sound transmission class² of 50 dB for all common interior walls and floor/ceiling assemblies between adjacent dwelling units, or between dwelling units and adjacent public areas for multifamily units and transient lodging. The code specifies a maximum interior performance standard of 45 dBA.

The State of California has also established noise insulation standards for new multifamily residential units, hotels, and motels that would be subject to relatively high levels of transportation-related noise. These requirements are collectively known as the California Noise Insulation Standards (California Code of Regulations, Title 24). The noise insulation standards set forth an interior standard of 45 dBA CNEL in any habitable room. They require an acoustical analysis demonstrating how dwelling units have been designed to meet this interior standard where such units are proposed in areas subject to noise levels greater than 60 dBA CNEL. Title 24 standards are typically enforced by local jurisdictions through the building permit application process.

LOCAL

SACRAMENTO COUNTY GENERAL PLAN

Noise levels within the project site are subject to the County's noise standards. Therefore, noise generated by the proposed project and experienced at nearby residential properties would be subject to the County Code noise limits as well as policies of the General Plan Noise Element.

TRAFFIC AND RAILROAD NOISE SOURCES

NO-1 The noise level standards for noise-sensitive areas of new uses affected by traffic or railroad noise sources in Sacramento County are shown by Table 1 (Table NOI-6 of this Supplement to the 2022 Airport SEIR). Where the noise

² The sound transmission class is used as a measure of a materials ability to reduce sound. The sound transmission class is equal to the number of decibels a sound is reduced as it passes through a material.

level standards of Table 1 are predicted to be exceeded at new uses proposed within Sacramento County which are affected by traffic or railroad noise, appropriate noise mitigation measures shall be included in the project design to reduce projected noise levels to a state of compliance with the Table 1 standards.

Table NOI-6: Noise Standards for New Uses Affected by Traffic and Railroad Noise Sacramento County Noise Element

New Land Use	Sensitive¹ Outdoor Area – Ldn	Sensitive Interior² Area – Ldn	Notes
All Residential	65	45	5
Transient Lodging	65	45	3,5
Hospitals & Nursing Homes	65	45	3,4,5
Theaters & Auditoriums	--	35	3
Churches, Meeting Halls,	65	40	3
Schools, Libraries, etc.	65	40	3
Office Buildings	65	45	3
Commercial Buildings	--	50	3
Playground, Parks, etc.	70	--	
Industry	65	50	3

NOTES:

1. Sensitive areas are defined in acoustic terminology section.
2. Interior noise level standards are applied within noise-sensitive areas of the various land uses, with windows and doors in the closed positions.
3. Where there are no sensitive exterior spaces proposed for these uses, only the interior noise level standard shall apply.
4. Hospitals are often noise-generating uses. The exterior noise level standards for hospitals are applicable only at clearly identified areas designated for outdoor relaxation by either hospital staff or patients.
5. If this use is affected by railroad noise, a maximum (L_{max}) noise level standard of 70 dB shall be applied to all sleeping rooms to reduce the potential for sleep disturbance during nighttime train passages.

SOURCE: Sacramento County, 2011. County of Sacramento General Plan, Amended December 13, 2017. Noise Element, Table 1.

AIRCRAFT NOISE SOURCES

NO-2 Proposals for new development within Sacramento County which may be affected by aircraft noise shall be evaluated relative to General Plan Noise Element Table 4 (Land Use Compatibility for Aircraft Noise) except in the following case. Development proposals which may be affected by aircraft noise from Sacramento International Airport shall be evaluated relative to the Land Use Compatibility Plan prepared for Sacramento International Airport dated December 12, 2013.

NON-TRANSPORTATION NOISE SOURCES

NO-5 The interior and exterior noise level standards for noise-sensitive areas of new uses affected by existing non-transportation noise sources in Sacramento County are shown by Table 2 (Table NOI-7 of this Supplement to the SEIR). Where the noise level standards of Table 2 are predicted to be exceeded at a proposed noise-sensitive area due to existing non-transportation noise sources, appropriate noise mitigation measures shall be included in the project design to reduce projected noise levels to a state of compliance with the Table 2 standards within sensitive areas.

Table NOI-7: Non-Transportation Noise Standards Sacramento County Noise Element Median (L_{50}) / Maximum (L_{max})¹

Outdoor Area ²			Interior ³ Day or Night	Notes
Receiving Land Use	Daytime	Nighttime		
All Residential	55 / 75	50 / 70	35 / 55	
Transient Lodging	55 / 75	--	35 / 55	4
Hospitals & Nursing Homes	55 / 75	--	35 / 55	5,6
Theaters & Auditoriums	--	--	30 / 50	6
Churches, Meeting Halls, Schools, Libraries, etc.	55 / 75	--	35 / 60	6
Office Buildings	60 / 75	--	45 / 65	6
Commercial Buildings	--	--	45 / 65	6
Playground, Parks, etc.	65 / 75	--	--	6
Industry	60 / 80	--	50 / 70	6
<p>NOTES:</p> <ol style="list-style-type: none"> 1. The Table 2 standards shall be reduced by 5 dB for sounds consisting primarily of speech or music, and for recurring impulsive sounds. If the existing ambient noise level exceeds the standards of Table 2, then the noise level standards shall be increased at 5 dB increments to encompass the ambient. 2. Sensitive areas are defined acoustic terminology section. 3. Interior noise level standards are applied within noise-sensitive areas of the various land uses, with windows and doors in the closed positions. 4. Outdoor activity areas of transient lodging facilities are not commonly used during nighttime hours. 5. Hospitals are often noise-generating uses. The exterior noise level standards for hospitals are applicable only at clearly identified areas designated for outdoor relaxation by either hospital staff or patients. 6. The outdoor activity areas of these uses (if any) are not typically utilized during nighttime hours. 7. Where median (L_{50}) noise level data is not available for a particular noise source, average (L_{eq}) values may be substituted for the standards of this table provided the noise source in question operates for at least 30 minutes of an hour. If the source in question operates less than 30 minutes per hour, then the maximum noise level standards shown would apply. <p>SOURCE: Sacramento County, 2011. County of Sacramento General Plan, Amended December 13, 2017. Noise Element, Table 2.</p>				

- NO-6 Where a project would consist of or include non-transportation noise sources, the noise generation of those sources shall be mitigated so as not exceed the interior and exterior noise level standards of Table 2 at existing noise-sensitive areas in the project vicinity.
- NO-7 The “last use there” shall be responsible for noise mitigation. However, if a noise generating use is proposed adjacent to lands zoned for uses which may have sensitivity to noise, then the noise generating use shall be responsible for mitigating its noise generation to a state of compliance with the Table 2 standards at the property line of the generating use in anticipation of the future neighboring development.

CONSTRUCTION NOISE

- NO-8 Noise associated with construction activities shall adhere to the County Code requirements. Specifically, Section 6.68.090(e) addresses construction noise within the County.

GENERAL NOISE POLICY

- NO-12 All noise analyses prepared to determine compliance with the noise level standards contained within this Noise Element shall be prepared in accordance with Table 3 (Table NOI-8 of this Supplement to the 2022 Airport SEIR).

Table NOI-8: Requirements for Acoustical Analyses Prepared in Sacramento County

<p>An acoustical analysis prepared pursuant to the Noise Element shall:</p> <ol style="list-style-type: none"> 1. Be the responsibility of the applicant. 2. Be prepared by qualified persons experienced in the fields of environmental noise assessment and architectural acoustics. 3. Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions. 4. Estimate projected future (20 year) noise levels in terms of the Standards of Tables 1 and 2 and compare those levels to the adopted policies of the Noise Element. 5. Recommend appropriate mitigation to achieve compliance with the adopted policies and standards of the Noise Element. 6. Estimate interior and exterior noise exposure after the prescribed mitigation measures have been implemented.
<p>SOURCE: Sacramento County, 2011. County of Sacramento General Plan, Amended December 13, 2017. Noise Element, Table 3.</p>

- NO-13 Where noise mitigation measures are required to satisfy the noise level standards of this Noise Element, emphasis shall be placed on the use of setbacks and site design to the extent feasible, prior to consideration of the use of noise barriers.

NO-15 The County shall have the flexibility to consider the application of 5 dB less restrictive exterior noise standards than those prescribed in Tables 1 and 2 in cases where it is impractical or infeasible to reduce exterior noise levels within infill projects to a state of compliance with the Table 1 or 2 standards. In such cases, the rationale for such consideration shall be clearly presented and disclosure statements and noise easements shall be included as conditions of project approval. The interior noise level standards of Tables 1 and 2 would still apply. The maximum allowable long-term noise exposure permissible for non-industrial uses is 75 dB.

EXEMPTIONS

- NO-16 The following sources of noise shall be exempt from the provisions of this Noise Element:
- A. Emergency warning devices and equipment operated in conjunction with emergency situations, such as sirens and generators which are activated during power outages. The routine testing of such warning devices and equipment shall also be exempt provided such testing occurs during daytime hours.
 - B. Activities associated with events for which a permit has been obtained from the County.

SACRAMENTO COUNTY CODE - CHAPTER 6.68 NOISE CONTROL

Noise generated by development allowed under the proposed project and experienced at nearby residential properties would be subject to the County Code noise limits. The following text presents the Sacramento County Code noise level limits as defined in County Code Chapter 6.68 Noise Control.

CHAPTER 6.68.070 NOISE CONTROL

- a. The following noise standards, unless otherwise specifically indicated in this chapter, shall apply to all properties within a designated noise area.

Noise Area	County Zoning Districts	Time Period	Exterior Noise Standard
1	RE-1, RD-1, RE-2, RD-2, RE-3, RD-3, RD-4, R-1-A, RD-5, R-2, RD-10, R-2A, RD-20, R-3, R-D-30, RD-40, RM-1, RM-2, A-1-B, AR-1, A-2, AR-2, A-5, AR-5	7 a.m.—10 p.m.	55 dBA
		10 p.m.—7 a.m.	50 dBA

- b. It is unlawful for any person at any location within the County to create any noise which causes the noise levels on an affected property, when measured in the designated noise area, to exceed for the duration of time set forth following, the specified exterior noise standards in any one hour by:

Cumulative Duration of the Intrusive Sound	Allowance Decibels
1. Cumulative period of 30 minutes per hour	0
2. Cumulative period of 15 minutes per hour	+5
3. Cumulative period of 5 minutes per hour	+10
4. Cumulative period of 1 minute per hour	+15
5. Level not to be exceeded for any time per hour	+20

- c. Each of the noise limits specified in subdivision (b) of this section shall be reduced by five dBA for impulsive or simple tone noises, or for noises consisting of speech or music.
- d. If the ambient noise level exceeds that permitted by any of the first four noise-limit categories specified in subdivision (b), the allowable noise limit shall be increased in five dBA increments in each category to encompass the ambient noise level. If the ambient noise level exceeds the fifth noise level category, the maximum ambient noise level shall be the noise limit for that category.

CHAPTER 6.68.090 NOISE CONTROL

The following activities shall be exempted from the provisions of this chapter:

- a. School bands, school athletic and school entertainment events;
- b. Outdoor gatherings, public dances, shows and sporting and entertainment events, provided said events are conducted pursuant to a license or permit by the County;
- c. Activities conducted on parks, public playgrounds and school grounds, provided such parks, playgrounds and school grounds are owned and operated by a public entity or private school;
- d. Any mechanical device, apparatus or equipment related to or connected with emergency activities or emergency work;
- e. Noise sources associated with construction, repair, remodeling, demolition, paving or grading of any real property, provided said activities do not take place between the hours of eight p.m. and six a.m. on weekdays and Friday commencing at eight p.m. through and including seven a.m. on Saturday; Saturdays commencing at eight p.m. through and including seven a.m. on the next following Sunday and on each Sunday after the hour of eight p.m. Provided, however, 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 eight 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;
- f. Noise sources associated with agricultural operations, provided such operations do not take place between the hours of eight p.m. and six a.m.;

- g. All mechanical devices, apparatus or equipment which are utilized for the protection or salvage of agricultural crops during periods of adverse weather conditions or when the use of mobile noise sources is necessary for pest control;
- h. Noise sources associated with maintenance of residential area property, provided said activities take place between the hours of six a.m. and eight p.m. on any day except Saturday or Sunday, or between the hours of seven a.m. and eight p.m. on Saturday or Sunday

CHAPTER 6.68.120 MACHINERY, EQUIPMENT, FANS AND AIR CONDITIONING

- a. It is unlawful for any person to operate any mechanical equipment, pump, fan, air conditioning apparatus, stationary pumps, stationary cooling towers, stationary compressors, similar mechanical devices, or any combination thereof installed after July 1, 1976, in any manner so as to create any noise which would cause the maximum noise level to exceed:
 - 1. Sixty dBA at any point at least one foot inside the property line of the affected residential property and three to five feet above ground level;
 - 2. Fifty-five dBA in the center of a neighboring patio three to five feet above ground level;
 - 3. Fifty-five dBA outside of the neighboring living area window nearest the equipment location. Measurements shall be taken with the microphone not more than three feet from the window opening but at least three feet from any other surface.
- b. Equipment installed five years after July 1, 1976, must comply with a maximum limit of fifty-five dBA at any point at least one foot inside the property line of the affected residential property and three to five feet above ground level.
- c. Equipment installed before December 17, 1970, must comply with a limit of sixty-five dBA maximum in sound level at any point at least one foot inside the affected property line and three to five feet above ground level by January 1, 1977. Equipment installed between December 16, 1970, and July 1, 1976, must comply with a limit of sixty-five dBA maximum sound level at any point at least one foot inside the property line of the affected residential property and three to five feet above ground level.

SACRAMENTO INTERNATIONAL AIRPORT LAND USE COMPATIBILITY PLAN

Airports occupy a special place in the planning process because of their potential impacts on surrounding land uses. The Sacramento County Airport Commission (ALUC) is charged with preparing an Airport Land Use Compatibility Plan (ALUCP) for SMF. The Sacramento Area Council of Governments (SACOG) acts as the ALUC for the Sacramento County area. The ALUCP addresses issues of airport noise and safety, with the intent of protecting airport operations from encroachment by non-compatible land uses, as well as protecting the citizens on the ground from the impacts of excessive noise and aircraft accidents. The compatibility plan is based on the long-range master plan prepared by the airport operator and must reflect growth out at least

20 years. Policies included in the ALUCP regulate only the land use surrounding an airport, and not the airport policies or the number of takeoffs and landings.

IMPACTS AND ANALYSIS

The analysis in this Supplement to the 2022 Airport SEIR presents impacts identified in the 2022 Airport SEIR and describes how the impacts of the proposed project would differ with implementation of the proposed project.

SIGNIFICANCE CRITERIA

For purposes of this Supplement to the 2022 Airport SEIR and consistent with the criteria presented in the 2022 Airport SEIR, which is based on Appendix G of the CEQA Guidelines, impacts related to noise may be considered significant if implementation of the proposed project would:

- Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Generate excessive groundborne vibration or groundborne noise levels; or
- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.

Excessive noise is defined in this analysis as a change in noise that exceeds the County's General Plan Policies, Noise Ordinance, or ALUCP.

METHODOLOGY AND ASSUMPTIONS

As discussed in Chapter 1, *Introduction*, the 2022 Airport Master Plan Update and the 2022 Airport SEIR considered a development and operational horizon of 20 years (2018 through 2038) with four Planning Activity Levels (PALs). The area south of I-5 within the Airport Master Plan area, which includes the project site, was included within PAL 4 (with anticipated development within the 2034-2038 time period) of the 2022 Airport Master Plan Update. Due to the extended 20-year planning horizon, Master Plan projects or facilities identified in PAL 4 were determined to be beyond the scope of the 2022 Airport SEIR. As discussed in Chapter 8, *Land Use*, of the 2022 Airport Draft SEIR (page 8-11), the 2022 Airport Master Plan Update identifies future commercial development south of I-5 in PAL 4. The discussion further notes that if PAL 4 becomes ripe for development additional environmental review will be necessary. Accordingly, proposed project impacts related to noise and vibration on the project site are evaluated at a project level below.

The following is a description of the methodology used to evaluate the impacts of development allowed under the proposed project relative to each of the significance thresholds cited above.

SUBSTANTIAL INCREASE IN NOISE

Construction and/or operation of the proposed project would generate noise, which is assessed differently for construction, mobile, and stationary noise sources. The proposed project is located within Sacramento County, California. Therefore, noise generated by construction and operation of the proposed project and experienced at existing nearby residential properties would be subject to the County Code noise limits and policies of the County's General Plan Noise Element.

The evaluation of impacts associated with increases in noise from the proposed project focuses first on construction-related noise and was evaluated based on construction noise criteria of the FTA, in lieu of any applicable construction noise standards of the Sacramento County's General Plan or Municipal Code. Next, localized increases in traffic-generated noise along roadways was considered relative to published measures of substantial increase in transportation noise, as discussed below. Finally, the increase in ambient noise levels from stationary sources during project operation was compared to standards found in General Plan policies and Municipal Code noise limits (see *Regulatory Setting*, above).

The approaches to each of these evaluations are described further below.

CONSTRUCTION NOISE

The Sacramento County Municipal Code establishes quantitative noise standards for construction noise, specifically, Section 6.68.090(e). Section 6.68.090(e) exempts all construction noise activity during specified hours of the week.

In lieu of a specified criterion for assessing the magnitude of a construction noise impact in local regulations, the analysis below compares resultant noise levels to construction noise impact criteria developed by the FTA. While the FTA's *Transit Noise and Vibration Impact Assessment Manual* (FTA, 2018) was developed for determining significant noise and vibration impacts for transit projects and is not a regulation, it is one of the few sources that suggest both a methodology and criteria for assessing construction noise impacts. The FTA noise impact criteria used to assess construction noise impacts on residential uses is 90 dBA L_{eq} during daytime hours and 80 dBA L_{eq} during nighttime hours. These criteria are absolute contribution values from construction activity and are independent of existing background noise levels. If the FTA criteria are exceeded, there could be adverse community reaction.

In addition to the assessment of construction noise relative to the FTA's 90 dBA L_{eq} daytime standard at residential uses, this analysis applies an increase of 10 dBA or more over existing noise levels at sensitive receptor locations to warrant the implementation of construction noise control measures. Such as increase is a perceived doubling of loudness (Caltrans, 2013).

For the following analysis, construction noise levels were estimated for construction equipment identified in the noise and vibration study prepared for the proposed project (Appendix NOI-1).

PROJECT-GENERATED TRAFFIC NOISE

Guidance on the significance of transportation-related changes to ambient noise levels is provided by the 1992 findings of the Federal Interagency Committee on Noise (FICON), which assessed the annoyance effects of changes in ambient noise levels caused by aircraft operations. (FICON, 1992) The recommendations are based on studies that relate aircraft noise levels to the percentage of persons highly annoyed by the noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, they apply to all sources of transportation noise described in terms of cumulative noise exposure metrics such as the DNL.

Table NOI-9 presents criteria based on the FICON findings, which show that as ambient noise levels increase, a smaller increase in decibel levels is sufficient to cause significant annoyance. In other words, the quieter the ambient noise level, the more the noise can increase (in decibels) before it causes significant annoyance. The 5 dBA and 3 dBA noise level increases listed in Table NOI-9 also correlate directly with noise level increases that Caltrans considers to be “readily perceivable” and “barely perceivable,” respectively, for short-term noise increases. Thus, the significance of permanent increases in transportation noise levels is evaluated based on the increases identified in Table NOI-9.

Table NOI-9: Measures of a Substantial Increase in Transportation Noise Exposure

Ambient Noise Level without Project (DNL)	Significant Impact Assumed to Occur if Project Development Increases Ambient Noise Levels by:
<60 dB	+ 5.0 dB or more
60–65 dB	+ 3.0 dB or more
>65 dB	+ 1.5 dB or more ^a

NOTES: dB = decibels; DNL = day-night average noise level

1. According to the Federal Interagency Committee on Noise report, the 1.5 A-weighted decibel (dBA) increase in environments that exceed 65 dBA is not necessarily a significant increase but, rather, an increase warranting further investigation.

SOURCE: Federal Interagency Committee on Noise, 1992.

Traffic noise levels were modeled using the algorithms of the Federal Highway Administration’s Traffic Noise Model for the existing and existing plus project scenarios. The resulting noise levels were then compared to existing modeled conditions (Table NOI-2), depending on the contribution of other noise sources in the local environment, to determine significance.

STATIONARY-SOURCE NOISE

Office, commercial, retail, or other noise-generating uses developed under the proposed project could substantially increase noise levels at nearby noise-sensitive land uses if they would expose sensitive receptors to noise levels exceeding standards established

by the Sacramento County's General Plan Policies NO-5 and NO-6 which requires all development projects to mitigate all significant noise impacts as a condition of project approval for sensitive land uses.

Operations at proposed noise-producing land uses would be dependent on many variables. The following analysis considers the potential for noise from sources such as mechanical equipment, outdoor maintenance areas, and parking lots by describing reference noise levels that are documented to be associated with these sources. Existing General Plan policies that address such sources are identified. Finally, mitigation measures with performance standards to address the potential impacts are identified.

GROUNDBORNE VIBRATION

Impacts from groundborne vibration during construction of the proposed project are assessed using vibration-damage threshold criteria expressed in PPV for architectural damage. Equipment or activities that typically generate continuous vibration include but are not limited to excavation equipment, static compaction equipment, and vibratory compaction equipment. Caltrans's measure of the threshold for architectural damage to conventional sensitive structures is 0.5 in/sec PPV for new residential structures and modern commercial buildings and 0.25 in/sec PPV for historic and older buildings. (Caltrans, 2013)

Vibration impacts were estimated using reference vibration levels for construction equipment in concert with the vibration propagation equations published by FTA and estimating the potential for resultant vibration levels in excess of Caltrans standards.

NON-CEQA PLANNING CONSIDERATIONS

Exposure of the proposed project to noise and vibration within the existing environment, such as existing roadway noise, and existing noise-generating land uses are not considered CEQA impacts. However, as discussed above in the *Regulatory Setting*, General Plan Policy NO-1 establishes interior and exterior noise standards and guidelines for locating new development that address existing conditions affecting a proposed project. Therefore, the analysis of noise exposure on proposed project is discussed in the context of consistency with relevant policies and regulations.

AIRPORT/AIRCRAFT NOISE

Development under the proposed project is evaluated relative to the Sacramento International ALUCP prepared by the SACOG dated December 12, 2013.

IMPACT: GENERATE A SUBSTANTIAL TEMPORARY INCREASE IN AMBIENT NOISE LEVELS IN THE VICINITY OF THE PROJECT IN EXCESS OF STANDARDS ESTABLISHED IN THE LOCAL GENERAL PLAN OR NOISE ORDINANCE, OR APPLICABLE STANDARDS OF OTHER AGENCIES

The generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise

ordinance, or applicable standards of other agencies due to the implementation of the 2022 Airport Master Plan Update was discussed on page 9-6 of the 2022 Airport Draft SEIR. The analysis concluded that implementation of the 2022 Master Plan Update would not generate a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies as construction is regulated by the Sacramento County General Plan and Sacramento County Code, based on the assumption that the nearest sensitive receptors are located approximately 0.5 miles from the proposed commercial developments and would not be impacted by nighttime construction if it was determined necessary. For these reasons, the 2022 Airport SEIR concluded that the impact associated with the generation of a substantial temporary increase in ambient noise levels would be less than significant.

CONSTRUCTION

Construction of the proposed project would occur in two phases. Construction would begin in summer 2024. Phase 1 would commence operation in 2025; there is no timeline for the commencement of Phase 2. However, for the purposes of this analysis it was conservatively assumed that the entire project would be built in one phase lasting approximately 12 months.

Construction, though typically temporary, short-term, and/or intermittent, can be a substantial source of noise. Construction noise is of greatest concern where it takes place near noise-sensitive land uses, or if it occurs at night or in the early morning hours; however, it can also affect commercial uses and other receptors. Local governments typically regulate noise from construction equipment and activities by enforcing noise ordinance standards, implementing general plan policies, and/or imposing conditions of approval for building or grading permits. The following analysis addresses potential construction impacts on off-site receptors with respect to standards established in applicable noise ordinances and General Plan policies identified in the *Regulatory Setting* above and also considers the relative increase in noise over existing conditions.

Major noise-generating construction activities associated with the proposed project would include some demolition, site preparation, grading, paving, building construction, and architectural coating. Site grading and excavation would also generate high noise levels, as these phases often require the simultaneous use of multiple pieces of heavy equipment such as heavy-duty trucks, backhoes, bulldozers, excavators, front-end loaders, and scrapers. Construction equipment would typically include, but would not be limited to, graders, scrapers, and tractors during site preparation; graders, dozers, and tractors during grading; cranes, forklifts, generators, tractors, and welders during building construction; pavers, rollers, mixers, tractors, and paving equipment during paving; and air compressors during architectural coating.

The nearest existing residential receptor is located approximately 400 feet from the edge of proposed construction activity for the solar field (refer to Plate PD-3) and over 2,500 feet away from any building construction. **Table NOI-10** shows typical maximum noise levels associated with various types of construction equipment at a distance of 50 feet. The equipment in this table were identified in the modeling output for the Air

Quality Assessment (see Appendix AQ-1). These criteria are absolute contribution values from construction activity and are independent of existing background noise levels and do not account for the percentage of usage throughout a given workday.

Table NOI-10: Typical Construction Noise Levels

Equipment	Typical Noise Levels (dBA) at 50 feet from Source
Air Compressor	80
Backhoe	80
Compactor	82
Concrete Mixer	85
Concrete Pump	82
Concrete Vibrator	76
Crane, Derrick	88
Crane, Mobile	83
Dozer	85
Generator	82
Grader	85
Impact Wrench	85
Jack Hammer	88
Loader	80
Paver	85
Pneumatic Tool	85
Pump	77
Roller	85
Saw	76
Scraper	85
Shovel	82
Truck	84
NOTE: dBA = A-weighted decibels	
SOURCE: Federal Transit Administration, <i>Transit Noise and Vibration Impact Assessment Manual</i> , September 2018.	

As shown in Table NOI-10, noise levels from project construction equipment at approximately 50 feet away would range from approximately 76 to 88 dBA.

Policy NO-8 of the Sacramento County General Plan states that noise associated with construction activities shall adhere to the requirements established in Municipal Code

Section 6.68.090(e), which offers an exemption for construction noise provided that the activities do not occur between the hours of eight p.m. and six a.m. on weekdays and Friday commencing at eight p.m. through and including seven a.m. on Saturday; Saturdays commencing at eight p.m. through and including seven a.m. on the next following Sunday and on each Sunday after the hour of eight p.m.

The Code further stipulates that, if 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 eight 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 during specified hours and days of the week.

Consistent with the general assessment methodology of the FTA, the two noisiest pieces of construction equipment (crane and jackhammer) listed in Table NOI-10 were assumed to operate simultaneously. Using the Roadway Construction Noise Model of the Federal Highway Administration, the resultant noise level at the nearest receptor would be 66 dBA. The combined noise level at existing offsite receptors would not exceed the FTA's daytime criterion of 90 dBA at residential sensitive receptor locations.

Therefore, similar to the conclusion reached in the 2022 Airport SEIR, the impact associated with a temporary increase in ambient noise levels during construction would be **less than significant**.

MITIGATION MEASURES

None required.

CONSTRUCTION TRAFFIC NOISE

Construction trucks would deliver building materials as well as remove dump materials. Based on the California Emissions Estimator Model (CalEEMod) default assumptions, the maximum daily haul and vendor truck trips are anticipated to occur during the grading phase. During this phase approximately 20 daily worker trips and 2 daily hauling trips (105 hauling trips over 65 days) are estimated to occur.

This analysis considers a doubling of the traffic volume would result in a 3 dBA increase to be a substantial temporary increase in roadside noise levels. The modeled weekday noise level estimates for the roadway segment for Bayou Way, between Power has an average daily traffic (ADT) volume of approximately 1,283 vehicles, as shown in Table NOI-2. The construction truck trips for the project would not double the existing traffic volume per day. Therefore, the road segment would be below the 3 dBA increase standard, and similar to the conclusion reached in the 2022 Airport SEIR, the impact would be **less than significant**.

MITIGATION MEASURES

None required.

IMPACT: GENERATE A SUBSTANTIAL PERMANENT INCREASE IN AMBIENT NOISE LEVELS IN THE VICINITY OF THE PROJECT IN EXCESS OF STANDARDS ESTABLISHED IN THE LOCAL GENERAL PLAN OR NOISE ORDINANCE, OR APPLICABLE STANDARDS OF OTHER AGENCIES

The generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies due to the implementation of the 2022 Airport Master Plan Update was discussed on pages 9-7 to 9-8 of the 2022 Airport Draft SEIR. The analysis concluded that implementation of the 2022 Master Plan Update would not generate a substantial permanent increase in ambient noise levels based on the assumption that the nearest sensitive receptors are located over 0.5 miles away and noise associated with operation of the cargo facility, new commercial uses, roadway improvements and realignments, and runway extension, in and surrounding the airport would attenuate with distance sufficiently to preclude a substantial permanent increase in ambient noise levels. As a result, the 2022 Airport SEIR concluded that the impact associated with the generation of a substantial permanent increase in ambient noise levels would be less than significant. The proposed project would be a new commercial use in a location not foreseen in the 2022 Airport SEIR and would be closer than the 0.5-mile distance applied to dismiss potential noise impacts.

MECHANICAL EQUIPMENT NOISE

The project would generate noise associated with the Battery Energy Storage System (BESS) substation, and heating, ventilation, and air conditioning (HVAC) units; however, the BESS does not generate noise itself but, rather, the HVAC units associated with the BESS would be noise sources and would be placed outdoors on a concrete pad near the substation and main switch gear. A typical HVAC unit generates a noise level of approximately 52 dBA at a reference distance of 50 feet (Elliott et al., 2010). The nearest existing noise-sensitive land uses are residential located approximately 2,800 feet (conservatively measured from the BESS location adjacent to the easter charging area) and 400 feet (conservatively measured from the southern extent of the solar array), respectively.

Table NOI-11 presents the estimated noise levels from stationary noise sources of the proposed project at the property line of the nearest sensitive land uses. Policy NO-6 of the County's General Plan Noise Element identifies a non-transportation noise limit of 55 dBA, L_{eq} during daytime hours (7:00 a.m. to 10:00 p.m.) and 50 dBA, L_{eq} during nighttime hours (10:00 p.m. to 7:00 a.m.). The proposed project would be open 24 hours per day, seven days per week and, hence, the more stringent nighttime standard would be applicable to project operations.

Table NOI-11 shows HVAC equipment associated with the BESS would not exceed the County's General Plan standards in Policy NO-6.

Table NOI-11: Operational Noise Levels

Nearest Sensitive Land Use	Distance ¹ (feet)	Reference Level at 50 ft (dBA)	General Plan Policy NO-6		
			Noise Level at Receiver	Exterior Noise Standard	Exceed Threshold
MECHANICAL EQUIPMENT					
Single Family Residence (Southeast)	2,800	68 dBA ^{2,3}	33 dBA	60 dBA ⁶	No
LOADING AREA					
Single Family Residence (Southeast)	2,800	64 dBA ²	29 dBA	60 dBA ⁶	No
PARKING AREA/EV CHARGING ACTIVITIES					
Single Family Residence (Southeast)	2,800	61 dBA ⁴	26 dBA	60 dBA ⁶	No
LANDSCAPE MAINTENANCE					
Single Family Residence (Southeast)	400	50 dBA ⁵	32 dBA	55 dBA ⁶	No
<p>NOTES: dBA = A-weighted decibels</p> <ol style="list-style-type: none"> The distance is from the southern extent of charging and loading areas of the project to the sensitive receptor property line, except for landscape maintenance which is from the southern extent of the solar field. Elliott H. Berger, Rick Neitzel, and Cynthia A. Kladden, Noise Navigator Sound Level Database with Over 1700 Measurement Values, July 6, 2010. Reference noise levels accounts for multiple HVAC units running simultaneously for the operation of the BESS. Kariel, H. G., Noise in Rural Recreational Environments, Canadian Acoustics 19(5), 3-10, 1991. USEPA, Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances, 1971. 6. County of Sacramento, Noise Element: Table 2: Non-Transportation Noise Standards, December 13, 2017. County of Sacramento, Noise Element: Table 2: Non-Transportation Noise Standards, December 13, 2017. <p>SOURCE: Kimley-Horn, 2024.</p>					

The predicted noise level of 33 dBA at the nearest sensitive receptor from BESS and HVAC equipment meets the conditions of the Sacramento County General Plan daytime and nighttime exterior noise level limits at the nearest existing noise-sensitive (residential) uses and are below the ambient noise level conditions at the nearest existing residential uses. Therefore, similar to the conclusion reached in the 2022 Airport SEIR, the impact of the proposed project with respect to HVAC equipment noise at existing sensitive uses would be **less than significant**.

MITIGATION MEASURES

None required.

LOADING AREA NOISE

Loading movements of heavy trucks have been documented to generate a noise level of 64 dBA at a reference distance of 50 feet (Elliott et al., 2010). However, it should be noted that electric heavy and medium-duty trucks are substantially quieter than similarly-sized diesel-powered trucks. According to Volvo Trucks, the difference between electric and conventional trucks is a reduction of approximately 10 decibels. Hence, this is a conservative assumption. The nearest existing noise-sensitive land uses are commercial and residential located approximately 2,800 feet (conservatively measured from the southern extent of the convenience store and parking areas). Table NOI-11 shows loading area operations would not exceed the County's General Plan standards in Policy NO-6.

The noise levels from delivery truck operations would be consistent with the restrictions of the Sacramento County General Plan daytime and nighttime exterior and interior noise level limits at the nearest existing noise-sensitive (residential) uses and are below the ambient noise level conditions at the nearest existing residential uses. Therefore, similar to the conclusion reached in the 2022 Airport SEIR, the impact of the proposed project with respect to delivery truck noise at existing sensitive uses would be **less than significant**.

MITIGATION MEASURES

None required.

PARKING LOT AND EV CHARGING ACTIVITIES NOISE

EV charging areas include parking noise activities of multiple vehicle types arriving and departing a parking area, including engines starting and stopping, car doors opening and closing, and persons conversing as they enter and exit vehicles. As discussed above, heavy truck operations generate a noise level of 64 dBA at a reference distance of 50 feet (Elliott et al., 2010).³ Also as noted above, electric-powered heavy-duty trucks are substantially quieter than the diesel-powered trucks by approximately 10 dB and this is a conservative estimate. Conversations at parking area have also been documented

³ It should be noted that electric heavy-duty trucks are substantially quieter than the diesel-powered trucks. According to Volvo Trucks, the difference between electric and conventional trucks is a reduction of approximately 10 decibels. Hence, this is a conservative analysis.

to result in an exposure of 50 dBA at a reference distance of 50 feet (Elliott et al., 2010). The nearest existing noise-sensitive land uses are residential uses located approximately 2,800 feet (conservatively measured from the southern extent of the charging areas). Table NOI-11 shows that estimated noise levels from parking lot and charging activities would not exceed the County's General Plan standards in Policy NO-6.

The predicted noise levels from the proposed parking lot meets the conditions of the Sacramento County General Plan daytime and nighttime exterior and interior noise level limits at the nearest existing noise-sensitive (residential) uses and are below the ambient noise level conditions at the nearest existing residential uses. Therefore, similar to the conclusion reached in the 2022 Airport SEIR, the impact of the proposed project with respect to parking lot noise at existing sensitive uses would be **less than significant**.

MITIGATION MEASURES

None required.

LANDSCAPE MAINTENANCE NOISE

Maintenance activities may include weed management and periodic washing of solar arrays. Maintenance activities such as a gasoline-powered lawnmower would generate a noise level of approximately 70 dB at a reference distance of 5 feet (USEPA, 1971). The nearest existing noise-sensitive land uses are residential located approximately 400 feet (conservatively measured from the southern extent of the solar array). Table NOI-11 shows that noise levels generated by landscape maintenance activities would not exceed the County's General Plan standards in Policy NO-6.

The predicted noise levels from maintenance activities meet the conditions of the Sacramento County General Plan daytime and nighttime exterior and interior noise level limits at the nearest existing noise-sensitive (residential) uses and are below the ambient noise level conditions at the nearest existing residential uses. Therefore, similar to the conclusion reached in the 2022 Airport SEIR, the impact of the proposed project with respect to landscape maintenance noise at existing sensitive uses would be **less than significant**.

MITIGATION MEASURES

None required.

TRAFFIC NOISE

Vehicle trips generated by the proposed project would generate roadway noise in the area and surrounding environment. Increases in traffic noise gradually degrade the environment in noise-sensitive areas.

The significance of traffic noise levels was determined by comparing the increase in noise levels (from the traffic contribution only) to increments recognized by Sacramento County General Plan Policy NO-1, as significant.

Traffic noise was developed for the transportation analysis,⁴ and assessed in the acoustical analysis for the following scenarios:

1. Existing traffic conditions during 24-Hour traffic distribution (using data generated for the Transportation Analysis); and
2. Existing plus proposed during 24-Hour traffic distribution.

Modeled estimates of weekday noise levels for the most highly affected roadway segments near the proposed project are presented in **Table NOI-12** for full buildout of the proposed project by the using the LDN noise descriptor. Initial modeling of traffic noise increases along these roadway segments indicated that the two analyzed roadway segments would not experience roadside noise increases that would be considered significant.

Therefore, similar to the conclusion reached in the 2022 Airport SEIR, the impact with respect to traffic noise at nearby existing receptors is considered **less than significant**.

MITIGATION MEASURES

None required.

Table NOI-12: Existing Traffic Noise along Roads in the Project Vicinity

Roadway Segment	Existing		Existing Plus Project		Change	Significant Impacts
	ADT	dBA L _{dn} ¹	ADT	dBA L _{dn} ¹		
BAYOU WAY						
Airport Boulevard to Power Line Road	2,155	52.7	3,430	54.7	2.0	No
Power Line Road to Metro Air Parkway	1,283	50.5	1,857	52.1	1.6	No
NOTES: ADT = average daily trips; dBA = A-weighted decibels; L _{dn} = day-night average noise level. 1. dBA L _{dn} at 100 feet from the roadway centerline. The actual sound level at any receptor location is dependent upon such factors as the source-to-receptor distance and the presence of intervening structures, barriers, and topography. Source: Based on traffic data provided by Kimley-Horn, 2024. Refer to Appendix NOI-1 for traffic noise modeling assumptions and results						

⁴ Based on traffic data within the Traffic Evaluation, prepared by Kimley-Horn. Traffic noise levels were calculated using the FHWA's Highway Noise Prediction Model (FHWA-RD-77-108).

IMPACT: GENERATE EXCESSIVE GROUNDBORNE VIBRATION OR GROUNDBORNE NOISE LEVELS

The generation of excessive groundborne vibration or groundborne noise levels due to the implementation of the 2022 Airport Master Plan Update was discussed on pages 9-8 of the 2022 Airport Draft SEIR. The analysis concluded that implementation of the 2022 Master Plan Update would not result in the generation of excessive groundborne vibration or groundborne noise levels because sensitive receptors within 0.5 miles or further from proposed construction areas would be sufficiently distant to preclude vibration impacts. For these reasons, the 2022 Airport SEIR concluded that the impact associated with potential conflicts with the generation of excessive groundborne vibration or groundborne noise levels would be less than significant.

CONSTRUCTION

This analysis addresses vibration impacts generated by construction activities at existing off-site buildings and at buildings constructed during the early phases of construction. Equipment or activities that typically generate continuous vibration include but are not limited to excavation equipment, drilling, static compaction equipment, and vibratory compaction equipment. The primary vibration-generating activities associated with the construction of development allowed under the proposed project would occur during grading and installation of piers for solar panels.

Receptors sensitive to vibration include structures (especially older masonry structures), residences or other uses where people would normally be expected to sleep during nighttime hours, and vibration-sensitive equipment (e.g., magnetic resonance imaging equipment, high resolution lithographic, optical and electron microscopes). Regarding the potential effects of groundborne vibration to people, except for long-term occupational exposure, vibration levels rarely affect human health.

The nearest structure to active work areas, the water tanks to the east of the project site, are located as close as 180 feet to the east of the proposed development. Vibration-generating equipment that may potentially be used for project construction are listed in **Table NOI-13** as are the vibration levels associated at a distance of 25 feet as well as at 180 feet for the closest structure to the east. The nearest residential buildings would be exposed to a vibration level of 0.033 or less, which is below FTA's threshold of 0.20 PPV. Consequently, existing sensitive structures near the proposed project would not be affected by substantial ground-borne vibration during project construction. Therefore, similar to the conclusion reached in the 2022 Airport SEIR, the impact of the proposed project with respect to generation of excessive groundborne vibration during construction would be **less than significant**.

MITIGATION MEASURES

None required.

Table NOI-13: Typical Construction Equipment Vibration Levels

Equipment	Peak Particle Velocity at 25 Feet (in/sec)	Peak Particle Velocity at 180 Feet (in/sec)^a
Pile Driver	0.644	0.033
Large Bulldozer	0.089	0.005
Caisson Drilling	0.089	0.005
Loaded Trucks	0.076	0.004
Rock Breaker	0.059	0.003
Jackhammer	0.035	0.002
Small Bulldozer/Tractors	0.003	0.000
NOTES:		
a. Calculated using the following formula: $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$, where: PPV_{equip} = the peak particle velocity in in/sec of the equipment adjusted for the distance; PPV_{ref} = the reference vibration level in in/sec from Table 7-4 of the Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, 2018; D = the distance from the equipment to the receiver.		
SOURCE: FTA, 2018.		

OPERATION

The proposed project does not propose the use of large, rotating equipment or other types of equipment or activities during the proposed project's operation and maintenance phase that would introduce any new sources of perceivable groundborne vibration. In addition, operation and maintenance would not require the use of heavy equipment. Therefore, similar to the conclusion reached in the 2022 Airport SEIR, the impact of the proposed project with respect to generation of excessive groundborne vibration during operation would be **less than significant**.

MITIGATION MEASURES

None required.

IMPACT: EXPOSE PEOPLE RESIDING OR WORKING IN THE PROJECT AREA TO EXCESSIVE NOISE LEVELS

The exposure of people residing or working in the project area to excessive noise levels due to the implementation of the 2022 Airport Master Plan Update was discussed on pages 9-8 to 9-9 of the 2022 Airport Draft SEIR. The analysis concluded that implementation of the 2022 Master Plan Update would not expose people residing or working in the project area to excessive noise levels as compliance with General Plan and Airport Land Use Compatibility Plan policies for interior noise levels and OSHA standards and use of personal protective equipment (PPE) would ensure that persons would not be exposed to excessive noise levels above 70 dB. For these reasons, the 2022 Airport SEIR concluded that the impact associated with potential conflicts with

exposed people residing or working in the project area to excessive noise levels would be less than significant.

The project site is located approximately 0.85 miles south of the Sacramento International Airport, from the east runway. Pursuant to Policy NO-2 of the Sacramento County General Plan Noise Element, proposals for new development within Sacramento County that may be affected by aircraft noise from Sacramento International Airport shall be evaluated relative to the Sacramento International ALUCP prepared by the SACOG dated December 12, 2013.

As shown in Plate NOI-1, the project site is inside of the 70-75 CNEL noise contours for the airport and is located within the Noise Impact Area as identified in the County's ALUCP. Specifically, the project site is located within Referral Area 1 of the Airport Influence Area.

The ACLUP requires trucking and rail freight terminals land uses, which are similar to the land uses proposed, to maintain an interior noise level of 50 dBA CNEL, when exposed to 70 to 75 dBA CNEL of airport noise. Standard building construction techniques would reduce interior noise levels to meet General Plan and ALUCP policies of 50 dB for buildings (HUD, 2009).

Compliance with General Plan and ALUCP policies for interior noise levels would ensure that persons on the project site would not be exposed to excessive noise levels. Therefore, similar to the conclusion reached in the 2022 Airport SEIR, this impact would be **less than significant**.

MITIGATION MEASURES

None required.

15 TRANSPORTATION AND CIRCULATION

INTRODUCTION

This chapter evaluates the effects of the proposed project related to transportation and circulation, focusing on changes to the 2022 Airport SEIR that may result in new or more severe impacts, and describes any mitigation measures needed to address any such impacts.

FINDINGS OF THE AIRPORT MASTER PLAN UPDATE SEIR

Impacts of the 2022 Airport Master Plan Update related to transportation and circulation were analyzed in Chapter 11, *Transportation and Circulation*, of the 2022 Airport Draft SEIR. The Airport Master Plan Update SEIR determined that implementation of the 2022 Airport Master Plan Update would have the following impacts with respect to transportation and circulation:

- Implementation of the Airport Master Plan Update would result in an increase in Vehicle Miles Traveled (VMT) (*Significant and Unavoidable Impact*)
- Implementation of the Airport Master Plan Update would not conflict with a program plan or policy addressing the circulation system including transit, roadway, bicycle, and pedestrian facilities (*Less than Significant Impact*)
- Implementation of the Airport Master Plan Update would not substantially increase roadway hazards (*Less than Significant Impact*)
- Implementation of the Airport Master Plan Update would not result in inadequate emergency access (*No Impact*)

NOTICE OF PREPARATION COMMENTS

The Notice of Preparation (NOP) for the Supplement to the 2022 Airport SEIR was circulated on August 17, 2023. The County received scoping comments related to transportation from the California Department of Transportation (Caltrans). Specifically, Caltrans requested that a traffic study be prepared to analyze the impact of the proposed project on queues at nearby on- and off-ramps and peak hour level of service (LOS) operations at nearby intersections under existing and cumulative conditions.

INFORMATION SOURCES

The information and analysis included in this chapter was adapted from a VMT analysis prepared by Kimley-Horn in 2023 (Appendix TR-1) and peer reviewed by ESA and Sacramento County and determined to be accurate and adequate for inclusion in this Supplement to the 2022 Airport SEIR. The VMT analysis was conducted consistent with the County's Transportation Analysis Guidelines (Sacramento County, 2020).

A separate document, the Local Transportation Analysis (LTA), analyzes access and safety issues, including the issues of concern to Caltrans raised in its comments on the NOP, and is provided in Appendix TR-2 (Kimley-Horn, 2024). Consistent with guidance in the County's Transportation Analysis Guidelines for non-CEQA transportation analysis requirements, the LTA evaluates the proposed project's effects on traffic operations at potentially affected roadways and intersections.

ENVIRONMENTAL SETTING

The proposed project is located in the northwest portion of Sacramento County, approximately 7.5 miles from downtown Sacramento (see Plate PD-1). Specifically, the project site is located south of Interstate 5 (I-5) immediately south of Sacramento International Airport (SMF) (see Plate PD-2). The project site is bounded by Bayou Way and I-5 to the north, fallow farmland and water tanks that are a part of the airport's water system to the east, the West Drainage Canal and farmland to the south, and fallow farmland to the west.

Primary regional access to the project site is provided by I-5 to the north via a nearby interchange with Airport Boulevard to the west and a more distant interchange with Metro Air Parkway to the east. Local access is provided by Bayou Way via Airport Boulevard to the west and Power Line Road to the east and Metro Air Parkway further to the east.

REGULATORY SETTING

FEDERAL

There are no federal laws or regulations that are relevant to potential transportation impacts of the proposed project.

STATE

SENATE BILL 743

SB 743, passed in 2013, required the California Governor's Office of Planning and Research (OPR) to develop new CEQA guidelines that address traffic metrics under CEQA. As stated in the legislation, upon adoption of the new guidelines, "automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to this division, except in locations specifically identified in the guidelines, if any." In December 2018, OPR published *Technical Advisory on Evaluating Transportation Impacts in CEQA* ("Technical Advisory") (OPR, 2018), which provided guidance for implementing SB 743. On December 28, 2018, the Resources Agency adopted CEQA Guidelines Section 15064.3. Under this guideline, VMT is the primary metric used to identify transportation impacts. On July 1, 2020, the provisions of Section 15064.3 became effective statewide.

LOCAL

SACRAMENTO COUNTY 2030 GENERAL PLAN

The following policies from the Circulation Element of the Sacramento County 2030 General Plan are applicable to the proposed project.

- CI-8 Maintain and rehabilitate the roadway system to maximize safety, mobility, and cost efficiency.
- CI-9 Plan and design the roadway system in a manner that meets Level of Service (LOS) D on rural roadways and LOS E on urban roadways, unless it is infeasible to implement project alternatives or improvements that would achieve LOS D on rural roadways or LOS E on urban roadways. The urban areas are those areas within the Urban Service Boundary as shown in the Land Use Element of the Sacramento County General Plan. The areas outside the Urban Service Boundary are considered rural.
- CI-10 Land development projects shall be responsible to mitigate the project's adverse impacts to local and regional roadways.
- CI-32 Develop a comprehensive, safe, convenient, and accessible bicycle and pedestrian system that serves and connects the County's employment, commercial, recreational, educational, social services, housing, and other transportation modes.
- CI-38 Design and construct pedestrian facilities to ensure that such facilities are accessible to all users.

TRANSPORTATION IMPROVEMENT AND PROGRAM GUIDE

The Sacramento County Transportation Improvement Program Guide (TIPG) presents the capital improvement plan and the maintenance and operations programs for unincorporated area roadway, bikeway, and pedestrian systems for implementation in the next 5 years (Sacramento County, 2019). The TIPG supports the County General Plan.

TRANSPORTATION ANALYSIS GUIDELINES

For certain projects the Sacramento County Department of Transportation (SacDOT) requires Local Transportation Analyses (LTA), which are traffic studies. Projects subject to an LTA would 1) generate 100 or more new a.m. or p.m. peak hour vehicle trip-ends, 2) generate 1,000 or more daily vehicle trip-ends, or 3) are likely to cause or substantially contribute to traffic congestion or safety issues. The purpose of the LTA is to ensure compliance with the multimodal policies in the General Plan; these include level of service (LOS),¹ safety, transit service, and a comprehensive, safe, convenient, and accessible bicycle and pedestrian system. The project analysis includes conditions to

¹ Level of service (LOS) is a qualitative measure used to relate the quality of motor vehicle traffic service. LOS is used to analyze roadways and intersections by categorizing traffic flow and assigning quality levels of traffic based on performance measure like vehicle speed, density, congestion, etc.

provide any recommended improvements necessary to comply with General Plan policies. Depending on the project, SacDOT may require additional analysis of other roadway elements such as turn pocket queuing, drive-thru queuing, traffic signal warrants, traffic safety, neighborhood cut-through traffic, truck impacts, access control, and phasing analysis. The County's Transportation Analysis Guidelines provide the requirements and guidance for preparing a LTA.

The County's Transportation Analysis Guidelines have been updated to reflect SB 743 and reflected in the CEQA Guidelines Section 15064.3. As noted in the County's guidelines, the intent of SB 743 is to bring CEQA transportation analyses into closer alignment with other statewide policies regarding greenhouse gases, complete streets, and smart growth. Using VMT as a performance measure instead of LOS is intended to discourage suburban sprawl, reduce greenhouse gas emissions, and encourage the development of smart growth, complete streets, and multimodal transportation networks. The current County guidelines provide methodologies for transportation engineers and planners to conduct CEQA transportation analyses for land development and transportation projects in compliance with SB 743. Notably, the County guidelines include the following screening criteria for projects that are expected to result in less-than-significant VMT impacts:

- 125,000 square feet of total gross floor area or less in an infill setting; OR 200,000 square feet of total gross floor area or less in a greenfield setting; OR if supported by a market study with a capture area of 3 miles or less; AND
- Local Serving: Project does not have regional-serving uses, as shown in Appendix A.

SACRAMENTO COUNTY ACTIVE TRANSPORTATION PLAN

The Sacramento County Active Transportation Plan (Sacramento County, 2022) guides the development and construction of a balanced transportation system that encourages active modes of transportation. Active transportation includes walking, biking, and rolling (e.g., mobility devices, skateboards, scooters). The Active Transportation Plan provides policies, programs, and a prioritization method to implement infrastructure recommendations in a phased approach to improve active transportation within unincorporated Sacramento County. This plan replaces the County's Pedestrian Master Plan (2007) and the Bikeway Master Plan (2011). A Class II bike lane is planned along Bayou Way in the vicinity of the project site.

IMPACTS AND ANALYSIS

The analysis in this Supplement to the 2022 Airport SEIR describes impacts identified in the 2022 Airport SEIR and describes how the impacts of the proposed project would differ, as applicable.

SIGNIFICANCE CRITERIA

For purposes of this Supplement to the 2022 Airport SEIR and consistent with the criteria presented in the 2022 Airport SEIR, which is based on Appendix G of the CEQA Guidelines, impacts related to transportation may be considered significant if implementation of the proposed project would:

- Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;
- Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) – measuring transportation impacts individually or cumulatively, using a vehicles miles traveled standard established by the County;
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- Result in inadequate emergency access.

METHODOLOGY AND ASSUMPTIONS

As discussed in Chapter 1, *Introduction*, the 2022 Airport Master Plan Update and the 2022 Airport SEIR considered a development and operational horizon of 20 years (2018 through 2038) with four Planning Activity Levels (PALs). The area south of I-5 within the Airport Master Plan area, which includes the project site, was included within PAL 4 (with anticipated development within the 2034-2038 time period) of the 2022 Airport Master Plan Update. Due to the extended 20-year planning horizon, Master Plan projects or facilities identified in PAL 4 were determined to be beyond the scope of the 2022 Airport SEIR. However, as discussed in Chapter 8, *Land Use*, of the 2022 Airport Draft SEIR (page 8-11), the 2022 Airport Master Plan Update does identify future commercial development south of I-5 in PAL 4. As further discussed in the analysis, if PAL 4 becomes ripe for development, additional environmental review will be necessary. Accordingly, proposed project impacts related to transportation on the project site are evaluated at a project level below.

The methodology and assumptions outlined below are based on guidance provided in the County's Transportation Analysis Guidelines (Sacramento County, 2020).

VEHICLE MILES TRAVELED

The proposed project was compared to the screening criteria found in the County's Transportation Analysis Guidelines for projects that are expected to result in less-than-significant VMT impacts to determine if a detailed CEQA transportation analysis of operational VMT is required. In part, the Transportation Analysis Guidelines establish the methodology for assessing transportation impacts for development projects based on the updated CEQA guidelines from the State of California that require transportation impacts be evaluated based on VMT rather than LOS or any other measure of a project's effect on automobile delay. The screening criteria for projects that are expected to result in less-than-significant VMT impacts are presented in Table 3-1 of the County's

Transportation Analysis Guidelines; the applicable criteria from the guidelines as they relate to the proposed project include:

- Local-Serving Retail – The ancillary uses that are part of the proposed project would total 20,000 gross square feet of building space, which is less than 200,000 square feet of development allowed for local-serving retail of a greenfield development. In addition, none of the proposed ancillary uses include regional serving uses as defined in Appendix A of the County’s guidelines.

ROADWAY SAFETY/DESIGN STANDARDS

The proposed project would cause a significant impact if it would:

- Cause a substandard rural roadway (i.e., less than 24 feet of pavement width and less than six a foot shoulder) to exceed an average daily traffic volume of 6,000 daily vehicles;
- Add 600 or more new daily vehicle trips to a substandard rural roadway that already carries 6,000 or more daily vehicles;
- Cause the maximum queue length at a freeway off-ramp to extend beyond the gore point onto the mainline (or exacerbate a current or future condition by increasing the maximum queue by one or more vehicles); or
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

BICYCLE AND PEDESTRIAN FACILITIES

The proposed project would cause a significant impact if it would:

- Eliminate or adversely affect an existing bikeway or pedestrian facility in a way that would discourage its use;
- Interfere or conflict with the Sacramento County Active Transportation Plan; or
- Fail to provide adequate access for bicyclists and pedestrians, resulting in unsafe conditions, including unsafe bicycle/pedestrian, bicycle/motor vehicle, or pedestrian/motor vehicle conflicts.

TRANSIT SERVICE AND FACILITIES

The proposed project would cause a significant impact if it would:

- Eliminate or adversely affect existing transit access, service, or operations;
- Interfere with the implementation of transit service as planned in the MTP/SCS; or
- Substantially increase transit demand and fail to provide adequate transit service.

IMPACT: CONFLICT WITH A PROGRAM, PLAN, ORDINANCE, OR POLICY ADDRESSING THE CIRCULATION SYSTEM

Potential conflicts with a program, plan, ordinance, or policy addressing the circulation system due to the implementation of the 2022 Airport Master Plan Update were discussed on pages 11-11 to 11-12 of the 2022 Airport Draft SEIR. The analysis determined that implementation of the 2022 Master Plan Update would be consistent with the Sacramento County General Plan Transportation Diagram; would be required to comply with applicable access and circulation requirements of the County Improvement Standards and the Uniform Fire Code; and would not conflict with existing programs or policies addressing transit, pedestrian, and bicycle facilities. The analysis concluded that impacts related to the implementation of the 2022 Airport Master Plan Update under this significance criterion would be less than significant. The following analysis addresses potential proposed project impacts under this significance criterion.

SACRAMENTO COUNTY GENERAL PLAN

The Circulation Element and Active Transportation Plan of the Sacramento County General Plan establishes goals, policies, and implementation measures guiding the future of transportation in the County. The goals and policies relevant to the project and identified above in the *Regulatory Setting* are centered on creating a connective and accessible roadway network that promotes efficient vehicular transport, while also promoting alternative modes of travel, including bicycling and walking. The following discussion evaluates whether proposed project construction or operation would conflict with applicable General Plan programs, goals, and policies that address the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

CONSTRUCTION

Regionally, access to the project site would be provided primarily by I-5. Local access to the project site would be from Bayou Way via Airport Boulevard and Power Line Road. Temporary construction activities would be geographically limited to the internal project site. As a result, the direct impacts of construction would not substantially impact the area's public roadways.

Up to four daily construction-related truck trips for delivery of materials would be spread over an 8-hour workday during the construction period. In addition, an average of 20 worker trips would occur during the AM and PM hours before and after each workday, resulting in a total of up to 22 daily vehicle and truck trips added each day to local roadways during construction. According to the LTA prepared for the proposed project, the daily volume along the segment of Bayou Way between Airport Boulevard and Power Line Road is 2,155 daily trips, and thus project construction traffic would only increase daily trips along this segment by approximately one percent. As a result, the temporary addition of 22 vehicle and truck trips would not substantially alter existing roadway capacity and would not substantially affect traffic circulation.

No bus stops, pedestrian and bicycle facilities are located near the project site, and as a result there would be no impact on such facilities due to project construction. Similarly,

temporary construction activities would not impede or otherwise conflict with implementation of the planned Class II bike lane along Bayou Way.

For the reasons discussed above, and similar to the conclusion reached in the 2022 Airport SEIR, construction of the proposed project would not conflict with any program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, and this impact would be **less than significant**.

MITIGATION MEASURES

None required.

OPERATION

ROADWAY ACCESS

General Plan Policies CI-8 through CI-10 are related to maintaining the safety and functionality of the roadway network in Sacramento County. As discussed in Chapter 2, *Project Description*, the proposed project would pave and widen the intersections of Bayou Way and Airport Boulevard and Bayou Way and Power Line Road and widen Bayou Way between Airport Boulevard and Power Line Road from two to three lanes (one-lane each direction, with a two-way left turn lane). The proposed improvements would allow trucks to safely pass through nearby intersections and provide vehicles with a safe space to accelerate and decelerate upon leaving and entering the turn into the project site without blocking traffic. Furthermore, as shown in Tables 9 through 12 of the LTA (see Appendix TR-2), trips generated by the proposed project would not result in nearby intersections and roadways exceeding County LOS standards.

BICYCLE AND PEDESTRIAN ACCESS

General Plan policies CI-32 and CI-38 seek to create and maintain safe and accessible opportunities for pedestrians and bicyclists. A significant impact would occur if the project hindered or eliminated an existing designated walkway or bikeway, or if the project interfered with implementation of a proposed walkway or bikeway improvement. There are currently no bicycle or pedestrian facilities in the vicinity of the project site. As discussed above, a Class II bike lane is planned along Bayou Way, and this bike lane would be installed as part of the proposed project improvements along affected portions of Bayou Way. In addition, a sidewalk would also be constructed along the project frontage to facilitate pedestrian access.

TRANSIT ACCESS

No bus stops are located near the project site, and transit is not proposed to be extended to the project site in the future. Therefore, implementation of the proposed project would not have any impact on existing public transit facilities.

SUMMARY

For the reasons discussed above, and similar to the conclusion reached in the 2022 Airport SEIR, operation of the proposed project would not conflict with any program,

plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, and this impact would be **less than significant**.

MITIGATION MEASURES

None required.

IMPACT: VEHICLE MILES TRAVELED

Impacts related to an increase in VMT due to the implementation of the 2022 Airport Master Plan Update were discussed on pages 11-8 to 11-11 of the 2022 Airport Draft SEIR. The analysis identified that more than 2.1 million domestic and 1.6 million international passengers travel to airports outside of the Sacramento region. Primarily, these passengers use airports in the Bay Area.

The analysis determined that if SMF does not expand or provide additional passenger service, these longer vehicular trips to the Bay Area airports will continue or possibly expand with population growth over time. The analysis noted that provision of additional gates to serve this unmet local demand is the primary reason for the 2022 Airport Master Plan Update. The analysis determined that the employee trips for the proposed cargo facility on the north side of the airport in PAL 1 would increase vehicle miles over the existing regional average, and the impact was considered significant. The analysis concluded that this impact would remain significant and unavoidable even with implementation of Mitigation Measures TC-1 and TC-2, which required implementation of a Transportation Demand Management (TDM) program to reduce employee VMT impacts associated with the proposed cargo facility, and for the cargo facility proponent to establish or join and maintain membership in an existing transportation management association.

The following analysis addresses potential VMT impacts related to the proposed project, which would be located in PAL 4, and which was not addressed at a project level in the 2022 Airport SEIR.

As discussed above under *Methodology and Assumptions*, the Sacramento County Transportation Analysis Guidelines provide that if a project meets the County's screening criteria, a detailed CEQA transportation analysis of VMT would not be required. The screening criteria for projects that are expected to result in less-than-significant VMT impacts are presented in Table 3-1 of the Transportation Analysis Guidelines; the applicable criteria from the guidelines as they relate to the proposed project include:

- Local-Serving Retail – The ancillary uses that are part of the proposed project would total 20,000 gross square feet of building space, which is less than 200,000 square feet of development allowed for local-serving retail of a greenfield development. In addition, none of the proposed ancillary uses include regional serving uses as defined in Appendix A of the County's guidelines.

Because VMT analysis is intended to capture the long-term impacts of a proposed project, construction activities are not typically subject to VMT analysis. As a result, no analysis of construction VMT is warranted (Sacramento County, 2020).

With respect to operation, due to the nature of the proposed project as an electric vehicle charging stop for both passenger electric vehicles and commercial electric trucks, and its location along the regional highway system, project trips are anticipated to be primarily pass-by and locally diverted-link trips from electric vehicle (EV) passenger cars (in the near-term) and trucks (in the long-term) already traveling on I-5 and SR-99 from origins or to destinations within the Sacramento region. In other words, the project would not attract vehicles that are not already passing through the area and would essentially operate in the same manner as a gas station along a major travel corridor. These types of facilities do not tend to attract users travelling from within the broader region for the specific purpose of visiting the facility, as would be the case with, say, a regional shopping center. On a local level, the EV charging facility would provide long-term charging capacity to electric trucks that service many of the businesses operating in nearby Metro Air Park, located Power Line Road just north of the project site. Based upon these considerations, the project would be more consistent with a local-serving use than a regional-serving use. Accordingly, the proposed project is not expected to generate a substantial amount of VMT and would not contribute to the VMT increase that was described for other portions of the Airport Master Plan Update in the 2022 Airport SEIR.

Moreover, the amount of building space associated with the proposed project meets the above screening criteria for local serving retail, and thus a detailed CEQA transportation analysis of operational VMT is not required. Finally, one of the principal intents of SB 743 and the statewide shift to analyzing a project's VMT impacts was to direct lead agencies towards considering a project's effect on VMT and the corresponding impacts related to criteria pollutants and GHG emissions. The project as proposed would provide substantial benefits with respect to criteria pollutant and GHG emissions reductions, as articulated in various discussions within this Supplement to the 2022 Airport SEIR, specifically those chapters related to air quality, climate change, and energy. Therefore, based upon these factors and consistent with the County Transportation Analysis Guidelines, and unlike the conclusion reached in the 2022 Airport SEIR, there is no conflict with CEQA Guidelines Section 15064.3 and the VMT impact associated with the proposed project would be **less than significant**.

MITIGATION MEASURES

None required.

IMPACT: HAZARDS DUE TO DESIGN OR INCOMPATIBLE USES

Impacts related to roadway hazards due to the implementation of the 2022 Airport Master Plan Update were discussed on pages 11-12 to 11-15 of the 2022 Airport Draft SEIR. The analysis specified that deficiencies associated with level of service were not included in the analysis unless the deficiency would lead to a safety impact. The analysis determined that the increase of vehicles associated with the proposed cargo

facility on the north side of the airport in PAL 1 and, cumulatively, implementation of PALs 1 through 3 would add to the volume of traffic on Elverta Road and increase potential safety concerns and traffic collisions on that roadway. The analysis concluded that implementation of Mitigation Measures TC-3 and TC-4, consisting of roadway improvements to increase travel lanes to 12 feet and to construct paved 6-foot shoulders, would reduce potential safety impacts along Elverta Road to less than significant. The analysis further determined that under existing plus project conditions the queue length for the southbound I-5 off-ramp at Airport Boulevard could exceed the existing queue capacity, resulting in a potentially significant safety impact with implementation of PALs 1 through 3. The analysis determined that the impact would be reduced to less than significant with implementation of Mitigation Measure TC-5, which requires that the southbound Airport Boulevard off-ramp be monitored as each PAL (1 through 3) is completed, and necessary improvements shall be implemented by the Department of Airports in consultation with Sacramento County Department of Transportation and Caltrans.

The following analysis addresses potential hazards due to design and incompatible uses related to the proposed project, which would be located in PAL 4, and which was not addressed in the 2022 Airport SEIR.

CONSTRUCTION

While project construction would introduce additional traffic movements and oversized haul vehicles to the local road network, construction traffic is common throughout the County and is not considered an “incompatible use.” However, given the scale of the project and rural setting in which the project would be constructed, the temporary addition of oversize vehicles, haul trucks and worker vehicles could increase traffic hazards and the resulting impact would be **potentially significant**.

To address this impact, **Mitigation Measure TR-1** is prescribed below, which would require that a construction traffic control plan be prepared in accordance with the California Manual of Traffic Control Devices. Pending final project design, the requirement for a construction traffic control plan may be triggered by the County encroachment permit process if any portion of Bayou Way right-of-way would be temporarily occupied or altered during construction. However, if no encroachment permit is required, the project would still be subject to a construction traffic control plan to address the potentially significant impact and to provide consistency with the County General Plan Policy CI-10, which requires land development projects to mitigate adverse impacts on local and regional roadways. With the implementation of Mitigation Measure TR-1, and similar to the conclusion reached in the 2022 Airport SEIR, this impact would be **less than significant**.

OPERATION

ROADWAY SAFETY/DESIGN STANDARDS

Bayou Way is currently a substandard rural roadway (i.e., less than 24 feet of pavement width and less than six a foot shoulder). As shown in Table 8 of the LTA (see Appendix TR-2), the daily trip volume along Bayou way between Airport Boulevard and

Power Line Road and between Power Line Road and Metro Air Parkway would be 3,430 and 1,921 vehicles, respectively, and thus would not cause a substandard rural roadway to exceed the average daily traffic volume threshold of 6,000 daily vehicles. Further, as part of its development, the proposed project would improve Bayou Way to remove the existing roadway deficiencies. As described in Chapter 2, *Project Description*, these improvements would include paving and widening at the intersections of Bayou Way and Airport Boulevard and Bayou Way and Power Line Road to facilitate truck turning movements, widening Bayou Way along the project frontage from two to three lanes (one-lane each direction, with a two-way left turn lane), and provision of multiple points of ingress/egress to/from the project site. Design and construction of these improvements would follow the established requirements and conditions of SacDOT. Therefore, similar to the conclusion reached in the 2022 Airport SEIR, the impact of the proposed project with respect to rural roadway compatibility is considered **less than significant**, and no mitigation is required.

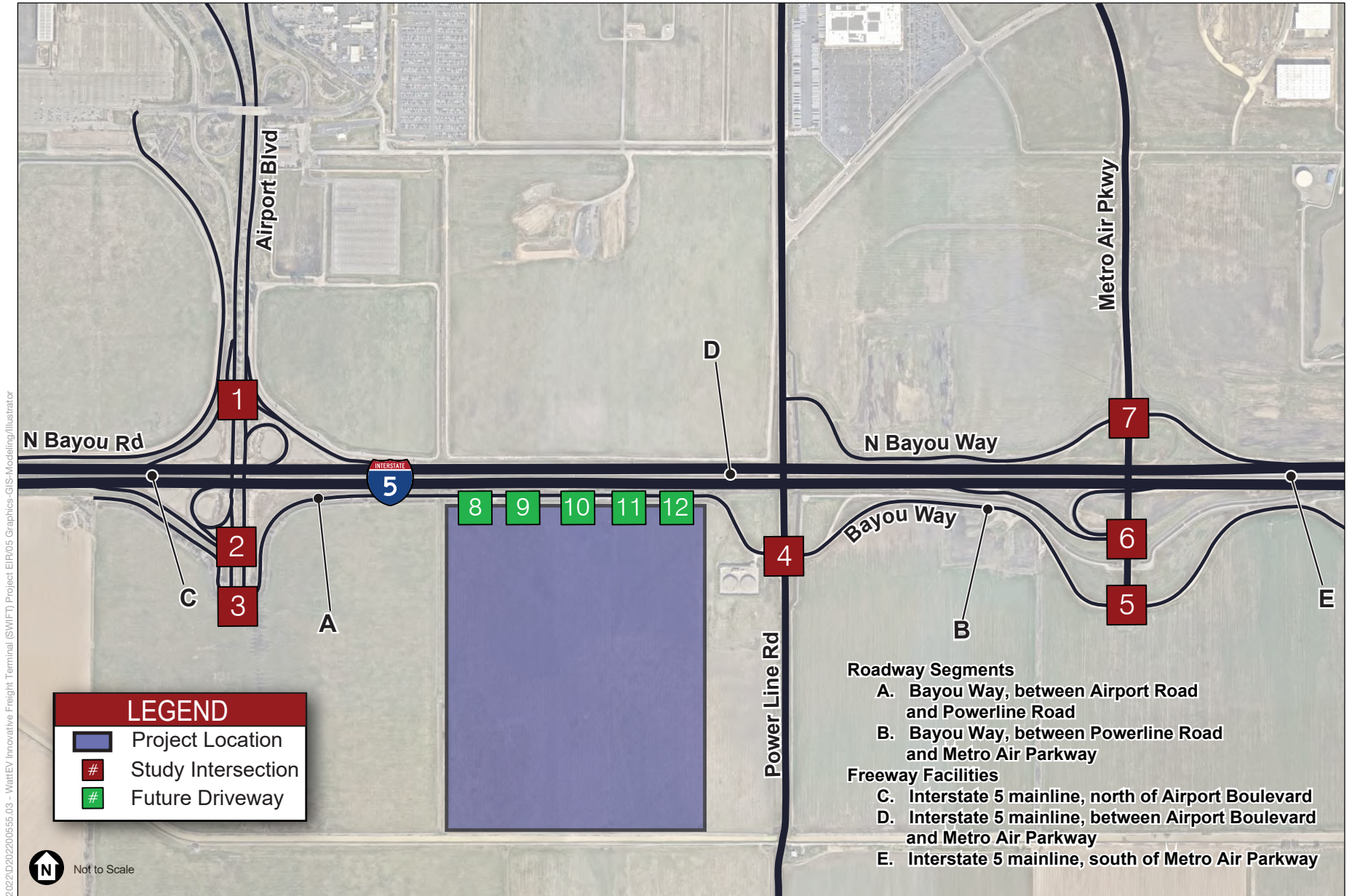
INTERSECTION QUEUEING

A queuing study was conducted to evaluate the capacity of the turn lanes at the study intersections, which are listed below and shown on **Plate TC-1**.

1. Airport Boulevard at I-5 Northbound Ramps
2. Airport Boulevard at I-5 Southbound Ramps
3. Airport Boulevard at Bayou Way
4. Bayou Way at Power Line Road
5. Metro Air Parkway at Bayou Way
6. Metro Air Parkway at I-5 Southbound Ramps
7. Metro Air Parkway at I-5 Northbound Ramps

Synchro reports were used to conduct the queuing analysis. The 95th percentile vehicle queues were compared against the existing vehicle storage lengths at select intersection movements to determine if queues are anticipated to exceed their available storage.

As shown in Table 13 of the LTA (see Appendix TR-2), none of the queues are anticipated to exceed their available storage at the time of the project's completion, though the 2022 Airport SEIR did acknowledge that some exceedances could occur at the southbound I-5 off-ramp at Airport Boulevard at some point in the future during PAL 1 through 3 of the Master Plan's buildout. The Airport SEIR's analysis determined that the impact would be reduced to less than significant with implementation of Mitigation Measure TC 5, which requires that the southbound Airport Boulevard off-ramp be monitored as each PAL (1 through 3) is completed, and necessary improvements are implemented by the Department of Airports in consultation with Sacramento County Department of Transportation and Caltrans. However, as demonstrated in the LTA, these potential exceedances would not occur until well after the project's completion,



20221020200655.03 - WattEV Innovative Freight Terminal (SWIFT) Project EIR/05 Graphics-GIS-Modeling/Illustrator

SOURCE: Kimley-Horn, 2024

WattEV Innovative Freight Terminal (SWIFT) Project



and potential exceedances would not occur until substantially greater quantities of development occurs at an undefined point in the future, at which point the prescriptions in Mitigation Measure TC 5 would then apply. As a result, similar to the conclusion reached in the 2022 Airport SEIR, the impact of the proposed project with respect to queueing hazards is considered **less than significant**, and no mitigation is required.

MITIGATION MEASURES

TR-1 To address potential traffic hazards during construction, prior to the commencement of construction or demolition activities the applicant shall prepare a construction traffic control plan for review and approval by the County Department of Transportation. Typical measures to be included in the construction traffic control plan include signage, traffic cones, and flaggers to help ensure safe and efficient movement of traffic through the affected area. In addition, the construction traffic control plan would provide for notification of emergency responders regarding the planned construction activities.

IMPACT: EMERGENCY ACCESS

Impacts related to emergency access due to the implementation of the 2022 Airport Master Plan Update were discussed on page 11-15 of the 2022 Airport Draft SEIR. The analysis determined that the 2022 Airport Master Plan Update identifies a site for a future City of Sacramento Fire Station west of Airport Boulevard, south of Crossfield Drive, and will serve the airport and surrounding areas. The analysis further identified that there is an Aircraft Rescue Firefighting Facility (ARFF) located at the airport to provide support for aviation emergencies. The analysis concluded that implementation of the 2022 Airport Master Plan Update would have no impact related to emergency access. The following analysis addresses potential proposed project impacts related to emergency access.

CONSTRUCTION

Temporary facilities would be developed at the project site during construction to facilitate the construction process. Construction impacts would generally be limited to on-site, and not directly impact the area's public roadways or substantially impede access to or from nearby properties. As a result, similar to the conclusion reached in the 2022 Airport SEIR, the impact of the project during construction would be **less than significant**. To the extent that emergency access in the project vicinity could be temporarily impeded during construction, the measures provided in the construction traffic control plan described above would serve to ensure that sufficient emergency access is available for the duration of the construction period.

OPERATION

Access to the project site would be from Bayou Way. As discussed in Chapter 2, *Project Description*, the proposed project would widen Bayou Way along the project frontage from two to three lanes (one-lane each direction, with a two-way left turn lane), which would allow project traffic to safely access the project site without disrupting traffic. Future driveways on the project site would comply with applicable fire code

requirements for emergency evacuation. The proposed project would be subject to the review and approval of access and circulation plans by the Sacramento County Fire Department; as such, the proposed project would not result in inadequate emergency access. Therefore, similar to the conclusion reached in the 2022 Airport SEIR, the proposed project would not result in inadequate emergency access, and the impact would be **less than significant**.

MITIGATION MEASURES

None required.

16 TRIBAL CULTURAL RESOURCES

INTRODUCTION

This chapter evaluates the effects of the proposed project related to tribal cultural resources, focusing on changes to the 2022 Airport SEIR that may result in new or more severe impacts, and describes any mitigation measures needed to address any such impacts.

FINDINGS OF THE AIRPORT MASTER PLAN UPDATE SEIR

Impacts of the 2022 Airport Master Plan Update related to tribal cultural resources were analyzed in Chapter 12, *Tribal Cultural Resources*, of the 2022 Airport Draft SEIR. The 2022 Airport SEIR determined that implementation of the 2022 Airport Master Plan Update would have the following impacts with respect to tribal cultural resources:

- Implementation of the Airport Master Plan Update could cause a substantial adverse change in the significance of a tribal cultural resource on site (*Less than Significant Impact with Mitigation*).

NOTICE OF PREPARATION COMMENTS

The Notice of Preparation (NOP) for the Supplement to the 2022 Airport SEIR was circulated on August 17, 2023. No comments were received related to tribal cultural resources.

INFORMATION SOURCES

The information and analysis included in this chapter was developed based on a review of the 2022 Airport SEIR, relevant policies of the Sacramento County 2030 General Plan, and tribal consultation completed between the County and culturally affiliated Native American tribes, which was peer reviewed by ESA and Sacramento County and determined to be accurate and adequate for inclusion in this Supplement to the 2022 Airport SEIR.

ENVIRONMENTAL SETTING

The Sacramento International Airport is located in the Natomas Basin of the Central Valley. Situated approximately two miles north of the confluence of the Sacramento and American Rivers, this area of the County historically flooded regularly. It was not until the early part of the 20th Century, that local Reclamation Districts were formed to create a network of canals and drainage ditches to control flood waters to allow broad scale agriculture in the basin.

Prior to Spanish and European settlement of the Central Valley, the area was populated by several Native American Tribes. While this area of the County regularly flooded and there were likely high spots that did not flood, it is generally understood that this area was used as hunting and gathering land.

ETHNOGRAPHIC CONTEXT

The project site is the traditional territory of the Penutian-speaking Nisenan and Utian-speaking Plains Miwok. Indigenous groups in the valley tended to define themselves by stream systems and native communication often followed these waterways. Political divisions were noted between tribal groups and the project site comprises an area marginal to both the cultures of the Patwin and Bay Miwok groups.

The Plains Miwok are part of the larger Eastern Miwok language group who form one of the two major divisions of the Miwokan subgroup of Utian speakers. Plains Miwok speakers lived in the Central Valley along the Sacramento, Cosumnes, and Mokelumne Rivers, and built their homes on high ground, with principal villages concentrated along major drainages. Plains Miwok speakers lived in semi-autonomous villages, or village clusters, that were largely economically, politically, and socially independent from one another; though villages participated in some shared regional religious and trade networks. Larger villages had an assembly house, a 40 to 50-foot-diameter semi-subterranean structure, in addition to a sweathouse, a smaller version of the assembly house (Levy, 1978).

As a language, Nisenan (meaning “from among us” or “of our side”) has three main dialects – Northern Hill, Southern Hill, and Valley Nisenan, with three or four subdialects. The Valley Nisenan lived along the Sacramento River, primarily in large villages with populations of several hundred each. Between there and the foothills, the grassy plains were largely unsettled, used mainly as a foraging ground by both valley and hill groups. Individual and extended families “owned” hunting and gathering grounds, and trespassing was discouraged. Residence was generally patrilocal, but couples actually had a choice in the matter. Politically, the Nisenan were divided into smaller groups made up of a primary village and a series of outlying hamlets, presided over by a more-or-less hereditary chief. Villages typically included family dwellings, acorn granaries, a sweathouse, and a dance house, owned by the chief. The chief had little authority to act on his own or her own, but with the support of the shaman and the elders, the word of the chief became virtually the law (Wilson and Towne, 1978).

The Spanish arrived on the central California coast in 1769 and by 1776 the Miwok territory bordering the Nisenan on the south had been explored by Jose Canizares. In 1808, Gabriel Moraga crossed Nisenan territory, and in 1813, a major battle was fought between the Miwok and the Spaniards near the mouth of the Cosumnes River. Though the Nisenan appear to have escaped being removed to missions by the Spanish, they were not spared the effects of European diseases. In 1833, an epidemic – probably malaria – raged through the Sacramento valley, killing an estimated 75 percent of the native population. The discovery of gold in 1848 at Sutter’s Mill, near the Nisenan village of Colluma (now Coloma) on the south fork of the American River, drew

thousands of miners to the area, and led to widespread killing and the virtual destruction of traditional Nisenan culture. By the Great Depression, no Nisenan remained who could remember the days before the arrival of the Euro-Americans (Wilson and Towne, 1978).

Valley groups exploited a wide variety of resources. Communal hunting drives were undertaken to obtain deer, quail, rabbits, and grasshoppers. Bears were hunted in the winter when their hides were at their best condition. Runs of salmon in the spring and fall provided a regular supply of fish, while other fish such as suckers, pike, whitefish, and trout were obtained with snares, fish traps, or with various fish poisons such as soaproot. Birds were caught with nooses or large nets and were also occasionally shot with bow and arrow. Game was prepared by roasting, baking, or drying (Wilson and Towne 1978).

Acorns were gathered in the fall and stored in granaries for use during the rest of the year. Although acorns were the staple of the Valley diet, they also harvested roots like wild onion and Indian potato, which were eaten raw, steamed, baked, or dried and processed into flour cakes to be stored for winter use (Wilson and Towne 1978). Buckeye, pine nuts, hazelnuts, and other edible nuts further supplemented the diet.

Natural vegetation that would have been considered a tribal cultural resource occurs in vicinity of the project site, such as blue oak, interior live oak, and assorted grasses and forbs. While the general area supports a variety of wildlife, woodlands, and shrubs, additional species have likely been removed during the intensive development in vicinity of the project site. The current landcover types within the project site consist of general agriculture, disturbed areas, and open water. General agriculture is the dominant landcover covering a majority of the project site with some areas of Himalayan blackberry. Disturbed landcover comprises the remaining project site, and open water is present along the perimeter. As noted in Chapter 7. Biological Resources, most special-status plants, many of which are the same resources historically utilized by indigenous groups, as not expected to occur in the project site. In addition, most special status wildlife species are also not expected to occur in the project site. Northwestern Pond Turtle, which would have been a utilized food source, has a high to moderate potential to occur in the project site although none were observed during the biological resources survey (see Appendix D). Some nesting birds and raptors also have a moderate to high potential to occur in the project site, although none were observed during the survey.

REGULATORY SETTING

FEDERAL

Federal regulations for cultural resources are governed primarily by Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended). Section 106 of the NHPA requires Federal agencies to consider the effects of their undertakings on historic properties and affords the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings. The ACHP's implementing regulations are the "Protection of Historic Properties" 36 Code of Federal Regulations

(CFR) Part 800. The Federal agency first must determine whether it has an undertaking that is a type of activity that could affect historic properties. Historic properties are those that meet the criteria for or are listed in the National Register of Historic Places (NRHP).

STATE

DISCOVERY OF HUMAN REMAINS

California law protects Native American burials, skeletal remains and associated grave goods regardless of their antiquity and provides for the sensitive treatment and disposition of those remains (Section 7050.5 of the Health and Safety Code and Public Resources Code 5097.9).

When human remains are discovered, the protocol to be followed is specified in California Health and Safety Code, which states:

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code.

State CEQA Guidelines Section 15064.5, subdivision (e), requires that excavation activities be stopped whenever human remains are uncovered and that the county coroner be called in to assess the remains. If the county coroner determines that the remains are those of Native Americans, the Native American Heritage Commission (NAHC) must be contacted within 24 hours. At that time, the lead agency must consult with the appropriate Native Americans, if any, as timely identified by the NAHC. Section 15064.5 directs the lead agency (or applicant), under certain circumstances, to develop an agreement with the Native Americans for the treatment and disposition of the remains.

In addition to the mitigation provisions pertaining to accidental discovery of human remains, the State CEQA Guidelines also require that a lead agency make provisions for the accidental discovery of historical or archaeological resources, generally. Pursuant to Section 15064.5, subdivision (f), these provisions should include “an immediate evaluation of the find by a qualified archaeologist. If the find is determined to be an historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available. Work could continue on other parts of the building site while historical or unique archaeological resource mitigation takes place.”

ASSEMBLY BILL 52

On September 25, 2014, Governor Brown approved Assembly Bill 52, which requires CEQA lead agencies to begin consultation with California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. The bill specifies that a project with an effect that may cause substantial adverse changes in the significance of a tribal cultural resource may have a significant effect on the environment. The bill became effective July 1, 2015, and is codified in PRC § 21080.3.1.

To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. (Pub. Resources Code, § 21080.3.1.)

AB 52 adds tribal cultural resources to the categories of cultural resources in CEQA, which had formerly been limited to historic, archaeological, and paleontological resources. “Tribal cultural resources” are defined as either:

- (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - a. Included or determined to be eligible for inclusion in the California Register of Historical Resources (CRHR)
 - b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
- (2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

LOCAL

SACRAMENTO COUNTY GENERAL PLAN

CO-155 Native American burial sites encountered during preapproved survey or during construction shall, whenever possible, remain in situ. Excavation and reburial shall occur when in situ preservation is not possible or when the archeological significance of the site merits excavation and recording procedure. On-site reinternment shall have priority. The project developer shall provide the burden of proof that off-site reinternment is the only feasible alternative. Reinternment shall be the responsibility of local tribal representatives.

- CO-157 Monitor projects during construction to ensure crews follow proper reporting, safeguards, and procedures.
- CO-159 Request a Native American Statement as part of the environmental review process on development projects with identified cultural resources.

DISCLOSURE OF CULTURAL RESOURCES INFORMATION

Public disclosure of site-specific cultural resources information is expressly exempt from the California Public Records Act, Government Code Sections 6250-6270. Furthermore, information obtained during Native American consultation or through consultation with the local and state agencies, including the North Central Information Center (NCIC), should remain confidential and is exempt from public disclosure under Senate Bill 922. Additionally, Sacramento County staff has signed an “Agreement to Confidentiality” with the NCIC that states that site-specific information will not be distributed or released to the public or unauthorized individuals. An authorized individual is a professional archaeologist or historian that qualifies under the Secretary of Interior’s standards to view confidential cultural resources materials.

IMPACTS AND ANALYSIS

The analysis in this Supplement to the 2022 Airport SEIR describes impacts identified in the 2022 Airport SEIR and describes how the impacts of the proposed project would differ, as applicable.

SIGNIFICANCE CRITERIA

For purposes of this Supplement to the 2022 Airport SEIR and consistent with the criteria presented in the 2022 Airport SEIR, which is based on Appendix G of the CEQA Guidelines, impacts on agricultural resources may be considered significant if implementation of the proposed project would:

- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:
 - 1) Listed or eligible for listing in the California Register, or in a local register of historical resources as defined in PRC Section 5020.1(k); or
 - 2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.

Under PRC Section 21084.3, public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. California Native American tribes traditionally and culturally affiliated with a geographic area may have expertise concerning their tribal cultural resources (21080.3.1(a)).

METHODOLOGY AND ASSUMPTIONS

As discussed in Chapter 1, *Introduction*, the 2022 Airport Master Plan Update and the 2022 Airport SEIR considered a development and operational horizon of 20 years (2018 through 2038) with four Planning Activity Levels (PALs). The area south of I-5 within the Airport Master Plan area, which includes the project site, was included within PAL 4 (with anticipated development within the 2034-2038 time period) of the 2022 Airport Master Plan Update. Due to the extended 20-year planning horizon, Master Plan projects or facilities identified in PAL 4 were determined to be beyond the scope of the 2022 Airport SEIR. As discussed in Chapter 8, *Land Use*, of the 2022 Airport Draft SEIR (page 8-11), the 2022 Airport Master Plan Update identifies future commercial development south of I-5 in PAL 4. The discussion further notes that if PAL 4 becomes ripe for development additional environmental review will be necessary. Accordingly, proposed project impacts related to tribal cultural resources on the project site are evaluated at a project level below.

The evaluation of potential impacts associated with tribal cultural resources was based on a review of tribal consultation completed between the County and culturally affiliated Native American tribes.

NATIVE AMERICAN CONSULTATION

As part of the 2022 Airport SEIR process, and pursuant to AB-52, on September 11, 2020, County staff mailed notification letters to the tribes that have formally requested notification. Further, all tribes were sent a copy of the Notice of Preparation of the Master Plan Update EIR in August 2020. Written responses were received during the AB-52 30-day review period from the United Auburn Indian Community of the Auburn Rancheria (UAIC) and Wilton Rancheria. Both Tribes requested copies of the cultural reports prepared for the Master Plan Update (provided in November 2020). Initial comments received by UAIC noted that there are tribal cultural resources along the boundary of the Master Plan study area, but it was unclear if they would be impacted. After further review of the information, UAIC provided mitigation language focusing on monitoring future ground disturbance and appropriate treatment of tribal cultural resources if discovered. Wilton Rancheria, in addition to requesting the cultural reports, provided similar mitigation language. All tribes requested to be notified if there are changes to the project description and to be included in all future CEQA noticing.

Even though not a requirement of CEQA, in April 2020, the Native American Heritage Commission responded to the consultant's request for a sacred lands file search and list of Native American contacts pursuant to Section 106 of federal law. The file search was negative and no Native American cultural resources were identified by commission staff.

On August 7, 2023, Sacramento County PER distributed AB-52 notification letters to lone Band of Miwok Indians, UAIC, and Wilton Rancheria per the recommended contacts provided by the NAHC:

- Chairperson Sara Dutschke, lone Band of Miwok Indians
- Chairperson Gene Whitehouse, UAIC
- THPO Steven Hutchason, Wilton Rancheria

On August 11, 2023, UAIC responded declining to consult, but requested that the County include a chapter discussion on tribal cultural resources and an unanticipated discoveries mitigation measure within the environmental document for the project.

On August 30, 2023, Wilton Rancheria responded with a request to formally open consultation on the project. Wilton Rancheria recognizes the project site as part of their ancestral and culturally affiliated territory and requested a pre-construction tribal cultural resources survey, tribal monitoring for the duration of the construction period, and incorporation of the inadvertent discovery treatment plan within the County's environmental document for the project.

On October 6, 2023, tribal monitor Julian Escobedo of the Wilton Rancheria conducted a survey of the project site. Candise Vogel (Sacramento County Archaeologist) accompanied to record findings. No resources were identified during the site visit.

On October 18, 2023, Wilton Rancheria and County PER discussed the Watt EV project and the survey. Given the proximity to known tribal cultural landscapes adjacent to the project site, both parties agreed that sub-surface discovery is highly possible, and mitigations should be included in the environmental document to include archaeological and tribal monitoring during the construction phase.

IMPACT: TRIBAL CULTURAL RESOURCES

The potential for a substantial adverse change in the significance of a tribal cultural resource due to the implementation of the 2022 Airport Master Plan Update was discussed on page 12-8 of the 2022 Airport Draft SEIR. The analysis determined that implementation of the 2022 Airport Master Plan Update could adversely affect tribal cultural resources, thus resulting in a potential impact to these resources. However, with mitigation requiring steps to be taken if unanticipated tribal cultural resources are discovered on the site during construction and that a tribal monitor be present on the site during ground disturbing activities, this impact was reduced to less than significant.

The 2022 Airport SEIR addressed tribal cultural resources and determined that one tribal cultural resource (Sacramento River Tribal Cultural Landscape) was within the study area. The background research completed for the project site also identified the Sacramento River Tribal Cultural Landscape. However, no cultural materials were identified on the project site and the areas associated with offsite improvements (i.e., roadway improvements, power line extension, etc.) as a result of the records search or survey efforts.

For the consultation completed for the Airport Master Plan Update, one tribe (Wilton Rancheria) responded with a request for consultation. The tribe did not identify a known sacred site or tribal cultural resource within the project site and the areas associated with offsite improvements (i.e., roadway improvements, power line extension, etc.); however, due to known resources nearby, there is the possibility of uncovering buried resources when ground disturbance occurs. The tribe provided recommended mitigation measures including requesting the opportunity to conduct construction monitoring and worker awareness training. Mitigation Measures CR-1 and CR-2, which is the same mitigation included to 2022 Airport SEIR to address this impact, is included to support this request. With the implementation of this mitigation, the impact to tribal cultural resources would be reduced to **less than significant**.

MITIGATION MEASURES

Implement Mitigation Measures CR-1 and CR-2.

17 UTILITIES

INTRODUCTION

This chapter evaluates the effects of the proposed project related to utilities and service systems, focusing on changes to the 2022 Airport SEIR that may result in new or more severe impacts, and describes any mitigation measures needed to address any such impacts.

FINDINGS OF THE AIRPORT MASTER PLAN UPDATE SEIR

Impacts of the 2022 Airport Master Plan Update related to utilities were analyzed in Chapter 10, *Public Services/Utilities*, of the 2022 Airport Draft SEIR. The 2022 Airport SEIR determined that implementation of the 2022 Airport Master Plan Update would have the following impacts with respect to utilities:

- Implementation of the Airport Master Plan Update would not require the construction of new or the expansion of existing water facilities that could potentially cause a significant construction-related environmental effects, or result in a service demand that cannot be met by existing or reasonably foreseeable future service capacity (*Less than Significant Impact*)
- Implementation of the Airport Master Plan Update would not require the construction of new or the expansion of existing wastewater facilities that could potentially cause a significant construction-related environmental effects, or result in a service demand that cannot be met by existing or reasonably foreseeable future service capacity (*Less than Significant Impact*)
- Implementation of the Airport Master Plan Update would not result in the need for additional landfill capacity for solid waste disposal (*Less than Significant Impact*)

NOTICE OF PREPARATION COMMENTS

The Notice of Preparation (NOP) for the Supplement to the 2022 Airport SEIR was circulated on August 17, 2023. The County received scoping comments from the Sacramento Municipal Utility District (SMUD) which requested consideration of potential proposed project effects related to overhead and/or underground transmission and distribution line easements, utility line routing, electrical load needs/requirements, energy efficiency, climate change, cumulative impacts related to the need for increased electrical delivery, and the potential need to relocate and/or remove any SMUD infrastructure that may be affected in or around the project area. Specifically, SMUD indicated it would like to have the following details related to electrical infrastructure incorporated into the project description:

- SMUD will need a 69 kilovolt (kV) route to the proposed project substation from Power Line Road.

- The existing overhead 12kV and 69kV lines along Power Line Road and Bayou Way must remain.

SMUD indicated that, as a Responsible Agency, SMUD's review of projects include supporting the goals of its 2030 Zero Carbon Plan to eliminate greenhouse gas emissions from its electricity production by 2030, and it would like to be involved with discussing the above areas of interest as well as discussing any other potential issues.

INFORMATION SOURCES

The information and analysis included in this chapter was developed based on a review of the 2022 Airport SEIR, the Sacramento County 2030 General Plan, a Water Supply Assessment (WSA) prepared for the proposed project by Kimley-Horn in 2024 (Appendix UT-1), and a Sewer Feasibility Study prepared for the proposed project by Kimley-Horn in 2023 (Appendix UT-2), which were peer reviewed by ESA and Sacramento County and determined to be accurate and adequate for inclusion in this Supplement to the 2022 Airport SEIR.

ENVIRONMENTAL SETTING

WATER

WATER SUPPLY

Potable water for uses within the Airport property is provided by the City of Sacramento through a wholesale purchasing agreement between the City and the Sacramento County Water Agency (SCWA) (Kimley-Horn, 2024a). The City primarily sources its water from surface water diverted from the Sacramento and American Rivers and groundwater underlying the North American and South American subbasins. Additional sources include limited amounts of recycled water, as well as rare and temporary uses of water purchased and imported from other water suppliers in the region, as explained further below.

SURFACE WATER

The City treats surface water diverted from the Sacramento and American Rivers at two water treatment facilities: the Sacramento River Water Treatment Plant (SRWTP), located just downstream of the Sacramento River's confluence with the American River on the east side of the Sacramento River, south of Richards Boulevard and north of the Railyards redevelopment area, and the E.A. Fairbairn Water Treatment Plant (EAFWTP), located on the south bank of the Lower American River near California State University, Sacramento.

SACRAMENTO RIVER WATER TREATMENT PLANT

The SRWTP has a permitted treatment capacity of 160 million gallons per day (mgd) during the summer months and 120 mgd during the remainder of the year. However, summer operations can be impacted by unusually low river levels which potentially

reduce capacity of the plant to 135 mgd during the summer months. The City is currently evaluating further expansion of the SRWTP to increase the diversion and treatment capacity to 310 MGD (Kimley-Horn, 2024a).

E.A. FAIRBAIRN WATER TREATMENT PLANT

The EAFWTP has a design capacity of 200 mgd and a permitted capacity of 160 mgd. However, due to the poor condition of some plant facilities, environmental agreements that frequently limit diversions during summer months, and other reduced rates during different parts of the year due to water rights agreements, the EAFWTP is unable to operate reliably at capacity. Therefore, the current reliable capacity of the EAFWTP during peak demand periods is 80 MGD, with the ability to operate at up to 100 MGD, but only for short periods of time (Kimley-Horn, 2024a).

GROUNDWATER

The City of Sacramento overlies two subbasins of the Sacramento Valley Groundwater Basin: the North American Subbasin, located north of the American River, and the South American Subbasin, located south of the American River. The City currently has 26 permitted wells in the North American Subbasin, and 2 permitted wells in the South American Subbasin; however, only 23 of these wells are currently operated on a regular basis to supply municipal water. The City has recently constructed three additional water supply wells. One well was drilled at the EAFWTP but the facilities necessary to pump, treat, and deliver the water are pending design and installation. The other two supply wells were constructed at Shasta Park. The Shasta facility includes two pumps that pull water from wells 1,200 feet below ground, as well as a 4-million-gallon tank (Kimley-Horn, 2024a).

PURCHASED/IMPORTED WATER

The City has historically not purchased or imported water from a wholesale water supplier except under rare circumstances. However, in the drought years of 2018 and 2020, the City purchased approximately 4,000 acre-feet and 8,500 acre-feet, respectively, of groundwater from SCWA and Sacramento Suburban Water District as part of a temporary groundwater substitution transfer.

RECYCLED WATER

Based on an agreement with the Sacramento Regional County Sanitation District (Regional San) and Sacramento Power Authority (SPA), the City delivers recycled water to the SPA's Campbell Power Plant in south Sacramento via a six-mile-long pipeline from Regional San's Sacramento Regional Wastewater Treatment Plant (SRWWTP) located in Elk Grove to the facility. In 2020, the City delivered 29 acre-feet of recycled water to the plant; in the future the City plans on delivering up to 1,000 acre-feet of recycled water to the facility (Kimley-Horn, 2024a).

WATER DEMAND

The past (2020) and projected (2025-2045) water demands for the City of Sacramento's retail and wholesale customers are summarized respectively in **Table UT-1** and **Table UT-2**. These projections are based on the City's on-going Water Master Plan

Update, which incorporates the most recent and accurate future development estimates and unit water use factors to develop the water demand projections. Unit water use factors were refined based on recent, post-drought water use trends and reflect current and on-going water use efficiencies and water conservation by the City's water customers. In addition, the water demand projections consider a future drought rebound factor since the 2012 to 2016 historical drought in California to provide conservative demand projections.

**Table UT-1: Projected Total Retail Water Use (Potable and Non-Potable)
(acre-feet per year)**

	2020	2025	2030	2035	2040	2045
Potable Water, Raw, Other Non-potable	100,483	107,432	113,809	120,187	126,654	132,942
Recycled Water Demand	29	1,000	1,000	1,000	1,000	1,000
Total Water Use	100,512	108,432	114,809	121,187	127,564	133,942
SOURCE: City of Sacramento 2020 UWMP, Table 4-10.						

**Table UT-2: Projected Total Wholesale Water Use (Potable and Non-Potable)
(acre-feet per year)**

	2020	2025	2030	2035	2040	2045
Potable and Raw Water	3,607	28,406	53,135	75,098	97,098	97,060
Recycled Water Demand	0	0	0	0	0	0
Total Water Use	3,607	28,406	53,135	75,098	97,098	97,060
SOURCE: City of Sacramento 2020 UWMP, Table 4-11.						

Table UT-3 presents a summary of water demands and available supply during a normal year, single dry year, and five consecutive dry years. As discussed above, the City's primary water sources during base years are surface water from the Sacramento and American Rivers and groundwater. In 2020, the City started delivering recycled water to the SPA Cogen Facility. The City uses these sources to meet the demands of its retail and wholesale customers.

WATER INFRASTRUCTURE

The City conveys water using a system of large transmission pipelines, which are at least 16 inches in diameter, and smaller distribution mains, which range from 4 to 12 inches in diameter. Potable water for use at the Airport is delivered to two potable water storage tanks located adjacent to the eastern border of the project site. Potable water is then distributed to uses at the Airport via a 24-inch line west along Bayou Way.

**Table UT-3: Projected Retail and Wholesale Supply and Demand Comparison
(acre-feet per year)**

Year Scenario	Water Supply or Demand	2025	2030	2035	2040	2045
Normal Year Scenario	Supply Total	361,606	403,335	425,298	447,260	447,260
	Demand Total	136,838	167,944	196,285	224,624	231,002
	Excess Supply	224,768	235,391	229,013	222,636	216,258
Single Dry Year Scenario	Supply Total	361,606	403,335	425,298	447,260	447,260
	Demand Total	136,838	167,944	174,322	224,624	231,002
	Excess Supply	224,768	235,391	250,976	222,636	216,258
Multiple-Dry-Year Scenario¹	Supply Total	381,389	420,905	442,868	447,260	447,260
	Demand Total	161,723	190,616	218,957	229,726	248,824
	Excess Supply	219,666	230,289	223,911	217,534	198,436
NOTE:						
1. Multiple Dry Years scenario values in this table are the Fifth Year Values from the 2020 UWMP.						
SOURCE: Kimley-Horn, 2024a.						

WASTEWATER

The Airport receives wastewater collection service from the Sacramento Area Sewer District (SacSewer). Wastewater generated at the Airport is collected by a local collection system and then conveyed via two 16-inch force mains to a lift station located offsite to the east (Sacramento County, 2022) where it is then conveyed to the regional interceptor system for treatment at the EchoWater Resource Recovery Facility in Elk Grove, which is owned and operated by Regional San. No existing wastewater infrastructure is located on or directly serves the project site. The nearest existing sewer line connection is approximately 0.6 mile to the north of the project site at the intersection of Elkhorn Boulevard and Power Line Road.

STORMWATER DRAINAGE

The storm drain system in and around the Airport consists of a collection of underground pipes and ditches that convey stormwater to canals owned and operated by Reclamation District (RD) 1000 for eventual discharge into the Sacramento River. The project site is bordered by the following drainages (Kimley-Horn, 2024b):

- Bayou Way/I-5 drainage ditch along the north side of the project site that drains to the east to the RD 1000 North Drain Canal.
- RD 1000 North Drain Canal along the east side of the project site that drains south to the West Drainage Canal.

- West Drainage Canal along the south side of the project site that drains to the east and eventually into the Sacramento River.
- An open channel along the west side of the project site that drains south to the West Drainage Canal.

SOLID WASTE

DISPOSAL

The Sacramento County Department of Waste Management and Recycling (DWMR) provides solid waste services to the unincorporated portions of Sacramento County. Sacramento County owns and operates the Kiefer Landfill, located at Kiefer Boulevard and Grant Line Road. Kiefer Landfill is 1,084 acres in size, with a permitted disposal area of 660 acres. Kiefer Landfill is the primary solid waste disposal facility in the County. Kiefer Landfill is classified as a Class III municipal solid waste landfill facility and is permitted to accept general residential, commercial, and industrial refuse for disposal, including municipal solid waste, construction waste, green materials, agricultural debris, dead animals, and other designated debris.

The Kiefer Landfill receives over 700,000 tons of waste per year. Kiefer Landfill is permitted to accept a maximum of 10,815 tons per day of solid waste and currently has a design capacity of approximately 117 million cubic yards. The Kiefer Landfill has 75 million cubic yards of remaining capacity and is expected to be operational until 2098 (Sacramento County DWMR, 2021).

COLLECTION/PROCESSING

Sacramento County also owns and operates the North Area Recovery Station (NARS) located in North Highlands. The NARS is 23 acres in size and accepts waste from the public, businesses, and private waste haulers. The facility has a permitted capacity of processing 2,400 tons per day (County DWMR, 2021). In 2020, the NARS processed an average of 1,200 tons per day of recyclables, trash, yard waste, and construction waste (County DWMR, 2022a).

There are various other transfer stations and small privately owned landfills throughout Sacramento County, located mainly within the boundaries of the City of Sacramento. These include three facilities, in addition to the NARS, that process construction waste. These facilities are Florin Perkins Public Disposal, located at 4201 Florin Perkins Road, L and D Landfill and Material Recovery Facility (L and D Landfill), located at 8635 Fruitridge Road, and Sierra Waste Recycling and Transfer Station (Sierra Waste), located at 8260 Berry Avenue.

Solid waste for commercial and multi-family uses is collected by private franchised haulers (County DWMR, 2022b). Solid waste collected by the commercial haulers is either taken to a transfer station and then transported to a landfill or taken directly to a landfill.

ENERGY SERVICES

Electrical power is supplied to the Airport from SMUD, which generates, transmits, and distributes electric power to a 900-square-mile service area that includes Sacramento County and a small portion of Placer County. SMUD obtains its electricity from diverse resources including hydrogeneration and cogeneration plants, wind, solar, and biomass/landfill gas power, and power purchased on the wholesale market.

SMUD provides power to the Airport from its Power Line-Elkhorn Substation, located on the eastern boundary of the Airport. The Airport is serviced by the substation from two 69 kV feeder lines. Electricity is distributed around the Airport primarily by underground cables to avoid aviation safety hazards. The SMUD 69 kV distribution line nearest to the project site is approximately 600 feet to the east along Power Line Road.

Solar electric panels installed at the Airport take advantage of the Sacramento area's abundant sunshine. The 7.9-Megawatt (MW) solar farm is a photovoltaic system located on two sites with more than 23,000 solar panels mounted on equipment that tracks the sun's path from east to west over the course of the day. The facility consists of a 15-acre site east of Aviation Drive and a 20-acre site west of runway 17L-35R within the north airfield area.

Pacific Gas and Electric Company (PG&E) supplies natural gas to the Airport. The Airport is connected to a six-inch diameter, 60-psi (pounds per square inch) PG&E distribution pipeline, which supplies a four-inch distribution line. The four-inch gas main that serves the Airport travels from the south along El Centro Boulevard, crosses Elkhorn Boulevard, continues north along Earhart Drive and Airport Boulevard, and crosses to Lindbergh Drive.

REGULATORY SETTING

FEDERAL

U.S. ENVIRONMENTAL PROTECTION AGENCY

The U.S. Environmental Protection Agency (USEPA) established primary drinking water standards in Clean Water Act (CWA) Section 304; states are required to ensure that potable water for the public meets these standards. Standards for 81 individual constituents have been established under the Safe Drinking Water Act (SDWA), as amended in 1986. USEPA may add standards for additional constituents in the future.

SAFE DRINKING WATER ACT

USEPA administers the SDWA, the primary federal law that regulates the quality of drinking water and establishes standards to protect public health and safety. The California Department of Public Health (CDPH) implements the SDWA and oversees the quality of public water systems statewide. CDPH establishes legal drinking water standards for contaminants that could threaten public health.

RESOURCE CONSERVATION AND RECOVERY ACT

The Resource Conservation and Recovery Act (RCRA), Subtitle D (United States Code Title 42, Section 6901 et seq.), contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the federal landfill criteria. The federal regulations address the location, operation, design, groundwater monitoring, and closure of landfills. The USEPA waste management regulations are codified in Code of Federal Regulations Title 40, Parts 239–282. RCRA Subtitle D is implemented by Public Resources Code Title 27, approved by USEPA.

STATE

CALIFORNIA MODEL WATER EFFICIENT LANDSCAPE ORDINANCE

The California Model Water Efficient Landscape Ordinance (MWELo) sets restrictions on outdoor landscaping. Because Sacramento County is a “local agency” under the MWELo, it must require project applicants to prepare plans consistent with the requirements of the MWELo for review and approval by the County. The MWELo was most recently updated by the DWR and approved by the California Water Commission on July 15, 2015. All provisions became effective on February 1, 2016. The revisions, which apply to new construction with a landscape area greater than 500 square feet, reduced the allowable coverage of high-water-use plants to 25 percent of the landscaped area. The MWELo also requires use of a dedicated landscape meter on landscape areas for residential landscape areas greater than 5,000 square feet or nonresidential landscape areas greater than 1,000 square feet and requires weather-based irrigation controllers or soil-moisture based controllers or other self-adjusting irrigation controllers for irrigation scheduling in all irrigation systems.

CALIFORNIA WATER CONSERVATION ACT

The California Water Conservation Act, enacted in November 2009, required each urban water supplier to select one of four water conservation targets contained in California Water Code Section 10608.20, with the statewide goal of achieving a 20 percent reduction in urban per-capita water use by 2020.

INTEGRATED WASTE MANAGEMENT ACT (ASSEMBLY BILL 939)

Regulations affecting solid waste disposal in California are included in Public Resources Code Title 14, the Integrated Waste Management Act, which was originally adopted in 1989. AB 939 was designed to increase landfill life by diverting solid waste from landfills in the state and conserving other resources through increasing recycling programs and incentives. AB 939 requires counties to prepare integrated waste management plans to implement landfill diversion goals and requires cities and counties to prepare and adopt source reduction and recycling elements. These elements must set forth a program for management of solid waste generated within the jurisdiction of the respective city or county. Each source reduction and recycling element must include, but is not limited to, all of the following components for solid waste generated in the jurisdiction of the plan:

- Waste characterization

- Source reduction
- Recycling
- Composting
- Solid waste facility capacity
- Funding
- Special waste

The Source Reduction and Recycling Element programs are designed to achieve landfill diversion goals by encouraging recycling in the manufacture, purchase and use of recycled products. AB 939 also requires California cities to implement plans designed to divert the total solid waste generated within each jurisdiction by 50 percent based on a base year of 2000. The diversion rate is adjusted annually for population and economic growth when calculating the percentage achieved in a particular jurisdiction.

ASSEMBLY BILL 341

To reduce greenhouse gas emissions from the disposal of recyclables in landfills, AB 341 (Chapter 476, Statutes of 2011) requires local jurisdictions to implement commercial solid waste recycling programs. Businesses that generate 4 cubic yards or more of solid waste per week or multifamily dwellings of five units or more must arrange for recycling services. To comply with AB 341, jurisdictions' commercial recycling programs must include education, outreach, and monitoring of commercial waste generators and report on the process to CalRecycle. Jurisdictions may enact mandatory commercial recycling ordinances to outline how the goals of AB 341 will be reached. For businesses to comply with AB 341, they must arrange for collection of recyclables through self-hauling, subscribing to franchised haulers for collection, or subscribing to a recycling service that may include mixed-waste processing that yields diversion results comparable to source separation (CalRecycle, 2021).

ASSEMBLY BILL 1826

To further reduce greenhouse gas emissions from disposal of organics materials in landfills, AB 1826 (Chapter 727, Statutes of 2014) required businesses to recycle their organic waste beginning on April 1, 2016, depending on the amount of solid waste generated per week. Similar to AB 341, AB 1826 requires jurisdictions to implement an organic waste recycling program that includes the education, outreach, and monitoring of businesses that must comply. *Organic waste* refers to food waste, green waste, landscaping and pruning waste, nonhazardous wood waste, and food-soiled paper that is mixed with food waste.

CALIFORNIA CODE OF REGULATIONS

New buildings constructed in California must comply with the standards contained in Title 20, Energy Building Regulations, and Title 24, California Building Standards Code, known as CALGreen. Part 6 of Title 24 contains California's Energy Efficiency Standards for Residential and Nonresidential Buildings. These regulations were

established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to incorporate new energy efficiency technologies and methods.

LOCAL

SACRAMENTO COUNTY GENERAL PLAN

The following policies from the Agricultural, Conservation, Energy, and Public Facilities elements of the Sacramento County 2030 General Plan are applicable to utilities.

AGRICULTURE

AG-27 The County shall actively encourage groundwater recharge, water conservation and water recycling by both agricultural and urban water users.

CONSERVATION

CO-16 Ensure developments are consistent with the County Water Efficient Landscape Ordinance, which shall be updated as needed to conform to state law.

ENERGY

EN-11 Promote the location within the Sacramento area of those industries which are labor intensive, utilize solar energy systems, and are consistent with other policies in terms of environmental protection.

PUBLIC FACILITIES

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

PF-23 Solid waste collection, handling, recycling, composting, recovery, transfer and disposal fees shall recover all capital, operating, facility closure and maintenance costs.

PF-24 Solid waste disposal fees and rate structures shall reflect current market rates and provide incentives for recovery.

SACRAMENTO COUNTY DEPARTMENT OF WASTE MANAGEMENT & RECYCLING

The County DWMR manages the operations, maintenance, and development of the solid waste management system within unincorporated portions of Sacramento County. The County DWMR provides solid waste residential curbside pickup services for garbage, recycling, organics, and bulky waste collection to households in the unincorporated areas; provides transfer and disposal services for household hazardous waste, residential, commercial, and self-haul customers at the NARS and Keifer Landfill; and, through its ordinances, regulates collection by franchised haulers for commercial solid waste and recycling for businesses and commercial properties.

IMPACTS AND ANALYSIS

The analysis in this Supplement to the 2022 Airport SEIR describes impacts identified in the 2022 Airport SEIR and describes how the impacts of the proposed project would differ, as applicable.

SIGNIFICANCE CRITERIA

For purposes of this Supplement to the 2022 Airport SEIR and consistent with the criteria presented in the 2022 Airport SEIR, which is based on Appendix G of the CEQA Guidelines, impacts related to utilities may be considered significant if implementation of the proposed project would:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.
- Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.
- Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

ISSUES NOT DISCUSSED IN IMPACTS

Require the construction of new or the expansion of existing wastewater treatment facilities or expansion of existing facilities – The proposed project would be served by an onsite wastewater treatment system. As a result, wastewater generated by the proposed project would not be required to be conveyed off site for treatment at the SRWWTP. As a result, no impact would occur, and this issue is not evaluated further. The water quality effects of construction and operation of an onsite wastewater treatment system is addressed in Chapter 12, *Hydrology and Water Quality*, of this Supplement to the 2022 Airport SEIR (page 12-16).

METHODOLOGY AND ASSUMPTIONS

As discussed in Chapter 1, *Introduction*, the 2022 Airport Master Plan Update and the 2022 Airport SEIR considered a development and operational horizon of 20 years (2018 through 2038) with four Planning Activity Levels (PALs). The area south of I-5 within the Airport Master Plan area, which includes the project site, was included within PAL 4 (with anticipated development within the 2034-2038 time period) of the 2022 Airport

Master Plan Update. Due to the extended 20-year planning horizon, Master Plan projects or facilities identified in PAL 4 were determined to be beyond the scope of the 2022 Airport SEIR. As discussed in Chapter 8, *Land Use*, of the 2022 Draft SEIR (page 8-11), the 2022 Airport Master Plan Update identifies future commercial development south of I-5 in PAL 4. The discussion further notes that if PAL 4 becomes ripe for development additional environmental review will be necessary. Accordingly, proposed project impacts related to utilities are evaluated at a project level below.

WATER

WATER SUPPLY

Water demand for the proposed project was compared to water supplies available to the City, in accordance with City procedures, and a determination was made regarding the sufficiency of supply for the proposed project using the WSA (see Appendix UT-1).

The proposed project’s estimated water demand was determined in conjunction with the expected future land use and the Unit Water Demand Factors obtained from the SCWA’s Zone 50 Water Supply Master Plan. While the project site is not a part of SCWA’s Zone 50, land uses are similar.¹ Based on the above factors and the estimated land use acreage, the land uses included in the proposed project would generate a water demand of approximately 13,722 gallons per day (gpd), or about 15.4 acre-feet per year (AFY) (see **Table UT-4**).

Table UT-4: Land Use Estimated Water Demand

Land Use	Estimated Acreage	Projected Water Demand		
		Avg. Day Demand (AFY)	Avg. Day Demand (gpd)	Max. Day Demand (gpd/ac)
Commercial – Offices Retail/Services, Automotive & Related Hotels	5.12	15.36	1,3721.60	2,7443.20
Solar Field ¹	99.48	0	0	0

NOTES: AFY = acre feet per year; gpd = gallons per day; gpd/ac = gallons per day per acre

1 The Solar Field land use category is not included in the SCWA Zone 50 Water Supply Master Plan. Therefore, additional calculations, included below in Table UT-5, were performed to estimate the water usage of the proposed solar field.

SOURCE: Kimley-Horn, 2024a.

¹ Appendix B of the WSA contains applicable excerpts from the SCWA Zone 50 Water Supply Master Plan regarding water demand factors based on land use.

Occasionally, the solar panels would be cleaned with an estimated average of 400 gallons of water per day. This would occur approximately 4 to 5 times a year. No additional water demand is expected in the solar field land. **Table UT-5** details the solar field demand calculations.

Table UT-5: Solar Field Projected Water Demand

	Projected Water Demand		
	Avg. Day Demand (AFY)	Avg. Day Demand (gpd)	Max. Day Demand (gpd/ac)
Solar Field Cleaning	0.45	400	800
SOURCE: Kimley-Horn, 2024a.			

WATER DISTRIBUTION

The water distribution infrastructure required to serve the proposed project was reviewed to determine if its construction and installation would cause significant environmental effects.

WASTEWATER

The onsite wastewater treatment system required to serve the proposed project was reviewed to determine if its construction and installation would cause significant environmental effects. Sewage generated from project employees and each parking stall would total 2,540 gpd (see **Tables UT-6** and **UT-7**).

Table UT-6: Sewage Generation (Buildings)

	Total Employees	Flow (gal/day/person)	Total Flow (gal/day)
Employees	33	15	495
SOURCE: Kimley-Horn, 2023.			

Table UT-7: Sewage Generation (Stalls)

	Total Stalls	Flow (gal/day/person)	Total Flow (gal/day)
Stalls	409	5	2,045
SOURCE: Kimley-Horn, 2023.			

SOLID WASTE

The estimated amount of solid waste generated by the proposed project was compared to available processing capacity at the NARS and available disposal capacity at the Keifer Landfill. Solid waste generation rates provided by CalRecycle were utilized to determine the estimated amount of solid waste generated under the proposed project. Based on these rates, the proposed project at buildout would generate approximately 10.1 tons of solid waste per year (see **Table UT-8**), or 276.7 cubic yards per year,² which equates to approximately 55.3 pounds of solid waste per day or 0.8 cubic yards per day.³

Table UT-8: Project Solid Waste Generation

Land Use	Generation Rate	Area (sf)	Annual Solid Waste Generation (Tons/Year)
OPERATIONS AND MAINTENANCE			
Building 1	6 lbs/1,000 sf/day	3,000	3.3
PUBLIC VISITORS CENTER			
Building 2	2.5 lbs/1000 sf/day	14,000	3.5
ADMINISTRATION/OFFICE			
Building 3	6 lbs/1,000 sf/day	3,000	3.3
Totals			10.1
NOTES: lbs = pounds; sf = square feet			
SOURCE: CalRecycle, 2022.			

IMPACT: CONSTRUCTION OF INFRASTRUCTURE COULD RESULT IN ADVERSE PHYSICAL EFFECTS

WATER

Impacts related to water facilities due to the implementation of the 2022 Airport Master Plan Update were discussed on pages 10-6 to 10-7 of the 2022 Airport Draft SEIR. The analysis identified that potable water is supplied to the Airport via two storage tanks south of I-5, a booster pump station, a 24-inch main water supply pipeline, and the

² According to the USEPA, one cubic yard of commercial dry waste equals 56 to 73 pounds (USEPA, 2016). The proposed project would generate 10.1 tons or 20,200 pounds of solid waste per year which equals to a maximum of 276.7 cubic yards per year (20,200 pounds X 1 cubic yard/73 pounds = 276.7 cubic yards).

³ 55.3 pounds X 1 cubic yard/73 pounds = 0.8 cubic yards

Airport's distribution loop. The analysis determined that the 2022 Airport Master Plan Update would require the construction of new water service lines to serve Master Plan elements, but the existing water supply system is designed to meet the demand projected for the 2022 Airport Master Plan Update. For these reasons, the analysis concluded that the 2022 Airport Master Plan Update would have a less-than-significant impact related to water supply, and no mitigation measures were required. As discussed above, the area south of I-5 within the Airport Master Plan area, which includes the project site, was included within PAL 4 (with anticipated development within the 2034-2038 time period) of the 2022 Airport Master Plan Update. Due to the extended 20-year planning horizon, Master Plan projects or facilities identified in PAL 4 were determined to be beyond the scope of the 2022 Airport SEIR. Accordingly, the following analysis addresses physical effects related to construction of water treatment and distribution infrastructure for the proposed project.

TREATMENT

The City owns and operates two water diversion and treatment facilities: the SRWTP on the Sacramento River and the FWTP on the American River. These treatment plants operate as demands dictate; treatment is directly related to consumer demands.

As discussed above, the SRWTP has a permitted treatment capacity of 160 mgd while the EAFWTP has a current reliable capacity of 80 mgd during peak demand periods with the ability to operate at up to 100 mgd for short periods of time. Combined, the two facilities provide the City with a maximum surface water treatment capacity of between 240 and 260 mgd.

As shown in Tables UT-4 and UT-5, the proposed project would demand approximately 16 AFY, or 14,122 gpd, of water that would require treatment prior to delivery to the project site. Based on Sacramento's 2020 retail water demand of approximately 88 mgd⁴ and the City's wholesale water demand of about three mgd⁵, the treatment plants have a combined excess capacity of 149 and 169 mgd, and thus the demand associated with the proposed project represents less than one percent of this excess capacity. As a result, no additional water treatment capacity would need to be constructed to accommodate the increase in water demand anticipated by the proposed project, and similar to the conclusion reached in the 2022 Airport SEIR, this impact would be **less than significant**.

DISTRIBUTION

The proposed project would be served by an existing 24-inch water main located in Bayou Way, which has sufficient capacity to accommodate the demand of the proposed project. As such, there are no physical effects of off-site infrastructure required to serve the project site with water from the City of Sacramento system. Similar to the conclusion reached in the 2022 Airport SEIR, this impact would be **less than significant**.

⁴ 100,483 AF = 32.7 million gallons or 89.7 mgd

⁵ 3,607 AF = 1.2 million gallons or 3.2 mgd

MITIGATION MEASURES

None required.

WASTEWATER

Impacts related to wastewater facilities due to the implementation of the 2022 Airport Master Plan Update were discussed on pages 10-7 to 10-8 of the 2022 Airport Draft SEIR. The analysis determined that the SRWTP would have sufficient capacity to treat wastewater for anticipated future development in Sacramento County, including buildout of the 2022 Airport Master Plan Update, and impacts associated with wastewater services would be less than significant. As noted above, the proposed project would not connect to the wastewater system which serves the remainder of the Airport Master Plan area, north of I-5. Rather an onsite wastewater treatment system would be developed within the project site. The following analysis addresses physical effects related to construction of onsite wastewater treatment infrastructure for the proposed project.

Wastewater generated by the proposed project would be treated by an onsite wastewater treatment system consisting of a septic tank, leach field, and conveyance infrastructure. As the system would be constructed entirely within the project site, the potential impacts associated with the construction and installation of the system is considered throughout the technical chapters of this Supplement to the 2022 Airport SEIR, including Chapter 5, *Agricultural Resources*, Chapter 6, *Air Quality*, Chapter 7, *Biological Resources*, Chapter 9, *Cultural Resources*, Chapter 12, *Hydrology and Water Quality*, Chapter 14, *Noise*, and Chapter 16, *Tribal Cultural Resources*. Project-specific mitigation measures for construction identified for each topical issue would reduce potential significant impacts associated with construction and installation of onsite wastewater treatment system to the maximum extent feasible. There are no environmental impacts that would occur specifically related to the construction and installation of the system. For these reasons, construction of wastewater infrastructure for the proposed project would not result in adverse physical effects, and similar to the conclusion reached in the 2022 Airport SEIR, this impact would be **less than significant**.

MITIGATION MEASURES

None required.

ENERGY SERVICES

Impacts related to provision of energy services, including electrical power and natural gas, due to the implementation of the 2022 Airport Master Plan Update were discussed on page 10-6 of the 2022 Airport Draft SEIR. The analysis determined that implementation of the 2022 Airport Master Plan Update would result in construction of new buildings that would increase consumption of electricity at the Airport, and expansion of the SMUD Power Line-Elkhorn Substation would likely be required to serve the increased energy demands associated with the 2022 Airport Master Plan Update. The analysis determined that, with the proposed expansions to existing substations, infrastructure, and distribution, the needs of the 2022 Airport Master Plan

Update would be met, and impacts related to electrical supply and distribution would be less than significant.

With respect to natural gas, the analysis determined that implementation of the 2022 Airport Master Plan Update would increase in natural gas consumption at the Airport but would not require expansion of existing infrastructure and would not place a significant demand on PG&E's gas supplies.

The analysis further identified that standard practice for the design of Airport facilities calls for early coordination with utility providers to ensure that facility siting and construction comply with Public Utilities Commission clearance requirements, and these standard practices would be used for the design of 2022 Airport Master Plan Update elements. For these reasons, the 2022 Airport SEIR concluded that impacts associated with the provision of energy services would be less than significant. The following analysis addresses the provision of energy services for the proposed project.

As discussed in Chapter 2, *Project Description*, the proposed project would be powered entirely by electricity. Natural gas service would not be extended to the project site. Therefore, the proposed project would have no impacts related to consumption of natural gas or provision of natural gas infrastructure.

As discussed in Chapter 2, *Project Description*, the proposed project includes deployment of advanced high-powered public charging stations and associated facilities powered by a 12.5 megawatt alternating current (MWac) solar generation field, with nameplate power of 31.2 megawatts of direct current (MWdc), to support zero-emissions electric freight movement in Sacramento. The charging areas and associated support facilities would occupy approximately 13.5 acres of land on the northern portion of the project site while the remaining 96.5 acres of the site would be occupied by solar fields and a 200-foot wide buffer area along the western and southern borders of the project site (see Plates PD-3 and PD-4).

The proposed solar facilities would lie directly south of the vehicle charging area/rest area. The facilities would use Photovoltaic (PV) technology to convert sunlight directly to electricity. The proposed solar facilities would power the proposed project's electric vehicle charging stations and appurtenant uses expect during nighttime and cloudy weather. Any excess power would be exported to SMUD via an intertie with its existing 69 kV distribution line along Power Line Road to the east of the project site as further described below.

Five 3.6 Megavolt Ampere (MVA) inverters and transformers would be installed on concrete pads located within the solar field on the project site. The inverters would take the DC power output and convert it to AC power while the adjacent transformers on the pad would step the voltage up to a medium-voltage level. The medium-voltage outputs from the pad-mounted transformers would then be collected via a combining 34.5 kV switchgear located at discrete locations throughout the project site. The medium-voltage output from the combining switchgear would connect to the proposed project substation,

where it would then be stepped up to 69 kV for export to the charging stations in the vehicle charging area.

The substation transformer would step-up the voltage from the collection-level voltage to 69 kV. Additional substation facilities include a circuit breaker, metering units, control building, buswork (overhead line components), Supervisory Control and Data Acquisition (SCADA), and associated substation equipment. The proposed intertie would connect from the substation switchgear to SMUD's existing regional distribution facilities located along Power Line Road. Due to the distance between the proposed substation and point of interconnection, which could be up to 650 feet, depending on final design, a new 69 kV power line would be required to connect the substation to SMUD facilities. The onsite substation would be located on a 200-foot by 200-foot pad and be approximately 20 feet in height.

Offsite improvements for the proposed project would include the extension of a 69 kV electrical power distribution line between Power Line Road and the proposed substation on the project site described above and the undergrounding of an existing 12 kV overhead powerline along Bayou Way.

Potential impacts associated with the construction and installation of onsite and offsite energy facilities are considered throughout the technical chapters of this Supplement to the 2022 Airport SEIR, including Chapter 5, *Agricultural Resources*, Chapter 6, *Air Quality*, Chapter 7, *Biological Resources*, Chapter 9, *Cultural Resources*, Chapter 12, *Hydrology and Water Quality*, Chapter 14, *Noise*, and Chapter 16, *Tribal Cultural Resources*. For these reasons, the construction and installation of onsite and offsite energy facilities for the proposed project would not result in adverse physical effects, and similar to the conclusion reached in the 2022 Airport SEIR, this impact would be **less than significant**.

MITIGATION MEASURES

None required.

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

As discussed on page 10-2 of the 2022 Airport Draft SEIR, until 2006, the Airport was supplied by four on-site potable water wells. In early 2006, due to reliability and water quality considerations, this system was replaced by connection to the City of Sacramento's water supply. This connection was completed with the activation of two potable water storage tanks located south of I-5 at the intersection of Power Line Road and Bayou Way, adjacent to the project site. The facility is monitored collaboratively by the Sacramento County Department of Airports and the Sacramento County Water Agency.

As further discussed on page 10-2 of the 2022 Airport Draft SEIR, the former domestic water wells have been retained to provide landscape irrigation and auxiliary water for backup fire suppression water. During early 2006, an additional water well was installed

near the intersection of Power Line Road and North Bayou Way, adjacent to the project site, and water well number 2 (located in the Daily B parking lot) was connected to the landscape irrigation system via a 40-foot pipe extension. These well connections replaced the landscape irrigation water provided by Natomas Central Mutual Water Company. An additional well is located near the intersection of Earhart Drive and Delta Road. This well is used for construction water requirements at the Airport.

Impacts related to water demand due to the implementation of the 2022 Airport Master Plan Update were discussed on pages 10-6 to 10-7 of the 2022 Airport Draft SEIR. The analysis concluded that the Airport water supply system is designed to meet the demand projected for the 2022 Airport Master Plan Update. For these reasons, the analysis concluded that the 2022 Airport Master Plan Update would have a less-than-significant impact related to water supply, and no mitigation measures were required. As discussed above, the area south of I-5 within the Airport Master Plan area, which includes the project site, was included within PAL 4 (with anticipated development within the 2034-2038 time period) of the 2022 Airport Master Plan Update. Due to the extended 20-year planning horizon, Master Plan projects or facilities identified in PAL 4 were determined to be beyond the scope of the 2022 Airport SEIR. Accordingly, the following analysis addresses water demand for the proposed project.

The proposed project would be required to comply with water conservation, reuse, and efficiency standards under CALGreen. To this end, development would use low-flow/high-efficiency plumbing fixtures, and landscaping on project site would be designed and maintained for low water use and appropriate site conditions and methods for reducing water demand. Compliance with these measures may reduce the project water demand to less than 16 AFY.

Table UT-9 presents a summary of water demands and available supply during a normal year, single dry year, and five consecutive dry years with the inclusion of proposed project demand.

As shown in Table UT-9, the City's surplus is projected to range from 224,752 AFY in 2025 and 216,242 AFY during normal and single dry years and 219,650 AFY in 2025 and 198,420 AFY during the 5th year of a multiple dry year. Thus, the City of Sacramento would have adequate planned water supply to serve the proposed project during normal, single dry, and multiple dry years, and similar to the conclusion reached in the 2022 Airport SEIR, this impact would be **less than significant**.

MITIGATION MEASURES

None required.

Table UT-9: Projected Retail and Wholesale Supply and Demand Comparison with Project (acre-feet per year)

Year Scenario	Water Supply or Demand	2025	2030	2035	2040	2045
Normal Year Scenario	Supply Total	361,606	403,335	425,298	447,260	447,260
	Demand Total	136,854	167,960	196,301	224,640	231,018
	Excess Supply	224,752	235,375	228,997	222,620	216,242
Single Dry Year Scenario	Supply Total	361,606	403,335	425,298	447,260	447,260
	Demand Total	136,854	167,960	174,338	224,640	231,018
	Excess Supply	224,752	235,375	250,960	222,620	216,242
Multiple-Dry-Year Scenario ¹	Supply Total	381,389	420,905	442,868	447,260	447,260
	Demand Total	161,739	190,632	218,973	229,742	248,840
	Excess Supply	219,650	230,273	223,895	217,518	198,420
NOTE:						
1. Multiple Dry Years scenario values in this table are the Fifth Year Values from the 2020 UWMP.						
SOURCE: Kimley-Horn, 2024a.						

IMPACT: RESULT IN A PROJECT SOLID WASTE DISPOSAL DEMAND THAT CANNOT BE MET BY LANDFILL CAPACITY

Impacts related to solid waste due to implementation of the 2022 Airport Master Plan Update were discussed on pages 10-8 to 10-10 of the 2022 Airport Draft SEIR. The analysis determined that implementation of the 2022 Airport Master Plan Update would generate construction debris from the demolition of existing facilities and construction of new facilities.

As is the case with all large construction projects in Sacramento County, some of the debris, such as clean soil and possibly concrete, would be recycled by the construction contractors for use at other construction sites needing fill material. The remainder of the debris would be transported to one or more licensed landfills in California and/or Nevada. With the large number of licensed haulers in the County and the availability of many licensed landfills for disposal of construction debris, the analysis determined that the quantity of material generated by implementation of the 2022 Airport Master Plan Update would not be expected to significantly impact the capacity of any disposal facility.

The analysis identified that the Airport employs several resource conservation and waste minimization programs, including the Integrated Waste Management Program, the Paper Recycling Program, the Terminal and Concourse Mixed Recycling Program, and other resource conservation and waste minimization programs detailed in the 2022

Airport SEIR. The analysis concluded that, with or without implementation of the 2022 Airport Master Plan Update, the Airport will continue these programs as well as seek other means of recycling solid waste, and impacts associated with solid waste would be less than significant.

Because the 2022 Airport SEIR assumed that the project site would be developed in PAL 4 and did not fully address impacts of development of the site within the analysis period, the following analysis addresses impacts related to solid waste for the proposed project.

CONSTRUCTION

Project construction would generate various types of construction waste: scrap lumber, scrap finishing materials, various scrap metals, and other recyclable and non-recyclable construction-related wastes. Construction waste would be managed in accordance with ordinances promulgated by the DWMR—in particular, in accordance with DWMR’s requirement that haulers achieve at least 30 percent recycling rate and up to 50 percent pursuant to AB 939. Recyclable construction materials—concrete, metals, wood, and other materials—would be diverted to recycling facilities.

Development on the project site would comply with County requirements to divert a minimum of 50 percent of construction wastes to a certified recycling processor. Adhering to these requirements would minimize the total volume of demolition and construction waste that would be landfilled but would not avoid disposal of all construction waste in local landfills. Construction solid waste could be delivered to one or more of the following facilities: NARS, Florin-Perkins Public Disposal, L and D Landfill, or Sierra Waste. Use of these facilities would be short-term, and the volume of material would represent a relatively minor component of daily input to these facilities. Therefore, new or expanded solid waste management or disposal facilities would not be required to accommodate project-related construction, and thus no adverse physical environmental effects would occur. Similar to the conclusion reached in the 2022 Airport SEIR, this impact would be **less than significant**.

MITIGATION MEASURES

None required.

OPERATION

Operation of the proposed project would generate municipal solid waste. As shown in Table UT-8, development anticipated under the proposed project would generate approximately 10.1 tons of solid waste per year or 276.7 cubic yards per year, which equates to approximately 55.3 pounds of solid waste per day or 0.8 cubic yards per day.

Waste generated by the proposed project would be collected and transported to NARS for processing and then on to Kiefer Landfill for disposal. Solid waste would be either recycled in accordance with State and County programs and requirements, composted as organic materials or landfilled at the Kiefer Landfill.

The NARS currently processes 1,200 tons of solid waste per day and is permitted to receive up to 2,400 tons per day. Project-related waste would represent an increase of approximately 0.8 percent over the amount of solid waste currently processed at the facility and about 0.4 percent of the facility's permitted capacity. As a result, sufficient solid waste processing capacity would be available to serve the proposed project.

Kiefer Landfill currently has approximately 75 million cubic yards⁶ of available capacity and is expected to be operational until 2098. Project-related wastes would represent less than one of a percent (<0.01 percent) of total annual and available capacity of Kiefer Landfill. Therefore, sufficient landfill disposal capacity would be available to the proposed project.

Based on the above, the proposed project would not require new or expanded solid waste management or disposal facilities. Because there would be no need to expand or create new landfill or solid waste management facilities, there would be no related physical environmental effects. Similar to the conclusion reached in the 2022 Airport SEIR, this impact would **be less than significant**.

MITIGATION MEASURES

None required.

⁶ One cubic yard is equivalent to approximately 0.1125 tons un-compacted, or approximately 0.375 tons compacted, as waste would arrive at the landfill from trucks or other transport equipment.

18 CUMULATIVE IMPACTS

INTRODUCTION

A cumulative impact consists of an impact that is created as a result of the combination of the project evaluated in the EIR together with other past, present and reasonably foreseeable projects causing related impacts.

The beginning of the cumulative impact analysis includes a description of the cumulative analysis methodology and the geographic or temporal context in which the cumulative impact is analyzed (e.g., the City of Sacramento, the Sacramento Valley Air Basin, other activity concurrent with project construction). In some instances, a project-specific impact may be considered less than significant, but when considered in conjunction with other cumulative projects or activities may be considered significant or potentially significant.

As noted above, where a cumulative impact is significant when compared to existing or baseline conditions, the analysis must address whether the project's contribution to the significant cumulative impact is "considerable." If the contribution of the project is considerable, then the EIR must identify potentially feasible measures that could avoid or reduce the magnitude of the project's contribution to a less-than-considerable level. If the project's contribution is not considerable, it is considered less than significant, and no mitigation of the project contribution is required.

METHODOLOGY

The State CEQA Guidelines suggest that the analysis of cumulative impacts for each environmental factor can employ one of two methods to establish the effects of other past, current, and probable future projects. A lead agency may select a list of projects, including those outside the control of the agency, or alternatively, a summary of projections. These projections may be from an adopted general plan or related planning document, or from a prior environmental document that has been adopted or certified, and these documents may describe or evaluate regional or area-wide conditions contributing to the cumulative impact.

In this EIR, a combination of these two methods is used depending upon the specific resource area being analyzed. To evaluate traffic and traffic-related air quality and traffic-related noise impacts, the impacts were evaluated using the projected growth in traffic through 2040 based on SACOG projections. Other impacts, such as construction air and noise impacts, were evaluated using a list of recently approved and/or proposed projects in the Natomas basin that are not yet constructed, are not yet occupied, or are very newly constructed. This development includes growth under specific plans proposed by the City of Sacramento and Sacramento County in north Natomas as well as growth under a specific plan in southern Sutter County.

Plate CI-1 shows the location of each of each cumulative project relative to the project site area while **Table CI-1**, below, includes a brief description of each cumulative project along with its status.

Table CI-1: Cumulative Project List

Project	Description	Status
UNINCORPORATED SACRAMENTO COUNTY		
1 Sacramento International Airport Master Plan Update	- Airport Master Plan through 2038	Approved
2 Elkhorn Extension	- Extension of the alignment of Elkhorn Boulevard from Metro Air Park to Airport Boulevard	Approved
3 Metro Air Park	- 1,892.2 Metro Air Park Special Planning Area - 1,320 acres industrial, manufacturing, distribution, and commercial use	Approved
4 Grandpark	- 5,675.6 acres total mixed use - 21,915 residential units on 2,739.4 acres - 374.5 acres commercial - 2,288.1 acres parks and open space	Proposed
5 Upper Westside	- 2,066 acres total - 9,356 residential units on 848 acres - 136 acres commercial - 392 acres public, park & open space	Proposed
CITY OF SACRAMENTO		
6 Airport South Industrial Park	- 6.6 million square feet (sf) of industrial use on 408 acres - 100,000 sf retail/commercial use, including a 61,000-sf hotel/hospitality, on 11 acres	Proposed
7 Northlake (formerly Greenbriar)	- 2,922 units on 253.9 acres residential - 28.6 acres commercial - 32.5 acres parks and recreational use - 9.9-acre school site - 57.9 acres open space buffers	Approved
8 Innovation Park	- 183.7 acres total - 3,679,400-sf Medical Center on 46 acres - 3,071 residential units - 470,000 sf retail, hotel, and office use	Approved
9 Panhandle	- 589.4 acres total - 1,623 units on 281.8 acres residential - 9.7 acres commercial - 66.5 acres public/quasi-public - 179.4 acres planned development	Approved

Project	Description	Status
SUTTER COUNTY		
10 Sutter Point	<ul style="list-style-type: none"> - 7,520 acres total - 49.7 million square feet of industrial, commercial, and business/professional development - 17,500 residential units - One high school and 6 K-8 schools - 272 acres parks - 395 acres open space. 	Approved
SOURCE: ESA, 2023		

CUMULATIVE ISSUE AREAS

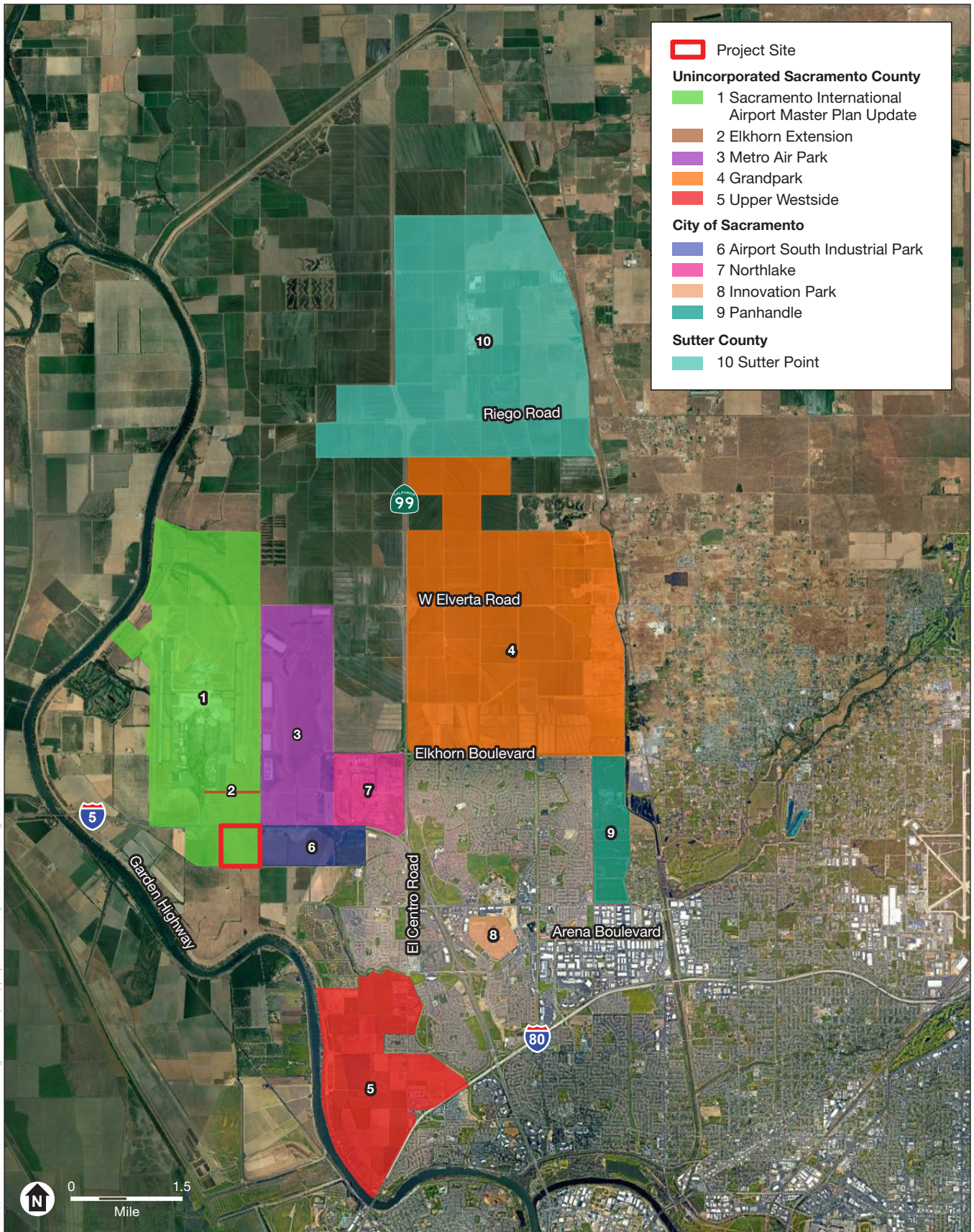
Cumulative impacts for each environmental resource topic area are discussed below. Significance criteria, unless otherwise specified, are the same for cumulative impacts as project impacts for each environmental resource topic area. When considered in relation to other probable future projects, cumulative impacts for some resources could be significant and more severe than those caused by the proposed project alone.

An analysis of cumulative effects of development allowed under the 2022 Airport Master Plan Update and other closely related past, present, and reasonably foreseeable future projects were included in 2022 Airport SEIR. As additional development has been proposed within the vicinity of the airport since the 2022 Airport SEIR was certified in February 2022 (e.g., Airport South Industrial Park), the discussion of cumulative effects of the proposed project and other closely related past, present, and reasonably foreseeable future projects does not tier from the cumulative analysis included in 2022 Airport SEIR, but instead consists of a stand-alone analysis.

AESTHETICS

GEOGRAPHIC CONTEXT

The geographic context for the analysis of cumulative effects related to aesthetics, light, and glare varies depending on the specific environmental issue area being analyzed. The geographic context for cumulative effects related to visual character is localized and typically includes the project site and the area within the viewshed of the project site. The geographic context for cumulative effects related to a decrease in the ability to view the night sky (skyglow effects) includes development in the surrounding area that could affect the same area as that affected by project-generated light. Nighttime spillover light onto adjacent sensitive (e.g., residential) uses and daytime glare effects are localized and do not typically generate cumulative effects.



SOURCE: Google Earth Pro, basemap, 2022; ESA, 2023

WattEV Innovative Freight Terminal (SWIFT) Project

Plate CI-1
Cumulative Projects



CUMULATIVE IMPACTS EVALUATION

VISUAL CHARACTER

Cumulative projects within the viewshed of the project site include development associated with the Sacramento International Airport Master Plan Update to the north and west, including the Elkhorn Boulevard extension, Metro Air Park to the northeast, and Airport South Industrial Park to the east. These cumulative projects, particularly projects that would include new buildings or other above-ground structures, would result in visual changes in the project vicinity. Most notably, areas of largely undeveloped rural land and farmland would be developed with new urban uses, including modern buildings and structures of various heights and materials and associated landscaping, lighting, and signage. However, like the proposed project, these projects would be subject to environmental review and approval by the local jurisdictions to ensure consistency with applicable policies and regulations that govern visual quality. Therefore, even if the visual landscape were to change substantially with the development of cumulative projects, the visual changes would be consistent with each jurisdiction's long-term vision for the areas. Therefore, the visual changes would not be adverse, and the cumulative impact associated with the proposed project with respect to visual character would be **less than significant**.

NIGHTTIME LIGHTING AND GLARE

Excessive, misdirected, or unshielded light can decrease views of the night sky. As described in Chapter 2, *Project Description*, the project site is undeveloped grassland. As such, no existing sources of lighting or glare are located on the site. Much of the area to the south, east, and west of the project site consists of farm fields that are devoid of nighttime lighting and are dark at night. Principal sources of nighttime lighting and illumination in the vicinity of the project site include Sacramento International Airport to the north, Metro Air Park to the northeast, headlights from vehicles traveling on Interstate 5 (I-5), and residential and other urban uses within the city of Sacramento to the east. New nighttime lighting associated with some of the projects considered in this cumulative analysis could contribute to a regional decrease in the ability to view the night sky and the potential for increased glare. Therefore, cumulative projects could result in a significant impact from new sources of nighttime lighting.

As discussed in Chapter 4, *Aesthetics*, the proposed project would include security lighting and lighting to provide operation and maintenance personnel with illumination in both normal and emergency conditions. As required in Section 4.4.5 of the Countywide Design Guidelines, lighting would be designed to provide the minimum illumination needed to achieve safety and security objectives and would be shielded and oriented to focus illumination on the desired areas, minimizing light spillover. Therefore, the contribution of the proposed project with respect to nighttime lighting and glare would not be cumulatively considerable, and the cumulative impact associated with the proposed project would be **less than significant**.

DAYTIME GLARE

Daytime glare can result in hazards for nearby motorists and for airplane pilots following low-level flight paths. As discussed in Chapter 4, *Aesthetics*, a glare analysis prepared

for the proposed project demonstrated that the proposed solar panels would not result in any hazardous glare. Because the proposed solar arrays at the project site would not result in hazardous glare for airport operations, the proposed project would not result in a substantial new source of daytime glare that would result in a hazard for aircraft pilots or people on the ground. Thus, the contribution of the proposed project with respect to adverse daytime glare would not be cumulatively considerable, and the cumulative impact associated with the proposed project would be **less than significant**.

AGRICULTURAL RESOURCES

GEOGRAPHIC CONTEXT

Farmland and agricultural resources are important contributors to Sacramento County's economy and land conservation efforts. The geographic context for the cumulative analysis of the conversion of farmland to non-agricultural use, other changes that could convert farmland to non-agricultural use, and conflicts with existing zoning for agricultural use, is Sacramento County. The cumulative context for conflicts with Williamson Act contracts is the Sacramento Valley Region (Sacramento, Butte, Colusa, Glenn, Sutter, Tehama, and Yolo counties), based on data available at this level.

CUMULATIVE IMPACTS EVALUATION

CONVERT IMPORTANT FARMLAND TO NON-AGRICULTURAL USE

Cumulative loss of agricultural land is a great concern in the State of California, especially within the Central Valley. This is a particular concern in Sacramento County, where approximately 11,500 acres of Important Farmland was lost between 2008 and 2018 (California Department of Conservation, 2018a). This is approximately 5 percent of the acres of Important Farmland that were present in 2008. Cumulative development in the Natomas Basin (see Table CI-1 and Plate CI-1), such as the proposed Grandpark Specific Plan and Upper Westside Specific Plan, includes large portions of Important Farmland that would be converted to urban uses. As a result, cumulative development in the basin would continue the trend of Important Farmland being converted to non-agricultural use, and thus would result in a potentially significant cumulative impact.

As discussed in Chapter 5, *Agricultural Resources*, the proposed project would not result in the conversion of Important Farmland to non-agricultural uses. However, County policy does require that projects resulting in the conversion of 50 or more acres of farmland, regardless of category, mitigate the loss within Sacramento County at a 1:1 ratio, which is included at Mitigation Measure AG-1. However, even with this proposed mitigation, it must be recognized that farmland is a finite resource. When an area is permanently taken out of agricultural production, there has been a net-loss of agricultural lands. Other agricultural lands may be preserved through compliance with mitigation, but new agricultural soils will not be created. Therefore, implementation of the proposed project would result in a considerable contribution to the cumulative loss of designated farmland in the County, and thus the cumulative impact associated with the proposed project would remain **significant and unavoidable**.

CONFLICT WITH EXISTING AGRICULTURAL USE AND ZONING

Land enrolled in a Williamson Act contract is preserved exclusively for agricultural and open space uses. A standard contract refers to a typical 10-year contract. A super contract refers to a 20-year contract. Therefore, land enrolled in the Williamson Act program protects the conversion of land to non-agricultural uses over a decade or more. In the Sacramento Valley region, the acreage of land under Williamson Act contracts has increased five of the past six years, resulting in a net negligible change in acreage (California Department of Conservation, 2018b, 2021, 2022). However, Sacramento County has experienced a cumulative loss of farmland, or Williamson Act contracts have not been renewed, as urban sprawl continues in the county. Cumulative development in the Natomas Basin (see Table CI-1 and Plate CI-1), particularly large specific plans on agricultural land, would have a cumulatively considerable impact on the further conversion of parcels under a Williamson Act contract throughout the County.

Furthermore, the cumulative development of the projects listed for consideration would result in land use compatibility conflicts between future urban development and agricultural uses in adjacent areas. Compatibility issues would most likely include noise, odor, lighting, and truck and tractor traffic. As mentioned, Sacramento County has right-to-farm policies which require that prospective buyers of property adjacent to agricultural land be notified that they could be subject to inconvenience or discomfort resulting from accepted farming activities and disallow them from claiming farming practices as a “nuisance.” Other counties in the Sacramento Region also have right-to-farm ordinances which limit the amount of conversion of agricultural land to non-agricultural use.

As discussed in Chapter 5, *Agricultural Resources*, uses proposed by the proposed project are consistent with the project site’s underlying AG-20 and AG-80 zoning designations. In addition, none of the parcels on the project site are under a Williamson Act contract. For these reasons, implementation of the proposed project would not result in a considerable contribution to cumulative conflicts with existing zoning for agricultural use, or a Williamson Act contract, and the cumulative impact associated with the proposed project would be **less than significant**.

OTHER CHANGES THAT COULD CONVERT FARMLAND TO NON-AGRICULTURAL USE

Sacramento County has experienced a tremendous amount of growth in recent decades. Development within the county as well as surrounding counties has reduced the amount of agricultural land in the area due to increased urban sprawl. The County’s General Plan calls for the development of unincorporated areas to provide areas for the county to grow. Thus, existing agricultural land may be converted to non-agricultural uses, especially as adjacent properties become entitled for urban development. Most cumulative development in the Natomas basin (see Table CI-1 and Plate CI-1), such as the Grandpark Specific Plan and Upper Westside Specific Plan, includes large tracts of farmland. As growth and development expand, additional areas of agricultural land may be affected, and thus would result in a significant cumulative impact.

As discussed in Chapter 15, *Transportation and Circulation*, proposed project construction activities would be temporary and would not substantially impact project area roadways. Therefore, construction of the proposed project would not indirectly

result in conversion of farmland to non-agricultural use. In addition, as discussed in Chapter 5, *Agricultural Resources*, all operational activities associated with the proposed project would occur within the project site; operational activities associated with the proposed project would not encroach upon neighboring agricultural operations. Furthermore, operational activities on the project site would not substantially increase vehicular traffic in areas where agricultural equipment uses roads. For these reasons, implementation of the proposed project would not result in a considerable contribution to other changes that could convert farmland to non-agricultural use, and the cumulative impact associated with the proposed project would be **less than significant**.

AIR QUALITY

GEOGRAPHIC CONTEXT

The geographic context for changes in the air quality environment due to development permitted under the proposed project would be both regional and local. Ozone and PM₁₀ would be the primary pollutants of regional concern as the Sacramento Valley Air Basin (SVAB), which includes Sacramento County, is currently in State and federal nonattainment for these pollutants. Dust and toxic air contaminants (TACs) would be the primary pollutants of local concern as project emissions could combine with the emissions of other projects within 1,000 feet of the project site to negatively affect nearby sensitive receptors.

CUMULATIVE IMPACTS EVALUATION

CONSTRUCTION EMISSIONS OF CRITERIA AIR POLLUTANTS AND PRECURSORS

The SMAQMD has developed thresholds of significance in consideration of achieving attainment status under the California Ambient Air Quality Standards and National Ambient Air Quality Standards and has determined that projects with estimated emissions below these thresholds would not result in a cumulatively considerable contribution to regional air quality degradation. As discussed in Chapter 6, *Air Quality*, the proposed project would not exceed any thresholds recommended by the Sacramento Metropolitan Air Quality Management District (SMAQMD). Furthermore, with the implementation of Mitigation Measure AQ-1, which requires the employment of Best Management Practices (BMPs) to control fugitive dust, construction of the proposed project would not worsen ambient air quality, create additional violations of federal and state standards, or delay the goal for meeting attainment standards in the SVAB. As a result, the proposed project would not result in a cumulatively considerable net increase of a criteria pollutant for which the project region is non-attainment, and the contribution of the proposed project to the cumulative impact would be **less than significant**.

LONG-TERM OPERATIONAL EMISSIONS OF CRITERIA AIR POLLUTANTS AND PRECURSORS

The SMAQMD directs lead agencies to use the region's existing attainment plans as a basis for analysis of cumulative emissions. A project's interference with the achievement of goals and targets established in such plans may be determined using the SMAQMD's recommended thresholds of significance for ozone precursors, PM_{2.5}, and PM₁₀. Given the project's required compliance with all applicable BMPs, the SMAQMD's recommended cumulative thresholds are identical to its operational

thresholds. Accordingly, if the proposed project would result in an increase of ROG, NO_x, PM₁₀, or PM_{2.5} in excess of SMAQMD's operational phase cumulative-level emissions threshold, which are equivalent to SMAQMD's project-level operational emissions thresholds, the project could potentially result in a significant incremental contribution towards cumulative air quality impacts. As discussed in Chapter 6, *Air Quality*, the proposed project would not exceed any thresholds by SMAQMD. As a result, the proposed project would not be considered to result in a cumulatively considerable net increase of a criteria pollutant for which the project region is non-attainment, and the cumulative impact associated with the proposed project would be **less than significant**.

EXPOSURE OF EXISTING SENSITIVE RECEPTORS TO TOXIC AIR COMPOUNDS

A Health Risk Assessment was conducted using factors and guidance from the Office of Environmental Health Hazard Assessment and evaluated cancer risk and chronic, non-carcinogenic hazard index (HI) from construction of the proposed project.

Emissions of Toxic Air Compounds (TACs) generally have localized effects. Because SMAQMD's threshold of significance for health risk exposure from TACs is based on the incremental increase in health risk from a project's TAC emissions, SMAQMD considers implementation of the project-level mitigation requirements to be sufficient for a finding of less than cumulatively considerable for cumulative impacts of TACs. However, to make this finding, it is assumed that the project complies with all applicable emission limits and mitigation measures required by applicable SMAQMD rules and regulations, and local ordinances. Therefore, the project-level threshold of significance for evaluating TACs generated by the proposed project is also used to determine whether its TAC emissions are cumulatively considerable.

As discussed in Chapter 6, *Air Quality*, the cancer risk and chronic HI at residential and worker receptors would be below the SMAQMD significance thresholds, and thus the proposed project would not increase risks to those sensitive receptors. Therefore, the contribution of the proposed project to the cumulative impact related to exposure to TACs would not be cumulatively considerable, and the cumulative impact associated with the proposed project would be **less than significant**.

EXPOSURE TO OBJECTIONABLE ODORS

As discussed in Chapter 6, *Air Quality*, the proposed project would generate temporary odors during construction as well as during operation. Construction-related odors would be minimal, temporary, and would cease once construction is complete. Because of the localized character of odor-related impacts, as well as adherence with SMAQMD Rule 402, which prohibits any person or source from emitting air contaminants that cause detriment, nuisance, or annoyance to a considerable number of persons or the public, the contribution of the proposed project to odor issues would not be cumulatively considerable and would not result in a considerable contribution such that a new significant cumulative impact would occur. Therefore, the cumulative impact associated with the proposed project with respect to odors would be **less than significant**.

BIOLOGICAL RESOURCES

GEOGRAPHIC CONTEXT

Landcover types within the project site consist of general agriculture, disturbed areas, and open water. The agricultural areas are currently fallowed. Fallowed agricultural land can function as important habitat for certain special-status wildlife species, including Swainson's hawk, since it can provide some of the same functional values as the native annual grasslands which were historically prevalent throughout the Sacramento region. The geographic context for this cumulative analysis of the impacts to biological resources is the Sacramento region and the Natomas Basin.

CUMULATIVE IMPACTS EVALUATION

HAVE A SUBSTANTIAL ADVERSE EFFECT ON PROTECTED STATE OR FEDERALLY PROTECTED WETLANDS OR SURFACE WATERS

Since the 1800s there has been an approximately 95 percent reduction in wetland and other aquatic habitat in the Central Valley. Future development within the Sacramento region and the Natomas Basin is anticipated to continue to result in the loss of these sensitive habitats. Given that the proposed project would avoid permanent conversion of aquatic habitat to uplands by design, implementation of the proposed project would not result in a considerable contribution to cumulative impacts to protected state or federally protected wetlands or surface waters, and the cumulative impact associated with the proposed project with respect to wetlands would be **less than significant**.

HAVE A SUBSTANTIAL ADVERSE EFFECT, EITHER DIRECTLY OR THROUGH HABITAT MODIFICATION, ON ANY SPECIES IDENTIFIED AS A SPECIAL STATUS SPECIES

Historic and ongoing loss of agricultural lands managed in a manner suitable for Swainson's hawk foraging has occurred as these areas are converted due to urban development. Additionally, ongoing conversion of seasonal wetlands and other aquatic habitat have affected the availability of habitat for species such as giant garter snake and western pond turtle.

As previously analyzed in Chapter 7, *Biological Resources*, implementation of the proposed project will result in conversion of 110 acres of Swainson's hawk foraging habitat. Future development is expected to continue in the Sacramento region, including specifically in the Natomas Basin where the proposed project is located. Cumulative development within the Natomas Basin (see Table CI-1 and Plate CI-1), including several large land development projects such as the Grandpark Specific Plan and Upper Westside Specific Plan, would result in the permanent conversion of annual grasslands and annual croplands that serve as habitat for a range of special-status species found in the Sacramento region, including Swainson's hawk, giant garter snake, western pond turtle. These development projects and plans would be required to comply with local ordinances and policies, in addition to the California Endangered Species Act, Federal Endanger Species Act, California Fish and Game Code, and other relevant regulations, permits, and requirements. Nevertheless, the implementation of previously approved and reasonably foreseeable future development projects listed in Table CI-2 are expected to result in permanent conversion of annual grasslands and

agricultural areas within the Natomas Basin. As shown in Table CI-2, more than half of the 53,537-acre footprint of the Natomas Basin is either already developed or approved for development. Furthermore, reasonably foreseeable future projects listed in Table CI-2 are anticipated to result in approximately 8,000 acres of development in the Natomas Basin including annual grasslands and agricultural areas that are potentially existing suitable habitat for special-status species such as Swainson's hawk. The cumulative impact of the development within the Natomas Basin summarized in Table CI-1 on special-status species is significant.

As discussed in Chapter 7, *Biological Resources*, the proposed project would implement multiple measures to avoid, minimize, and mitigate its impacts to special-status species. To avoid impacts to nesting Swainson's hawks, implementation of Mitigation Measure BR-2 requires Swainson's hawk nesting surveys be conducted prior to development of the proposed project. Implementation of Mitigation Measure BR-3 would preserve and manage foraging habitat in perpetuity to offset the project's conversion of Swainson's hawk foraging habitat (and would also mitigate impacts to habitat of other special-status species using annual cropland). Consistent with Sacramento County policy, Mitigation Measure BR-3 would also require habitat preservation consistent with mitigation for similar impacts elsewhere on Sacramento International Airport lands and not less than that required for development under the NBHCP and Metro Air Park HCP. To avoid impacts to nesting raptors, implementation of Mitigation Measure BR-4 would require a pre-construction survey for raptor nests. To avoid impacts to burrowing owls, implementation of Mitigation Measure BR-5 calls for a pre-construction burrowing owl survey to be conducted and a Burrowing Owl Mitigation Plan approved by the California Department of Fish and Wildlife (CDFW) to be developed and implemented in the event occupied burrows or burrowing owls are found. Additionally, Mitigation Measure BR-6 would be implemented to avoid potential effects to western pond turtles that may be present on-site during construction.

While Mitigation Measure BR-3 would mitigate for conversion of foraging habitat for Swainson's hawk at a 1:1 ratio by preserving off-site habitat, ultimately there would still be a net loss of 110 acres of foraging habitat within the Central Valley since the measure does not entail creation of new foraging habitat for the species. Mitigation Measure BR-3 though would also ensure that any land set aside for Swainson's hawk foraging habitat is managed into perpetuity in a manner suitable for Swainson's hawk foraging. There is an ongoing regional trend in the Central Valley of widespread planting of orchards and vineyards, which are not suitable for Swainson's hawk foraging, displacing annual row crops, much of which is suitable for foraging habitat by Swainson's hawks. Such changes in cropping patterns are up to the discretion of the agricultural operator and not subject to the discretionary approval of counties. Preservation of suitable foraging habitat into perpetuity under Mitigation Measure BR-3 will help contribute to long-term protection for Swainson's hawk in the Sacramento region. Given these mitigation measures, and that the proposed project by itself will only individually contribute to conversion of approximately 110 acres of foraging habitat for Swainson's hawk, the proposed project's contribution to cumulative impacts to special-status species would not be cumulatively considerable, and the cumulative impact associated with the proposed project with respect to special-status species would be **less than significant**.

INTERFERE SUBSTANTIALLY WITH THE MOVEMENT OF ANY NATIVE RESIDENT OR MIGRATORY FISH OR WILDLIFE SPECIES OR WITH ESTABLISHED NATIVE RESIDENT OR MIGRATORY WILDLIFE CORRIDORS, OR IMPEDE THE USE OF NATIVE WILDLIFE NURSERY SITES

As previously analyzed in Chapter 7, *Biological Resources*, while the project area is within the Pacific flyway, the Sacramento International Airport is subject to intensive wildlife control to prevent airplane-wildlife collisions, and I-5 immediately north of the project site presents a substantial barrier to wildlife movement. Additionally, while irrigation and drainage ditches can provide corridors for dispersal for highly aquatic species such as giant garter snake and western pond turtles, such aquatic habitat would be avoided by design of the proposed project. Based on these considerations, implementation of the proposed project would not result in a considerable contribution to cumulative impacts on movement conditions for native resident or migratory wildlife, and the cumulative impact associated with the proposed project with respect to movement corridors for native resident or migratory wildlife would be **less than significant**.

CONFLICT WITH ANY LOCAL POLICIES OR ORDINANCES PROTECTING BIOLOGICAL RESOURCES

Sacramento County has an ordinance adopted to protect Swainson's hawk foraging habitat and has also adopted measures protecting native and landmark trees. As described previously in Chapter 7, *Biological Resources*, the proposed project would result in conversion of Swainson's hawk foraging habitat and may affect native trees protected by Sacramento County. The approval process by Sacramento County for discretionary projects such as the proposed project are how relevant county ordinances, such as the one protecting Swainson's hawk foraging habitat, are enforced. Implementation of Mitigation Measure BR-3 would mitigate the project's contribution to conversion of Swainson's hawk foraging habitat and Mitigation Measures BR-8 and BR-9 would mitigate the project's contribution to impacts to native trees. Given these mitigation measures, which are consistent with the applicable Sacramento County policies, implementation of the proposed project would not result in a considerable contribution to cumulative conflicts with local policies or ordinances protecting biological resources, and the cumulative impact associated with the proposed project would be **less than significant**.

CONFLICT WITH THE PROVISIONS OF AN ADOPTED HABITAT CONSERVATION PLAN, NATURAL COMMUNITY CONSERVATION PLAN, OR APPROVED LOCAL, REGIONAL, OR STATE HABITAT CONSERVATION PLAN

As previously analyzed in Chapter 7, *Biological Resources*, construction of the proposed project would not impair the ability for either the Natomas Basin HCP or the Metro Air Park HCP to implement their respective conservation strategies. The project site would not be a target for acquisition by The Natomas Basin Conservatory (TNBC) since 1) the project site is on a 110-acre parcel of land and thus on its own represents less than 30 percent of the 400-acre minimum habitat block size required under the NBHCP, and 2) adding preserve areas close to existing preserves is a key component of the NBHCP's conservation plan and the project site is not located close to any existing habitat preserve holdings. Furthermore, the proposed project would also avoid or minimize any potential impacts to Natomas Basin HCP and Metro Air Park HCP covered species by implementing measures (Mitigation Measures BR-2 through BR-6) comparable to those required by the Natomas Basin HCP and Metro Air Park HCP.

There are several large-scale development plans and projects already approved or reasonably foreseeable to occur within the Natomas Basin. **Table CI-2** includes those planned projects within the Natomas Basin identified previously in Table CI-1, along with information about the percentage of Natomas Basin area those planned projects and existing development represent. As shown in Table CI-2, more than half of the 53,537-acre footprint of the Natomas Basin is either already developed or approved for development. Additionally, when combined with reasonably foreseeable future projects, an estimated 76 percent of the Natomas Basin is expected to be developed.

The cumulative impact of development within the Natomas Basin, as summarized in Table CI-2, could result in future challenges to the acquisition of adequate habitat preserve holdings within the Natomas Basin as the pool of available, suitable, undeveloped land within the Natomas Basin becomes more constrained. Only the difficulty of acquisitions would be considerably increased if requirements for future development projects within the Natomas Basin restricted special-status species habitat mitigation to only within the Natomas Basin. The aerial extent of reasonably foreseeable projects in the Natomas Basin is an estimated 20.4 percent of the total Natomas Basin footprint; as tabulated in Table CI-2, only an estimated 24 percent of the Natomas Basin is not already developed or planned for development. Given that not all the remaining 24 percent of land available in the Natomas Basin is suitable to function as mitigation for special-status species, the pool of available, suitable mitigation lands within the Natomas Basin is extremely constrained. Under conditions in which all cumulative projects would be required to mitigate impacts to special-status species habitats on lands within the Natomas Basin, insufficient land would be available to successfully implement the currently adopted Natomas Basin HCP and Metro Air Park HCP, which would result in a significant cumulative impact.

Implementation of Mitigation Measures BR-3 and AG-1 pursuant to the proposed project were evaluated to consider their potential to impair the ability for either the Natomas Basin HCP or the Metro Air Park HCP to implement their respective conservation strategies. Mitigation Measure BR-3 calls for compensation of permanent loss of Swainson's hawk foraging habitat to be achieved at a 1:1 ratio through purchase of credits from an agency-approved conservation bank, or through protection of habitat through acquisition of fee-title or a conservation easement at sites within 10 miles of Natomas Basin. This measure maintains flexibility in the location of where the mitigation site is ultimately located, so to not unnecessarily directly compete with TNBC for limited Swainson's hawk foraging habitat mitigation opportunities within the geographic boundaries of the Natomas Basin. Furthermore, even if the mitigation site were located in the Natomas Basin, the 110 acres of mitigation would only represent about 0.2 percent of the 53,537-acre Natomas Basin (or approximately 0.9 percent¹ of the portion of Natomas Basin not already developed or planned for development that may potentially be available for habitat mitigation purposes²).

¹ This percentage is made on the calculation that 12,824 acres of Natomas Basin is not developed nor planned for developed (i.e., 53,537 acres of the total Natomas Basin minus 29,769 acres of previous development in Natomas minus 10,943.9 acres of reasonably foreseeable development in the Natomas Basin).

² Please note that not all land that is left undeveloped in Natomas Basin is necessarily suitable to function as special-status species habitat mitigation.

Table CI-2: Acreage of Existing and Reasonably Foreseeable Development in the Natomas Basin

Project/Development	Project Acreage	Percentage of Natomas Basin^a	Status
EXISTING			
Sacramento International Airport with buffer lands	5,900	11.0	Existing
Urban as of 1997 ^b	3,854	7.2	Existing
Highways ^b	1,435	2.7	Existing
Major canals ^c	503	0.9	Existing
NBHCP-covered development ^d	17,500	32.7	Existing
Northlake (formerly known as Greenbriar ^e)	577	1.1	Existing
<i>Subtotal</i>	<i>29,769</i>	<i>55.6</i>	<i>N/A</i>
REASONABLY FORESEEABLE			
Metro Air Park	1,892.2	3.5	Approved
Innovation Park	183.7 ^e	0.3	Approved
Panhandle	589.4 ^f	1.1	Approved
Grandpark	5,675.6	10.6	Proposed
Upper Westside	2,066	3.9	Proposed
Airport South Industrial Park	419	0.8	Proposed
SWIFT (Watt EV)	110	0.2	Proposed
<i>Subtotal</i>	<i>10,943.9</i>	<i>20.4</i>	<i>N/A</i>
Total	40,713	76.0	N/A
<p>a. Total acreage of Natomas Basin in 2003 NBHCP is 53,537 acres.</p> <p>b. 1997 land cover was used as the baseline/existing conditions for the 2003 NBHCP's analyses.</p> <p>c. Corresponds to Class I canals in NBHCP.</p> <p>d. Includes both existing and reasonably foreseeable development and development under Metro Air Park HCP. This development acreage value also includes Sutter Pointe, which is located in Sutter County but is within the Natomas Basin.</p> <p>e. Innovation Park project area is included in the list of existing development that is exempt from compliance with the NBHCP.</p> <p>f. 2003 NBHCP provides that upon annexation, the Panhandle project area automatically will be included within the 8,050-acre City of Sacramento Permit Area and covered by the NBHCP.</p> <p>SOURCES: ESA, 2023; City of Sacramento, Sutter County, and Natomas Basin Conservancy, 2003; County of Sacramento, 2023; City of Sacramento, 2022; Helix, 2023; NorthPoint development, 2021; USFWS, 2017.</p>			

Measure AG-1 calls for setting aside approximately 110 acres of existing farmland of local importance with a permanent farmland conservation easement to address conversion of farmland within the project site. Even if this mitigation measure was to be implemented by setting aside 110 acres of farmland of local importance within the Natomas Basin, it would represent only 0.2 percent of the total footprint of the Natomas Basin (or approximately 0.9 percent of the portion of Natomas Basin not already developed or planned for development that potentially may be available for habitat mitigation purposes).

For the purposes of this cumulative effects analysis, it is conservatively assumed that Sacramento County will not stack conservation easements to satisfy requirements under both Mitigation Measure BR-3 and AG-1, even though both inherently involve protection of agricultural land of quality similar to the project site. If implementation of Mitigation Measure BR-3 and AG-1 all took place within the Natomas Basin, it would represent only about 0.4 percent of the total size of the Natomas Basin (or approximately 1.8 percent of the portion of Natomas Basin not already developed or planned for development). Considering the small size of the proposed project and any required habitat mitigation lands, even under the most conservative assumptions, implementation of mitigation measures pursuant to the proposed project would not be expected to conflict with the implementation of the conservation plan of the NBHCP and Metro Air Park HCP. The land that would be required to be set aside from collective implementation of these mitigation measures is very small compared to the size of the overall Natomas Basin and compared to the scale of the full list of cumulative projects; for context, Grandpark alone represents 24 percent³ of the total footprint of Natomas Basin not already developed. Because the proposed project's contribution to a significant cumulative conflict with existing approved conservation plans is both absolutely and comparatively small, it is less than cumulatively considerable, and therefore the cumulative impact associated with the proposed project with respect to a conflict with conservation plans would be **less than significant**.

CLIMATE CHANGE

GEOGRAPHIC CONTEXT

Prominent greenhouse gases (GHGs) contributing to the greenhouse effect are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Human-caused emissions of these GHGs in excess of natural ambient concentrations have been found to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. Climate change is a global problem caused by global pollutants and is inherently cumulative. Therefore, the cumulative setting for climate change is global, and there is an existing adverse cumulative condition.

³ This percentage is made on the calculation that Grandpark will develop 5,675.60 acres of land and that there is 23,768 acres of Natomas Basin not already developed (i.e., 53,537 of the total Natomas Basin minus existing development of 29,769 acres).

CUMULATIVE IMPACTS EVALUATION

The proposed project would result in the production of GHG emissions during construction activities and throughout the operational period of the project due to vehicle use, energy use, waste generation, water treatment and distribution, and other area sources. As discussed in Chapter 8, *Climate Change*, the project would result in less than significant impacts with the incorporation of SMAQMD recommended BMPs and considering the continuation of GHG reducing State regulations. Although an existing cumulative adverse condition exists, the proposed project would not result in a cumulatively considerable contribution to an existing adverse cumulative condition, and the cumulative impact associated with the proposed project with respect to GHG emissions would be **less than significant**.

CULTURAL RESOURCES

GEOGRAPHIC CONTEXT

The geographic context for the analysis of cumulative effects related to cultural resources is the project site and the immediate vicinity (within 0.5 miles of the project site) as property types are similar in a given area in relation to the people who once lived and utilized the region, and thus would contain similar types of resources.

CUMULATIVE IMPACTS EVALUATION

Cumulative development in the vicinity could result in significant cumulative impacts to historical architectural resources, archaeological resources, and human remains, as numerous resources have been identified in the vicinity according to the Native American Heritage Commission's Sacred Lands File and North Central Information Center database. Projects in the vicinity, including projects in Natomas Basin (see Table CI-1 and Plate CI-1), could have a significant impact on historical resources, archaeological resources, and human remains. However, each individual project is subject to review under CEQA and is required to obtain necessary permits and approvals from federal and state resource agencies. As a result of these processes, each project would be required to avoid, minimize, and compensate for impacts on cultural resources, such that the cumulative impact would be reduced, though not completely eliminated. However, because not all such impacts from these other projects have been or can be reduced with certainty to less-than-significant levels, the loss of any eligible cultural resources would result in a significant cumulative impact.

As discussed in Chapter 9, *Cultural Resources*, there are no historical architectural resources on the project site and the areas associated with the offsite improvements (i.e., roadway improvements, power line extension, etc.). Furthermore, while the results of the background research and survey effort completed for the project site and the areas associated with the offsite improvements (i.e., roadway improvements, power line extension, etc.) did not identify any cultural materials or other evidence of past human use or occupation, the potential of encountering unanticipated archaeological resources, including human remains, during ground disturbing activity does still remain, and thus construction of the proposed project could affect these resources. However, with implementation of Mitigation Measure CR-1, which outlines steps to take to protect

unanticipated archaeological resources, including human remains, if they are discovered during ground disturbing activities and requires cultural awareness training for construction workers, and Mitigation Measure CR-2, which requires the presence of a tribal monitor on the project site during ground disturbing activities, the contribution of the proposed project to impacts on archaeological resources, including human remains, in the vicinity of the project site, would not be cumulatively considerable, and thus the cumulative impact associated with the proposed project with respect to archaeological resources, including human remains, would be **less than significant**.

ENERGY

GEOGRAPHIC CONTEXT

The geographic context for the analysis of cumulative effects related to energy includes the service areas of the local electricity and natural gas providers, Sacramento Municipal Utility District (SMUD) and Pacific Gas & Electric (PG&E), respectively.

CUMULATIVE IMPACTS EVALUATION

The proposed project would use energy resources during construction and operation; therefore, it could contribute to potential cumulative impacts during these phases. In addition, continued growth in the Sacramento area and throughout SMUD's and PG&E's service areas could contribute to ongoing increases in demand for electricity and natural gas, which are discussed below.

ENERGY DEMAND

Cumulative development in the Natomas Basin (see Table CI-1 and Plate CI-1), the county of Sacramento, and the service areas for SMUD and PG&E in general could cumulatively contribute to ongoing increases in demand for electricity and natural gas. These anticipated increases would be countered in part by ongoing increases in national, statewide, and local requirements and incentives to support construction or retrofit of buildings with increased energy efficiency.

For electricity, overall supply during most conditions is adequate; therefore, there is no existing significant adverse condition that would be worsened or intensified by the project. However, as demand continues to increase in SMUD's service area, temporary shortfalls could occur in SMUD's system (and other portions of the statewide grid) during temporary periods of high peak demand. Peak demands occur in the region during the summer's hot weather conditions when people run their air conditioners. In the future, electrification of buildings and increased use of electricity as a transportation fuel would add to SMUD's peak demand.

With an increasing number of hot-weather days and the move toward electrification of buildings, meeting demand during peak periods is a key planning consideration for the utility. SMUD is actively planning to offset growth in peak demands by encouraging and deploying energy efficiency and conservation measures within its service area. Through a combination of increases in efficiency and deployment of power management strategies, including power imports during peak periods, SMUD expects to maintain

sufficient capacity to provide power to its service area, including development allowed under the proposed project, at least through 2050 (SMUD, 2019). More importantly, with the addition of on-site PV generation to satisfy EV charging demand, the project would generate more renewable solar energy than the total energy consumed which would be stored in the on-site battery storage facility. Therefore, on an annualized basis, the contribution of the proposed project to a potential cumulative impact with respect to electrical supply and capacity would not be cumulatively considerable.

With respect to natural gas, PG&E sources natural gas from a combination of producers and suppliers located in Canada and the U.S. Existing and planned infrastructure is anticipated to be sufficient to maintain service to development allowed under the proposed project and to other cumulative scenario projects (PG&E, 2023). Regardless, natural gas service would not be extended to the project site. Therefore, the proposed project would not contribute to a potential cumulative impact with respect to natural gas supply and capacity.

Regarding the efficiency of fuel use during construction and operation, there is no existing significant adverse condition (such as a shortage) that would be worsened or intensified by the project. The proposed project is designed to support electrically fueled vehicles and the vast majority of the vehicle trips generated would not result in combustion of gasoline or diesel fuel. Cumulative development in the Natomas Basin (see Table CI-1 and Plate CI-1) could require gasoline or diesel fuel but would not combine with the limited fuel demands of the proposed project from employee trips and pass-by trips for the proposed convenience store, to cause a significant adverse cumulative impact relating to the wasteful, inefficient, or unnecessary consumption or use of fuel. In the event of a future shortage, higher prices at the pump would curtail unnecessary trips that could be termed “wasteful” and would moderate choices regarding vehicles, equipment, and fuel efficiency. Under these conditions, the proposed project would not contribute to a potential cumulative impact with respect to the efficiency of fuel use.

In summary, cumulative impacts on energy resources would not be significant, and the contribution of the proposed project would not be cumulatively considerable. As such, the cumulative impact associated with the proposed project would be **less than significant**.

HAZARDS AND HAZARDOUS MATERIALS

GEOGRAPHIC CONTEXT

The geographic context for the analysis of cumulative hazards and hazardous materials effects encompasses and is limited to the project site and the immediately-adjacent area. This is because impacts relative to hazards and hazardous materials impacts are generally site-specific. For example, the effect of hazardous materials spills would tend to be limited to the localized area of a project and could only be cumulative if hazardous materials spills occurred as the result of two or more adjacent projects that spatially overlapped. The geographic context for safety hazards to an airport is two miles.

CUMULATIVE IMPACTS EVALUATION

ROUTINE TRANSPORT, USE, OR DISPOSAL OF HAZARDOUS MATERIALS OR ACCIDENTAL RELEASE OF HAZARDOUS MATERIALS; BEING LOCATED ON A HAZARDOUS MATERIALS SITE

The construction activities for cumulative development in the Natomas Basin (see Table CI-1 and Plate CI-1) would be subject to the same regulatory requirements discussed for the project for compliance with existing hazardous materials regulations, including spill response during construction and being located on sites with residual contamination from previous land uses. Projects that have spills of hazardous materials and/or residual contamination from previous land uses would be required to remediate their respective sites to the same established regulatory standards as the proposed project. This would be the case regardless of the number, frequency, or size of the release(s). The responsible party associated with each spill would be required to remediate site conditions to the same established regulatory standards. The residual less-than-significant effects of the proposed project that would remain after compliance with existing regulations would not combine with the potential residual effects of cumulative projects to cause a potential significant cumulative impact because residual impacts would be highly site-specific, would not spatially overlap, and would be below regulatory standards. For the above reasons, the proposed project in combination with projects proposed in the vicinity of the project site would not cause or contribute to a cumulatively considerable impact with respect to the use of hazardous materials, and thus the cumulative impact associated with the proposed project would be **less than significant**.

SAFETY HAZARD FROM AN AIRPORT

As discussed in Chapter 11, *Hazards and Hazardous Materials*, the proposed project would be required to comply with FAA regulations regarding the airspace protection surface and glare. Similarly, cumulative development in the Natomas Basin (see Table CI-1 and Plate CI-1) would be required to evaluate whether they are located within the safety zones of Sacramento International Airport. If so, structures proposed for construction would be required to comply with height restrictions to not extend into the airspace protection surface. Cumulative projects would also be required to conduct a glare analysis to ensure that glare does not adversely affect aircraft pilots. For the above reasons, the project in combination with cumulative projects would not cause or contribute to a cumulatively considerable impact with respect to the proximity to airports, and thus the cumulative impact associated with the proposed project would be **less than significant**.

IMPAIR IMPLEMENTATION OF OR PHYSICALLY INTERFERE WITH AN EMERGENCY OPERATIONS PLAN

Construction for two or more projects that occur at the same time and use the same roads could cause interference with emergency access. However, construction vehicles for the Sacramento International Airport would use the four-lane I-5 and then Airport Boulevard, whereas the project would use I-5 and then Bayou Way. Neither project would require lane closures or restrictions of I-5. Consequently, the proposed project in combination with cumulative development in the Natomas Basin (see Table CI-1 and Plate CI-1) would not cause or contribute to a cumulatively significant impact with

respect to emergency access, and thus the cumulative impact associated with the proposed project would be less than significant.

HYDROLOGY AND WATER QUALITY

GEOGRAPHIC CONTEXT

The geographic context for the analysis of most cumulative hydrology and water quality impacts encompasses and is limited to the project site and its immediately adjacent area (i.e., one-half mile of the project site). This is because impacts relative to hydrology and water quality impacts are generally site-specific. For example, the effect of erosion would tend to be limited to the localized area of a project and could only be cumulative if erosion occurred as the result of two or more adjacent projects that spatially overlapped. However, the geographic context for cumulative effects to groundwater supplies and recharge is the Sacramento Valley-North American Subbasin, which covers 351,000 acres that span across portions of Sutter, Placer, and Sacramento counties.

CUMULATIVE IMPACTS EVALUATION

WATER QUALITY STANDARDS AND WASTE DISCHARGE REQUIREMENTS

Like the proposed project, the construction activities for all cumulative development in the Natomas Basin (see Table CI-1 and Plate CI-1) would be subject to the same hydrology and water quality regulatory requirements discussed in Chapter 12, *Hydrology and Water Quality*. Construction sites would be required to prepare and implement Stormwater Pollution Prevention Plans in compliance with the state Construction General Permit and local erosion control regulations to prevent runoff and manage hazardous materials on construction sites. Cumulative development in rural areas would be required to design onsite wastewater treatment systems in compliance with the County regulations described in the Onsite Wastewater Treatment System Guidance Manual. Cumulative development in urban areas would be required to be designed in compliance with regional municipal stormwater permit requirements that require that stormwater be captured and treated. With compliance with existing regulations, the construction and operation of the proposed project and cumulative development would not cause or contribute to a cumulatively considerable impact with respect to hydrology and water quality impacts, and therefore the cumulative impact associated with the proposed project would be **less than significant**.

GROUNDWATER SUPPLY

As discussed in Chapter 12, *Hydrology and Water Quality*, the Sacramento Valley Groundwater Basin, North American Subbasin, is a high-priority subbasin, though not one in a condition of critical overdraft. The proposed project and the cumulative development in the Natomas Basin (see Table CI-1 and Plate CI-1) are located within this subbasin. The City of Sacramento, which would supply water to the project site, acquires its water supply from a combination of surface water, groundwater, occasional temporary uses of imported water, and small amounts of recycled water. Similar to the proposed project, cumulative development would be required to quantify their water demand and apply for that supply to the City. The City would conduct a Water Supply Assessment to assess whether the requested water demand is accounted for in their

Urban Water Management Plan. If accounted for, cumulative development would not have an adverse impact on water supplies. If not accounted for, cumulative development would be denied. In either case, with compliance with existing water supply regulations, the proposed project and cumulative development that would be served by the City of Sacramento would not cause or contribute to a cumulatively considerable impact with respect to water supplies, and thus the cumulative impact associated with the proposed project would be **less than significant**.

GROUNDWATER RECHARGE

As discussed in Chapter 12, *Hydrology and Water Quality*, the proposed project would add new impervious surface. The project design would include a stormwater system that would capture and route stormwater to vegetated swales, which would replace the infiltration that would be lost to the new impervious surfaces. Stormwater would then be directed to existing drainage ditches and canal, as it does now. Similarly, cumulative development would also be required by the Regional Stormwater Permit to capture stormwater and return the same volume or more to infiltration. With compliance with the Regional Stormwater Permit, the proposed project and cumulative development would not cause or contribute to a cumulatively considerable impact with respect to recharge, and thus the cumulative impact associated with the proposed project would be **less than significant**.

DRAINAGE PATTERNS

As discussed above in the cumulative impacts analyses for water quality and recharge, like the proposed project, cumulative development in the Natomas Basin (see Table CI-1 and Plate CI-1) would also be required to capture and control stormwater in compliance with the Regional Stormwater Permit. The project designs would be required to prevent erosion, siltation, increases in runoff, and redirection or impedance of flood flows. With compliance with the Regional Stormwater Permit, the proposed project and cumulative development would not cause or contribute to a cumulatively considerable impact with respect to drainage patterns, and thus the cumulative impact associated with the proposed project would be **less than significant**.

RELEASE OF POLLUTANTS IN A FLOOD HAZARD ZONE

As discussed above in the cumulative impacts analyses for water quality, recharge, and drainage patterns, like the proposed project, cumulative development in the Natomas Basin (see Table CI-1 and Plate CI-1) would also be required to capture and control stormwater in compliance with the Regional Stormwater Permit. The project designs would be required to prevent adverse effects related to flood flows. In addition, as discussed in Chapter 11, *Hazards and Hazardous Materials*, the proposed project and cumulative development would be required to transport, storage, use, and dispose of hazardous materials in accordance with applicable federal, State, and local laws and regulations. Finally, and as discussed in Chapter 12, *Hydrology and Water Quality*, the proposed project and cumulative development are in designated Zone A floodplains within the Natomas Basin. However, levees are also in place and are designed to protect the Natomas Basin from the 100-year flood event. Furthermore, the Natomas Levee Improvement Project is ongoing and by 2025 will have improved the level of

protection to the 200-year flood event. For these reasons, the proposed project and cumulative development would not cause or contribute to a cumulatively considerable impact with respect to the release of pollutants in a flood hazard zone, and thus the cumulative impact associated with the proposed project would be **less than significant**.

WATER QUALITY AND GROUNDWATER PLANS

As discussed above in the cumulative impacts analyses for water quality, recharge, drainage patterns, and the release of pollutants in flood hazard zones, the proposed project and cumulative development in the Natomas Basin (see Table CI-1 and Plate CI-1) would both be required to capture and treat stormwater to prevent impacts to water quality and to maintain the level of infiltration of stormwater into the subsurface at current levels. Compliance would ensure that the operation of the proposed project and cumulative development would be consistent with water quality and groundwater plans, and thus the cumulative impact associated with the proposed project would be **less than significant**.

LAND USE

GEOGRAPHIC CONTEXT

The geographic context for the analysis of cumulative impacts related to land use is the Natomas Basin, which includes unincorporated areas within Sacramento and Sutter counties and incorporated areas within the City of Sacramento. Specifically, the analysis of cumulative impacts related to land use considers the incremental effects of the proposed project combined with cumulative development identified in Table CI-1 and shown in Plate CI-1.

As discussed in Chapter 13, *Land Use*, while an EIR may provide information regarding land use and planning issues, CEQA does not consider inconsistency with land use plans and policies to be a physical effect on the environment unless the plan or policy was adopted for the purpose of avoiding or mitigating a significant environmental effect. Physical effects on the environment that could result from construction and operation of the proposed project, combined with cumulative projects, are evaluated and disclosed in the appropriate topical sections of this chapter.

CUMULATIVE IMPACTS EVALUATION

CONFLICT WITH APPLICABLE PLANS, POLICIES, OR REGULATIONS

The proposed project, in combination with cumulative development in the Natomas Basin, particularly development on presently non-urbanized lands and unincorporated areas within Sacramento and Sutter counties and incorporated areas within the City of Sacramento, would change land uses within and in the vicinity of the project site. As described in Chapter 2, *Project Description*, buildout of the proposed project would convert 110 acres of undeveloped grassland on the project site to a publicly accessible Electric Vehicle (EV) charging facility with related structures. The proposed project and the cumulative development would result in the conversion of largely undeveloped land to urban uses. However, all development, including the proposed project, must be reviewed for consistency with applicable land use plans, policies, and regulations in

accordance with the requirements of CEQA, all of which require findings of plan and policy consistency prior to approval of entitlements for development. These requirements would ensure that project-specific and cumulative impacts related to conflicts with applicable plans, policies, or regulations would be **less than significant**.

NOISE

GEOGRAPHIC CONTEXT

The geographic scope for cumulative effects on noise and vibration would consist of an area approximately 900 feet around the perimeter of the project site. This distance was selected because typical construction noise levels can affect a sensitive receptor at a distance of 900 feet if there is a direct line-of-sight between a noise source and a noise receptor (i.e., a piece of equipment generating 85 dBA would attenuate to 60 dBA over a distance of 900 feet). An exterior noise level of 60 dBA will typically attenuate to an interior noise level of 35 dBA with the windows closed and 45 dBA with the windows open. Because construction noise usually generates the highest noise levels for a commercial development project, such as the proposed project, this geographical scope (distance) may also be conservatively applied to operational impacts.

CUMULATIVE IMPACTS EVALUATION

EXCEEDANCE OF ESTABLISHED NOISE STANDARDS

CONSTRUCTION

Of the cumulative development listed in Table CI-1 and shown in Plate CI-1, there are three projects that are within the 900-foot geographic scope for noise and vibration analysis: 2022 Airport Master Plan Update, Metro Air Park, and Airport South Industrial Park. According to the 2022 Airport Master Plan Update, commercial and parking uses are planned on parcels adjacent to the west of the project site. However, according to the update, development of these parcels is not expected until 2034-2038. Next, the Metro Air Park project will construct industrial, manufacturing, distribution, and commercial uses on 1,320 acres located approximately 620 feet northeast of the project site, across I-5. Finally, the Airport South Industrial Park project will construct 6.6 million square feet (sf) of industrial use on 408 acres and 100,000 sf retail/commercial use, including a 61,000-sf hotel/hospitality, on 11 acres approximately 600 feet east of the project site, across Power Line Road.

As the proposed project is expected to be constructed and operational by 2025, noise generated during project construction would not combine with noise generated during the construction of adjacent parcels to the west within the Airport Master Plan area as construction on these parcels is not anticipated to commence until 2034 at the earliest according to the 2022 Airport Master Plan Update.

With respect to the two remaining projects, the proposed project could contribute to cumulative noise in the area if these projects undergo construction simultaneously with the proposed project. However, the Metro Airpark project is located north of I-5 and would be over 3,000 feet from the nearest sensitive receptor to the proposed project,

southeast of the solar farm on the project site. Additionally, as discussed in Chapter 14, *Noise*, with compliance with the Sacramento County Code and General Plan policies, the contribution of noise generated during project construction would not be a significant noise impact. Consequently, given the substantial distance of the Metro Airpark project from the nearest receptor, the construction noise generated by either of the proposed project or Metro Airpark project would not be cumulatively considerable.

The western extent of the Airport South Industrial Park project would extend south from I-5 along Power Line Road to the agricultural channel which is located within 400 feet of a lone existing residence to the south. Unlike the proposed project that would construct solar arrays to the west of this area, development of the Airport South Industrial Park could result in construction of industrial buildings which could require more intensive construction over a longer period of time. However, the Airport South Industrial project would adhere to the requirements established in City of Sacramento Municipal Code Section 6.68.080(D), which offers an exemption for construction noise provided that the activities do not occur during noise sensitive hours. Accordingly, the construction noise generated by either the proposed project or Airport South Industrial project would not be cumulatively considerable.

Based upon these considerations, construction equipment operations from multiple construction projects happening simultaneously in close proximity are unlikely to combine to create a cumulative noise impact, and the cumulative noise impact associated with the proposed project during construction would be **less than significant**.

STATIONARY SOURCES

As discussed above, of the projects listed in Table CI-1 and shown in Plate CI-1, there are three projects that are within the 900-foot geographic scope for noise and vibration analysis: 2022 Airport Master Plan Update, Metro Air Park, and Airport South Industrial Park.

Parking lot uses proposed under the 2022 Airport Master Plan Update would not include stationary noise sources and would not be expected to generate substantial increase in operational noise, given the presence of traffic on the adjacent I-5. Similarly, stationary noise sources such as HVAC equipment for the Metro Air Park project would be located north of I-5 and would be over 3,000 feet from the nearest sensitive receptor to the proposed project, and hence would also not be expected to generate substantial increase in operational noise.

The western extent of the Airport South Industrial Park project would extend south from I-5 along Power Line Road to the agricultural channel which is located within 400 feet of a lone existing residence to the south. Industrial uses associated with this development could reasonably be expected to include HVAC or other mechanical equipment noise.

Of the stationary source impacts evaluated in the assessment for the proposed project, the noisiest sources would be mechanical equipment, which would be located approximately 2,800 feet from the nearest sensitive receptor to the proposed project,

southeast of the solar farm on the project site. This source would generate noise levels of 33 dBA which is well below the County's exterior noise standard of 60 dBA and would not result in a cumulatively considerable contribution to operational noise that may be generated by development of the Airport South Industrial Park project. Therefore, the cumulative impact associated with the proposed project with respect to noise from stationary noise sources would be **less than significant**.

TRAFFIC

The cumulative traffic noise analysis considers all the roadways analyzed in the transportation analysis. The operational noise impacts of the proposed project would result primarily from increased traffic on the local roadway network. Cumulative with project traffic data were used to estimate cumulative noise increases.

EXISTING ROADWAYS

The significance of cumulative impacts related to traffic noise levels on existing roadways is determined using a two-step process. First, similar to the project-level assessment of traffic impacts, the increase in noise levels between cumulative conditions with the project and existing baseline conditions is compared to an incremental 3 dBA or 5 dBA threshold, as applicable based on the existing noise level. If the roadside noise levels exceed this incremental threshold, a significant cumulative noise impact is identified.

The second step of the analysis of cumulative roadside noise impacts (if a significant cumulative noise impact is predicted based on the above methodology) is to evaluate whether the contribution of the project to roadside noise levels would be cumulatively considerable. This second step (if necessary) involves assessing whether the project's contribution to roadside noise levels (i.e., the difference between cumulative conditions and cumulative plus project conditions) would exceed a 1.5 dBA incremental contribution; this is a threshold that is considered to be cumulatively considerable. The 1.5 dBA increase used to represent a cumulatively considerable contribution is conservatively based on the minimum increase identified as potentially significant by FICON (see Table NOI-9). Except in carefully controlled laboratory experiments, a change of 1 dB cannot be perceived (Caltrans, 2013). Consequently, a cumulatively considerable contribution would reasonably be more than 1 dBA.

The roadway segments analyzed and the results of the noise increases resulting from modeling are shown in **Table CI-3** for cumulative plus full buildout of the proposed project. As shown in Table CI-3, there would be **no cumulative impact** related to traffic noise.

TRANSPORTATION

GEOGRAPHIC CONTEXT

The geographic context for the analysis of cumulative transportation effects is the immediate vicinity of nearby and similar project locations where impacts to the setting of transportation could occur.

Table CI-3: Cumulative Plus Project Predicted Traffic Noise Levels

Roadway Segment	Existing (dBA Ldn ¹)	Cumulative without Project (dBA Ldn ¹)	Cumulative With Project (dBA Ldn ¹)	Combined Effects	Incremental Effects	Cumulatively Significant Impacts
				dBA Difference: Existing and Cumulative with Project	dBA Difference: Cumulative and Cumulative with Project	
BAYOU WAY						
Airport Boulevard and Power Line Road	52.7	52.8	56.3	3.6	3.5	No ²
Power Line Road and Metro Air Parkway	50.5	50.5	53.4	2.9	2.9	No
<p>NOTES: dBA = A-weighted decibels; Ldn = day-night average noise level.</p> <p>1. dBA Ldn at 100 feet from the roadway centerline. The actual sound level at any receptor location is dependent upon such factors as the source- to-receptor distance and the presence of intervening structures, barriers, and topography.</p> <p>2. Cumulative plus Project noise levels would remain below the 65 dBA Ldn traffic noise threshold. Also, only industrial receptors are located along this segment.</p> <p>SOURCE: Based on traffic data within the Traffic Evaluation, prepared by Kimley-Horn, 2024. Refer to Appendix A of the Kimley-Horn Study for traffic noise modeling assumptions and results.</p>						

CUMULATIVE IMPACTS EVALUATION

PROGRAM, PLAN, ORDINANCE OR POLICY ADDRESSING THE CIRCULATION SYSTEM

Similar to the proposed project, cumulative development in the Natomas Basin (see Table CI-1 and Plate CI-1) would be required to be determined consistent with relevant programs, plans, ordinances, or policies related to transportation facilities, including policies found in the County's General Plan. As discussed in Chapter 15, *Transportation and Circulation*, the proposed project would not conflict with General Plan policies centered on creating a connective and accessible roadway network that promotes efficient vehicular transport, while also promoting alternative modes of travel, including bicycling and walking. Therefore, to the extent that a cumulative impact would occur in regard to consistency with any of these programs, plans, ordinances, or policies, the contribution of the proposed project to this impact would not be cumulatively considerable, and the cumulative impact associated with the proposed project would be **less than significant**.

VEHICLE MILES TRAVELED

Although the State has enacted laws aimed at encouraging transit-oriented and infill land use planning and development, Californians continue to drive more, and mostly drive alone, which is creating challenges for the State in meeting 2030 and 2045 GHG emissions reduction mandates that are the objective of established VMT thresholds (CARB, 2022). Therefore, the cumulative VMT impact is significant.

As discussed in Chapter 15, *Transportation and Circulation*, due to the nature of the proposed project as an electric vehicle charging stop for both passenger electric vehicles and commercial electric truck and its location along the regional highway system, project trips are anticipated to be primarily pass-by and diverted-link trips from electric vehicle (EV) passenger cars (in the near-term) and trucks (in the long-term) already traveling on I-5 from origins or to destinations within the Sacramento region, and thus the proposed project is not expected to generate a substantial amount of VMT. Moreover, the amount of building space associated with the proposed project meets the screening criteria found in the County's Transportation Analysis Guidelines for local serving retail, and thus it is expected that the proposed project would result in a less than significant impact with respect to VMT. For these reasons, to the extent that a cumulative impact would occur in regard to VMT, the contribution of the proposed project to this impact would not be cumulatively considerable, and thus the cumulative impact associated with the proposed project would be **less than significant**.

HAZARDS DUE TO DESIGN OR INCOMPATIBLE USES

CONSTRUCTION

Similar to the proposed project, given the size and scale of cumulative development in the Natomas Basin (see Table CI-1 and Plate CI-1) and the basin's rural setting, the temporary addition of oversize vehicles, haul trucks and worker vehicles to the local roadway network during the construction of these projects could increase traffic hazards. As discussed in Chapter 15, *Transportation and Circulation*, the proposed project would implement Mitigation Measure TR-1, which requires the preparation of a

construction traffic control plan to reduce potential hazards on local rural roadways. As a result, the contribution of the proposed project to traffic hazards during construction would not be cumulatively considerable, and thus the cumulative impact associated with the proposed project would be **less than significant**.

OPERATION

ROADWAY SAFETY/DESIGN STANDARDS

As discussed in Chapter 15, *Transportation and Circulation*, Bayou Way is a substandard rural roadway (i.e., less than 24 feet of pavement width and less than six foot shoulder), and according to the County's Transportation Analysis Guidelines a significant impact on a substandard rural roadway would occur if a proposed project caused the average daily traffic volume of the roadway to exceed 6,000 daily vehicles. The daily trip volume along Bayou Way between Airport Boulevard and Power Line Road and between Power Line Road and Metro Air Parkway under cumulative conditions with the proposed project would be 4,955 and 2,540 vehicles (Kimley-Horn, 2024), respectively, and thus the combination of project and cumulative traffic would not cause a substandard rural roadway to exceed the County's significance threshold. Therefore, the cumulative impact associated with the proposed project with respect to roadway safety/design standards hazards would be **less than significant**.

INTERSECTION QUEUEING

As discussed in Chapter 15, *Transportation and Circulation*, a queuing study was conducted to evaluate the capacity of the turn lanes at the study intersections. None of the queues at study area intersections are anticipated to exceed their available storage under cumulative conditions plus project conditions except for one. While the reported westbound left queueing at the intersection of Metro Air Parkway and I-5 Northbound Ramps under both Cumulative (2040) and Cumulative (2040) plus Project conditions are deficient, guidance from the *California Highway Design Manual* indicates that the measured length of the northbound off-ramp from intersection stop bar to striped gore⁴ on I-5 provides sufficient decision sight distance for a vehicle traveling 60 mph to stop prior to reaching the back of queue (Kimley-Horn, 2024). As a result, the cumulative impact associated with the proposed project with respect to queueing hazards is considered **less than significant**.

EMERGENCY ACCESS

Similar to the proposed project, cumulative development in the Natomas Basin (see Table CI-1 and Plate CI-1) would be required to comply with applicable fire code requirements for emergency evacuation, including proper emergency exits for residents, visitors, and employees. Further, individual buildings proposed within each cumulative project would be subject to the review and approval of access and circulation plans by the fire department with jurisdiction over the project site. Therefore, the cumulative

⁴ A gore is a triangular-shaped zone painted with several white lines that separates the entrance ramp from the lanes of the highway and indicates to the driver when it is safe or legal to switch lanes and join the other traffic on the road.

impact associated with the proposed project with respect to emergency access would be **less than significant**.

TRIBAL CULTURAL RESOURCES

GEOGRAPHIC CONTEXT

The geographic context for the analysis of cumulative effects related to tribal cultural resources is the project site and immediate vicinity (within 0.5 miles of the project site) as property types are similar in a given area in relation to the people who once lived and utilized the region, and thus would contain similar type of resources.

CUMULATIVE IMPACTS EVALUATION

Cumulative development in portions of the Central Valley identified as the territory of the local Native American communities could result in significant cumulative impacts to tribal cultural resources as confidential tribal cultural resource locations, including ethnographic landscapes and pre-contact archaeological resources, have been identified in the vicinity according to the Native American Heritage Commission's Sacred Lands File and North Central Information Center database. Cumulative development in the Natomas Basin (see Table CI-1 and Plate CI-1) would be subject to review under CEQA and is required to obtain necessary permits and approvals from federal and state resource agencies. As a result of these processes, each project would be required to avoid, minimize, and compensate for its impacts on tribal cultural resources in consultation with Native American tribes, such that the cumulative impact would be reduced, though not completely eliminated. Because not all such impacts from these other projects have been or can be reduced with certainty to less-than-significant levels, the loss of any tribal cultural resources would result in a significant cumulative impact.

As discussed in Chapter 16, *Tribal Cultural Resources*, no cultural materials were identified in the project site and the areas associated with offsite improvements (i.e., roadway improvements, power line extension, etc.) as a result of the records search or survey effort. However, due to the cultural resource sensitivity of the area, there is the possibility of uncovering buried resources when ground disturbance is proposed, and thus construction of the proposed project could negatively affect these resources. However, with implementation of Mitigation Measure CR-1, which outlines steps to take to preserve unanticipated archaeological resources, including human remains, if they are discovered during ground disturbing activities and requires cultural awareness training for construction works, and Mitigation Measure CR-2, which requires the presence of a tribal monitor on the project site during ground disturbing activities, the contribution of the proposed project to impacts on tribal cultural resources in the vicinity of the project site would not be cumulatively considerable, and thus the cumulative impact associated with the proposed project with respect to tribal cultural resources would be **less than significant**.

UTILITIES

GEOGRAPHIC CONTEXT

The geographic context for the analysis of cumulative effects related to utilities and service systems varies depending on the specific utility and service system being analyzed. To begin, the geographic context for water supply, treatment, and distribution includes the water service area for the City of Sacramento, which includes most of the land within the city limits as well as small pockets of land adjacent to the city limits. Next, the geographic context for wastewater treatment, collection and conveyance includes the service areas of the Sacramento Regional Sanitation District (Regional San), which treats most of the wastewater generated in the region at its Sacramento Region Wastewater Treatment Plant (SRWWTP), and the Sacramento Area Sewer District (SASD), which conveys most of the wastewater generated in the region for treatment. Next, the geographic context for storm drainage includes the area covered by the North Natomas Drainage Basin, which covers approximately 55,000 acres in northwestern Sacramento County and southeast Sutter County. Next, the geographic context for solid waste includes incorporated cities and unincorporated portions of Sacramento County that utilize the Kiefer Landfill. Finally, the geographic context for energy and telecommunications facilities storm drainage includes the service area covered by SMUD, PG&E, and the telecommunications providers.

CUMULATIVE IMPACTS EVALUATION

WATER, WASTEWATER, DRAINAGE, ENERGY AND TELECOMMUNICATIONS INFRASTRUCTURE

As with the proposed project, cumulative development in the Natomas Basin (see Table CI-1 and Plate CI-1) would require the construction of necessary infrastructure (water and wastewater lines, storm drain facilities, electrical, natural gas, telecommunications infrastructure, etc.). As discussed in Chapter 17, *Utilities*, while water, wastewater, drainage and telecommunications infrastructure needed to serve the proposed project would be limited to the project site, a 69 kV powerline would need to be extended from the proposed substation onsite to SMUD distribution infrastructure along Power Line Road. The environmental impacts associated with the construction of proposed project infrastructure, including offsite infrastructure, have been considered throughout the technical chapters of this Supplement to the 2022 Airport SEIR, including Chapter 5, *Agricultural Resources* (see pages 5-5 to 5-9), Chapter 6, *Air Quality* (see pages 6-22 to 6-33), Chapter 7, *Biological Resources* (see pages 7-28 to 7-57), Chapter 9, *Cultural Resources* (see pages 9-8 to 9-13), Chapter 12, *Hydrology and Water Quality* (see pages 12-12 to 12-19), Chapter 14, *Noise* (see pages 14-19 to 14-33), and Chapter 16, *Tribal Cultural Resources* (see pages 16-5 to 16-8). Project-specific mitigation measures for construction identified for each topical issue would reduce potential significant impacts associated with construction of utilities infrastructure. Therefore, the proposed project would not have a cumulatively considerable contribution to a significant cumulative impact associated with construction of utility infrastructure, and the cumulative impact associated with the proposed project is **less than significant**.

WATER DEMAND AND TREATMENT

The proposed project, in combination with future growth within the water service area of the City of Sacramento, which includes projects listed in Table CI-1 and shown on Plate CI-1, would result in a net increase in demand for potable water supply. As discussed in Chapter 17, *Utilities*, the City's surplus water supply is projected to range from 224,768 AFY in 2025 to 216,258 AFY in 2045 during normal, single dry year and over multiple-dry-years and droughts up to five years. Thus, the City of Sacramento would have adequate planned water supply to serve development with the City's water service area, including the proposed project, during normal, single dry, and multiple dry years. Therefore, the cumulative impact associated with the proposed project would be **less than significant**.

Furthermore, the proposed project, in combination with future growth within the water service area of the City of Sacramento, which includes some of the projects listed in Table CI-1, would also result in a net increase in demand for water treatment at the City's E.A. Fairbairn Water Treatment Plant and Sacramento River Water Treatment Plant. As discussed in Chapter 17, *Utilities*, both water treatment plants have a combined excess capacity of 240 and 250 mgd. As a result, it is expected that this excess capacity would be sufficient to accommodate future development in the City's water service area, including the proposed project, through 2045. Therefore, the cumulative impact associated with the proposed project would be **less than significant**.

WASTEWATER TREATMENT AND CONVEYANCE

As discussed in Chapter 17, *Utilities*, wastewater generated by the proposed project would be treated by an onsite wastewater treatment system consisting of a septic tank, leach field, and conveyance infrastructure. As a result, the proposed project would not combine with future growth within the service areas of Regional San and SASD, which includes some of the projects listed in Table CI-1 and shown on Plate CI-1, to result in a net increase in the amount of wastewater treated by the SRWWTP and conveyed by the SASD. Therefore, **no impact** associated with the proposed project would occur with respect to cumulative burdens placed on wastewater treatment and conveyance.

SOLID WASTE DISPOSAL CAPACITY

The proposed project, in combination with future growth within Sacramento County, which includes some of the projects listed in Table CI-1 and shown on Plate CI-1, would result in a net increase in the amount of solid waste disposed of at the Kiefer Landfill. As discussed in Chapter 17, *Utilities*, the Kiefer Landfill presently has approximately 75 million cubic yards of available capacity and is expected to be operational until 2098. As a result, it is expected that remaining disposal capacity would be sufficient to accommodate future development in Sacramento County for the foreseeable future. In addition, all cumulative projects would also be subject to the same local and State management and reduction statutes and regulations related to solid waste. Therefore, considering the amount of available disposal capacity and required compliance with State and local solid waste standards, enough disposal capacity exists to serve future growth within Sacramento County, including the proposed project, and the cumulative impact associated with the proposed project would be **less than significant**.

19 OTHER RESOURCE TOPICS

INTRODUCTION

Pursuant to CEQA Guidelines Section 15128, this chapter describes the reasons that various possible effects of the proposed project were determined not to be significant, or to have no impact, and, therefore, are not discussed in detail in this Supplement to the 2022 Airport SEIR. These determinations were generally made because the identified environmental resources are not present within or around the project site or because implementation of the proposed project would clearly have no effect with respect to these topical issue areas. Except where otherwise noted and explained, the discussions presented in this chapter summarize the findings of the 2022 Airport SEIR for each topic area and describe how the impacts of the proposed project would differ, as applicable.

GEOLOGY AND SOILS

The 2022 Airport SEIR did not include a chapter discussing geology and soils but identified that impacts related to geology and soils from implementation of the 2022 Master Plan Update would be less than significant (see page 2 of the 2022 Airport Draft SEIR).

In accordance with the required project-level evaluation described in Chapter 1, *Introduction*, of this Supplement to the 2022 Airport SEIR, the following analysis addresses proposed project impacts related to geology and soils.

THRESHOLDS OF SIGNIFICANCE

For purposes of this Supplement to the 2022 Airport SEIR and consistent with the criteria presented in the 2022 Airport SEIR, which is based on Appendix G of the CEQA Guidelines, impacts related to geology and soils may be considered significant if implementation of the proposed project would:

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault
 - Strong seismic ground shaking
 - Seismic-related ground failure, including liquefaction
 - Landslides
- Result in substantial soil erosion or the loss of topsoil;

- Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence (i.e., settlement), liquefaction, or collapse;
- Be located on expansive¹ soil creating direct or indirect substantial risks to life or property;
- Have soils incapable of adequately supporting the use of septic tanks or alternative reclaimed water disposal systems where sewers are not available for the disposal of reclaimed water; and
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

OVERVIEW

The geologic and seismic site conditions for the project site were evaluated as part of a larger geotechnical investigation prepared for proposed commercial development areas located in the southern portion of the Sacramento International Airport property and which included the project site (Engeo, 2018). The information provided below is from that geotechnical report.

The project site is entirely flat and has been used for agricultural purposes since at least 1937. A review of historical aerial photographs suggests the crops have been hay or silage (e.g., ordinary grasses, clovers, alfalfa, vetches, oats, rye, and maize), or grasses and weeds used as silage. Several drainage channels are along the borders with one north-to-south drainage channel bisecting the middle of the project site. Soils consist of fat clay from approximately 2 to 8 feet below ground surface (bgs), underlain by lean clay with varying amounts of sand to approximately 21 feet bgs, underlain by sand to gravelly sand to the maximum depth explored of 50 feet bgs.

There are no active faults passing through or within 24 miles of the project site. However, earthquakes on regional faults could subject the project site to seismic shaking and seismic-induced ground failures (e.g., liquefaction). Laboratory testing and analysis preliminarily indicated that liquefaction-induced settlements would be less than 1 inch under a design earthquake event. The geotechnical investigation concluded this amount of settlement would not require mitigation.

Laboratory testing conducted for the geotechnical investigation indicated that the fat clays in shallow soils on the project site exhibit high to very high shrink/swell potential with variations in moisture content. Expansive soils change in volume with changes in moisture. They can shrink or swell and cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations.

¹ The CBC no longer includes a Table 18-1-B. Instead, Section 1803.5.3 of the CBC describes the criteria for analyzing expansive soils.

The maximum depth of excavation for the proposed project components is expected to be no more than eight feet bgs. The surface and shallow soils are Holocene in age (from the present to 11,700 years ago), meaning the soils within the depth of excavation are likely less than 5,000 years old. The Society of Vertebrate Paleontology (SVP) provides guidance on evaluating paleontological resources and has concluded that soils less than 5,000 years in age would not contain unique paleontological resources (SVP, 2010). Given the highly disturbed nature of the surface soils due to agricultural activities, the young age of the soils, and the shallow depth of proposed excavation, the project site is expected to have no paleontological resources.

IMPACT: ACTIVE FAULTS, SEISMIC SHAKING, OR SEISMIC-INDUCED GROUND FAILURES

As described above, although the project site is not located on an active fault, the project site could be subjected to seismic shaking and could be susceptible to seismic-induced ground failures (e.g., liquefaction). However, the proposed project would be required to comply with the California Building Code (CBC), which requires structures to be designed and constructed to resist minor earthquakes without damage, resist moderate earthquakes without structural damage but with some nonstructural damage, and resist major earthquakes without collapse but with some structural as well as nonstructural damage. In addition, the CBC requires structures to be designed and constructed to address problematic soils (e.g., expansive soils). For these reasons, and like the conclusion reached in the 2022 Airport SEIR, impacts related to active faults, seismic shaking, and seismic-induced ground failures would be **less than significant**.

IMPACT: SOIL EROSION OR LOSS OF TOPSOIL

As described above, the project site is flat with no slopes that could result in erosive runoff. In addition, because the project site is larger than one acre, the proposed project would be required to comply with the state Construction General Permit, which requires the preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP). The Best Management Practices (BMPs) that would be implemented as part of the SWPPP would prevent erosion. For these reasons, and like the conclusion reached in the 2022 Airport SEIR, impacts related to soil erosion, or the loss of topsoil would be **less than significant**.

IMPACT: UNSTABLE GEOLOGIC UNITS OR SOIL

As described above, the project site is not located on unstable geologic units or soil. In addition, the CBC requires project designs to incorporate geotechnical recommendations to address unstable geologic units or soils. For these reasons, and like the conclusion reached in the 2022 Airport SEIR, impacts related to unstable geologic units or soil would be **less than significant**.

IMPACT: EXPANSIVE SOIL

As described above, shallow soils on the project site are expansive. As required by the CBC, the geotechnical investigation provided recommendations to address expansive

soils, including replacement or treatment of expansive soils. For these reasons, and like the conclusion reached in the 2022 Airport SEIR, impacts related to expansive soils would be **less than significant**.

IMPACT: SOILS CAPABLE OF ADEQUATELY SUPPORTING SEPTIC TANKS OR ALTERNATIVE RECLAIMED WATER DISPOSAL SYSTEMS

As discussed in Chapter 2, *Project Description*, wastewater would be discharged to an onsite wastewater treatment system. The system would be constructed in compliance with the Sacramento County Environmental Management Department Liquid Waste Program, which established the regulations in compliance with California Health and Safety Code, Section 101000 et seq. and Sacramento County Code (SCC), Section 2.15.030. The County's Board of Supervisors adopted Chapter 6.32 (On-site Management of Wastewater) of the SCC which regulates onsite wastewater treatment systems. A full set of regulations can be found in the Onsite Wastewater Treatment System Guidance Manual (Sacramento County, 2018). As discussed in the sewer feasibility study prepared for the proposed project (Appendix UT-2), which was peer reviewed by ESA and Sacramento County and determined to be accurate and adequate for inclusion in this Supplement to the 2022 Airport SEIR, soils at the site are expected to be clay and silt loams with moderate to low infiltration rates (Kimley-Horn, 2023). To account for the anticipated infiltration rates, the treatment system would be designed with a septic tank capacity of least 5,080 gallons and a leach field size of 5,080 to 12,700 square feet, depending on the soil type encountered when constructed. The sewer feasibility study also provided two septic tanks and three leach field options to account for the soil types. With compliance with existing regulations, and like the conclusion reached in the 2022 Airport SEIR, impacts related to the disposal of wastewater would be **less than significant**.

IMPACT: PALEONTOLOGICAL RESOURCES OR UNIQUE GEOLOGIC FEATURES

As described above, implementation of the proposed project is not expected to encounter or otherwise affect paleontological resources or unique geologic features. Consequently, and like the conclusion reached in the 2022 Airport SEIR, impacts related to paleontological resources or unique geologic features would be **less than significant**.

MINERAL RESOURCES

The 2022 Airport SEIR did not include a chapter discussing mineral resources but identified that impacts related to mineral resources from implementation of the 2022 Master Plan Update would be less than significant (see page 2 of the 2022 Airport Draft SEIR).

In accordance with the required project-level evaluation described in Chapter 1, *Introduction*, of this Draft **Final** Supplement to the 2022 Airport SEIR, the following analysis addresses proposed project impacts related to mineral resources.

THRESHOLDS OF SIGNIFICANCE

For purposes of this Supplement to the 2022 Airport SEIR and consistent with the criteria presented in the 2022 Airport SEIR, which is based on Appendix G of the CEQA Guidelines, impacts on mineral resources may be considered significant if implementation of the proposed project would:

- Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state; or
- Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

OVERVIEW

Mineral resources present within Sacramento County include sand, gravel, clay, gold, silver, peat, topsoil, lignite, natural gas, and petroleum. However, aggregate (sand and gravel) and natural gas are the principal mineral resources that are currently in production. Aggregate deposits are primarily located in the southeastern portion of the county within the Old American River channel south of Rancho Cordova while natural gas production areas are located in the far southwestern portion of the county in the Delta (Sacramento County, 1993).

The Surface Mining and Reclamation Act (SMARA) of 1975 requires the State Geologist to classify land into Mineral Resource Zones (MRZs) based on the known or inferred mineral resource potential of that land. A majority land in Sacramento County is classified as either MRZ-1, defined as areas where available geologic information indicates that little likelihood exists for the presence of significant mineral resources, and MRZ-3, areas containing mineral occurrences of undetermined mineral resource significance. Only portions of land along the American River corridor and in the center of the County, south of the American River, are classified as MRZ-2, areas where adequate information indicates that significant mineral deposits are present, or where geologic information indicates that significant inferred resources are present (Sacramento County, 2010).

According to the Mineral Land Classification Map of Portland Cement Concrete-Grade Aggregate Resources in Sacramento County (Dupras, 1999a) and the Selected Historic and Active Mining Operations in Sacramento County (Dupras, 1999b), resources published by the CGS, there are no significant mineral resources or active mining operations in or near the project site. Likewise, based on these conditions, the project site has been classified by the State geologist as MRZ-1 (Sacramento County, 2010). Finally, according to information from the Geologic Energy Management Division, no active or inactive natural gas wells are located on the project site (CalGEM, 2022).

IMPACT: LOSS OF AVAILABILITY OF A KNOWN MINERAL RESOURCE OR LOCALLY KNOWN MINERAL RESOURCE SITE

As described above, there are no significant mineral resources or active mining operations on or near the project site and the site is classified as MRZ-1 by the State

geologist. Furthermore, the project site has also not been identified as an area likely to produce natural gas. For these reasons, and like the conclusion reached in the 2022 Airport SEIR, impacts related to mineral resources would be **less than significant**.

POPULATION AND HOUSING

The 2022 Airport SEIR did not include a detailed discussion of population and housing but identified that impacts related to population and housing from implementation of the 2022 Master Plan Update would be less than significant (see pages 2 and 13-3 of the 2022 Airport Draft SEIR).

In accordance with the required project-level evaluation described in Chapter 1, *Introduction*, of this ~~Draft~~ **Final** Supplement to the 2022 Airport SEIR, the following analysis addresses proposed project impacts related to population and housing.

THRESHOLDS OF SIGNIFICANCE

For purposes of this Supplement to the 2022 Airport SEIR and consistent with the criteria presented in the 2022 Airport SEIR, which is based on Appendix G of the CEQA Guidelines, impacts related to population and housing may be considered significant if implementation of the proposed project would:

- Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure); or
- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

OVERVIEW

POPULATION AND POPULATION GROWTH

In 2023, unincorporated portions of Sacramento County had a population of 598,519 people (DOF, 2023). From 2010 to 2023, the population in unincorporated Sacramento County increased by 43,965 people with a growth rate of 7.3 percent. In comparison, population growth in Sacramento County, which includes both incorporated and unincorporated portion of the county, was slightly higher with a rate of 9.8 percent between 2010 and 2023 (DOF, 2021, 2023). It is projected that between 2016 to 2040, that population in the six-county Sacramento region will increase by 26 percent (SACOG, 2019).

EMPLOYMENT

According to the Sacramento County Housing Element of 2021-2029, there were 249,282 jobs in unincorporated Sacramento County in 2017. As shown in Table 12 of the Housing Element, the 2020 Economic Overview for the entire County projects that the educational services, health care, and social assistance industries will be the fastest

growing sectors between 2020 and 2023. The COVID-19 pandemic has increased the unemployment rate of Sacramento County in the short term; however, the long-term impacts on employment rate are not yet known (Sacramento County, 2022).

HOUSING UNITS AND VACANCY

According to the California Department of Finance, there are 373,085 housing units in unincorporated Sacramento County in 2023 and a vacancy rate of 4.1 percent (DOF, 2023). From 2010 to 2023, the number of housing units in unincorporated Sacramento County increased by 36,774 units with a growth rate of 9.9 percent. In comparison, the growth in the number of housing units in Sacramento County was slightly lower with a rate of 7.5 percent between 2010 and 2023 (DOF, 2021, 2023). Furthermore, the current vacancy rate in the county is slightly lower at 3.9 percent (DOF, 2023). It is projected that between 2016 to 2040, that the number of housing units in the six-county Sacramento region will increase by 28 percent (SACOG, 2019).

IMPACT: INDUCE SUBSTANTIAL UNPLANNED POPULATION GROWTH

The proposed project does not include the construction of new homes and would not increase the residential population in the area. The project would include various services and amenities, such as a convenience store, restrooms, resting lounges, and a public visitor center. However, these services and amenities are intended to serve thru-motorists on Interstate 5.

The proposed project would generate long-term employment opportunities associated with the operation of the charging center and convenience store. It is expected that these jobs would be sourced from the local workforce and would not require people to relocate from surrounding communities. Therefore, the proposed project is not expected to contribute to direct unplanned growth in the area.

The proposed project would not include the development of infrastructure that would attract additional development in the surrounding area. All utility connections that would be extended to the project site are intended to serve the proposed project. Any new development in the project vicinity would need to be conducted in accordance with County General Plan policies and land use and zoning designations. Therefore, the project is not expected to contribute to indirect unplanned growth in the area.

For these reasons, the proposed project would not induce substantial unplanned population growth in the area, either directly or indirectly, and like the conclusion reached in the 2022 Airport SEIR, this impact would be **less than significant**.

IMPACT: DISPLACEMENT OF HOUSING

The proposed project is a commercial electrical truck and passenger vehicle charging center served by an adjacent solar array field. There are no existing residences within the project site. Therefore, the proposed project would not have potential to displace people or homes and would not necessitate the construction of replacement housing,

and like the conclusion reached in the 2022 Airport SEIR, this impact would be **less than significant**.

PUBLIC SERVICES AND RECREATION

Impacts of the 2022 Airport Master Plan Update related to fire protection and police protection were analyzed in Chapter 10, *Public Services/Utilities*, of the 2022 Airport Draft SEIR. The 2022 Airport SEIR determined that implementation of the 2022 Airport Master Plan Update would have the following impacts with respect to fire protection and police protection:

- Implementation of the Airport Master Plan Update would not result in substantial adverse physical impacts associated with the provision of emergency services (*Less than Significant Impact*)
- Implementation of the Airport Master Plan Update would not result in substantial adverse physical impacts associated with the provision of law enforcement services (*Less than Significant Impact*)

The 2022 Airport SEIR did not include a detailed discussion of impacts related to the provision of schools, park and recreational services, and libraries but identified that impacts related to public services from implementation of the 2022 Master Plan Update were considered less than significant (see pages 2 and 13-3 of the 2022 Airport Draft SEIR).

In accordance with the required project-level evaluation described in Chapter 1, *Introduction*, of this Supplement to the 2022 Airport SEIR, the following analysis addresses proposed project impacts related to public services and recreation.

THRESHOLDS OF SIGNIFICANCE

For purposes of this Supplement to the 2022 Airport SEIR and consistent with the criteria presented in the 2022 Airport SEIR, which is based on Appendix G of the CEQA Guidelines, impacts related to public services and recreation may be considered significant if implementation of the proposed project would:

- Result in substantial adverse physical impacts associated with the provision of emergency services.
- Result in substantial adverse physical impacts associated with the provision of law enforcement services.
- Result in substantial adverse physical impacts associated with the provision of schools, park and recreational services, and libraries.

OVERVIEW

FIRE PROTECTION

Fire protection service at SMF is provided by the Sacramento County Airport Fire Department. The Airport Rescue and Fire Fighting (ARFF) station at SMF is located north of the terminal complex along Earhart Drive. It is staffed 24 hours a day and currently has a staff of 33 providing ARFF, structural and wildland fire suppression, and emergency medical services (Sacramento County, 2022).

SMF also receives service from the City of Sacramento Fire Department (SFD). The closest City facility is Station 3, which is located approximately five miles to the west of the airport near the Sacramento River at 7208 West Elkhorn Boulevard. This station is typically staffed with one captain, one apparatus operator, and one firefighter. Normal response time to airport incidents is three to five minutes (Sacramento County, 2022).

Sacramento County Airport Fire is the first responder to all medical, fire, vehicle, and aircraft incidents at SMF. They work closely with the SFD to efficiently handle incidents at the airport. Sacramento County Airport Fire is typically the lead for all airport incidents and relies on SFD for backup support (Sacramento County, 2022).

POLICE PROTECTION

Law enforcement at SMF and the area surrounding the airport is provided by the Sacramento County Sheriff's Department Airport Division. This division has 45 sworn officers and typically five to six deputies and sheriffs are on duty at any given time. The Division's station is located on airport property at 6900 Airport Boulevard. The normal response time to an incident at SMF is 3 minutes (Sacramento County, 2022).

OTHER PUBLIC SERVICES

Public education services (grades K-12) in the vicinity of the airport are provided by the Natomas Unified School District while County parks and recreation services and library services in the vicinity of the airport are provided by the Sacramento County Parks Department and Sacramento County Library System, respectively.

IMPACT: RESULT IN SUBSTANTIAL ADVERSE PHYSICAL IMPACTS ASSOCIATED WITH THE PROVISION OF EMERGENCY SERVICES

The proposed project would attract visitors to the project site for short periods of time and this periodic increase in visitors could result in an increase in the number of calls for fire protection services. The proposed project would be served by the existing fire facility near the airport terminals, which is located approximately 1.5 miles to the north of the project site. Sacramento County Airport Fire has indicated that they can adequately serve the proposed project along with their other commitments (Thompson-Duarte, 2023). As a result, the proposed project would not place a unique demand on fire protection resources and would not interfere with existing services, thus resulting in the need to expand existing or construct new fire protection facilities. Therefore, like the conclusion reached in the 2022 Airport SEIR, this impact would be **less than significant**.

IMPACT: RESULT IN SUBSTANTIAL ADVERSE PHYSICAL IMPACTS ASSOCIATED WITH THE PROVISION OF LAW ENFORCEMENT SERVICES

As discussed above, the proposed project would attract visitors to the project site for short periods of time and this periodic increase in visitors could result in an increase in the number of calls for police protection services. The proposed project would be served by the existing Sheriff's facility near the airport terminals, which is located approximately 1.5 miles to the north of the project site. The Sheriff's Department Airport Division has indicated that they can adequately serve the proposed project along with their other commitments (Thompson-Duarte, 2023). As a result, the proposed project would not place a unique demand on police protection resources and would not interfere with existing services, thus resulting in the need to expand existing or construct new police protection facilities. Therefore, like the conclusion reached in the 2022 Airport SEIR, this impact would be **less than significant**.

IMPACT: RESULT IN SUBSTANTIAL ADVERSE PHYSICAL IMPACTS ASSOCIATED WITH THE PROVISION OF OTHER PUBLIC SERVICES

Although new employment would be created by the proposed project, the workforce is expected to be comprised of existing residents in the region, and thus the proposed project is not anticipated to otherwise induce unplanned population growth. As a result, the proposed project would not increase demand for other public services such as schools, parks, and libraries, and thus no new or physically altered governmental facilities associated with these services, which could result in adverse physical effects, would be required. Furthermore, the proposed project does not include recreational facilities or require the construction or expansion of recreational facilities which might have adverse physical effects on the environment. Therefore, like the conclusion reached in the 2022 Airport SEIR, this impact would be **less than significant**.

WILDFIRE

The 2022 Airport SEIR did not include a discussion of impacts related to wildfire. In accordance with the required project-level evaluation described in Chapter 1, *Introduction*, of this Supplement to the 2022 Airport SEIR, the following analysis addresses proposed project impacts related to wildfire.

THRESHOLDS OF SIGNIFICANCE

For purposes of this Supplement to the 2022 Airport SEIR and consistent with the criteria presented in the 2022 Airport SEIR, which is based on Appendix G of the CEQA Guidelines, impacts related to wildfire may be considered significant if, for projects located in or near state responsibility areas or lands classified as very high fire hazard severity zones, implementation of the proposed project would:

- Substantially impair an adopted emergency response plan or emergency evacuation plan;

- Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;
- Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or
- Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

OVERVIEW

With large areas of the state burning annually, often at great cost to life and property, wildfire has become a significant concern in much of California over the last two decades. These events are most often associated with rural and suburban areas adjacent to or directly within areas where a combination of vegetation, terrain, climate, and weather heightens the risk of wildfire and makes control of wildfire difficult. These areas, commonly referred to as the Wildland-Urban Interface (WUI), present specific risks and challenges associated with wildfire. These conditions are being exacerbated by the effects of climate change, which has resulted in prolonged fire seasons and an increase in the severity of climate, weather, and fuel conditions that increase the risk of catastrophic wildfire.

The California Department of Forestry and Fire Protection (CAL FIRE) has considered each of these criteria in its preparation of Fire Hazard Severity Zone Maps for each of California's counties. Where areas of higher wildfire risk are present, these zones are categorized as moderate, high, or very high. Of particular interest to this topic is the presence of fire hazard severity zones within areas where CAL FIRE has responsibility for fire protection. These areas are referred to as State Responsibility Areas (SRA) and are typically located in the rural and nonurbanized areas of the state. In contrast, most of the urbanized areas of the state lie within Local Responsibility Areas (LRAs), where local city fire departments and organized fire districts have fire protection responsibility. The project site is located within an LRA with fire protection and prevention services provided by the City of Sacramento Fire Department through a contract with the Natomas Fire Protection District.

With respect to the conditions described above that contribute to heightened wildfire risk, these conditions are not present within the project site. No portion of the project site is located within a fire hazard severity zone, and neither are any adjoining areas. The nearest designated fire hazard severity zone to the project site is 23 miles to the east, in the lower Sierra Nevada Foothills. The project site itself is primarily occupied by agricultural uses and is crisscrossed by roadways and irrigation canals and ditches. While the project comprises grassland, woody and flammable vegetation of the types associated with high wildfire danger (e.g., scrub vegetation, woodlands, and timber) are not present on the site. The area surrounding the project site is equally devoid of high-

risk characteristics. Interstate 5 and the airport adjoin the project site to the north while agricultural land adjoins the project site to east, south, and west.

IMPACT: SUBSTANTIALLY IMPAIR AN ADOPTED EMERGENCY RESPONSE PLAN OR EMERGENCY EVACUATION PLAN

Implementation of the proposed project would alter the project site's existing land use pattern and would add additional vehicle and truck traffic and commercial uses requiring evacuation in case of an emergency. However, implementation of the proposed project would not conflict with the County's emergency response and/or evacuation plans since the roads adjacent to, and in the vicinity of, the project site would be improved to support the roadway connectivity, allowing for improved emergency vehicle access to the project site. As such, this impact would be **less than significant**.

IMPACT: EXPOSURE TO POLLUTANT CONCENTRATIONS FROM A WILDFIRE

As noted in the overview discussion above, the project site does not present features associated with enhanced wildfire risk. The site's flat terrain, its absence of vegetation conducive to the spread of wildfire, and existing land uses present a low risk of wildfire for the site. The land uses proposed as part of the proposed project would not increase the site's susceptibility to wildfire, and thus would not exacerbate wildfire risks. This impact would be **less than significant**.

IMPACT: INSTALLATION OR MAINTENANCE OF INFRASTRUCTURE THAT MAY EXACERBATE FIRE RISK OR THAT MAY RESULT IN TEMPORARY OR ONGOING IMPACTS TO THE ENVIRONMENT

As noted above, the project site is at low risk for wildfire, and the land uses proposed as part of the proposed project would not change that condition. Roads, fuel breaks, and other features associated with abating wildfire risk would not be required. There would therefore be no exacerbation of wildfire risks or ongoing impacts associated with wildfire risk abatement activities. This impact would be **less than significant**.

IMPACT: EXPOSE PEOPLE OR STRUCTURES TO SIGNIFICANT RISKS AS A RESULT OF RUNOFF, POST-FIRE SLOPE INSTABILITY, OR DRAINAGE CHANGES

As noted above, the project site is at low risk for wildfire, and the land uses proposed as part of the proposed project would not change that condition. Accordingly, there would be no exposure of people or structures to post-fire impacts like downslope flooding, landslides, or drainage changes because the site is flat. This impact would be **less than significant**.

20 OTHER CEQA REQUIREMENTS

INTRODUCTION

CEQA Guidelines Section 15126 requires that all phases of a project—planning, acquisition, development, and operation—be considered when evaluating the project’s impact on the environment. Further, CEQA Guidelines Section 15126.2(a) requires that the evaluation of significant impacts consider direct, reasonably foreseeable indirect, and cumulative effects of the proposed project over the short term and long term.

Section 15126 of the CEQA Guidelines also requires an EIR to identify all the following:

- Significant environmental effects of the proposed project.
- Potentially feasible mitigation measures proposed to avoid or substantially lessen significant effects.
- Significant environmental effects that cannot be avoided if the proposed project is implemented.
- Significant irreversible environmental changes that would result from implementation of the proposed project.
- Growth-inducing impacts of the proposed project.
- Alternatives to the proposed project.¹

The Executive Summary and Chapters 4 through 19 of this Supplement to the 2022 Airport SEIR provide a comprehensive presentation of the proposed project’s environmental effects, potentially feasible mitigation measures, and conclusions regarding the level of significance of each impact both before and after mitigation.

Chapter 3, *Alternatives*, of this Supplement to the 2022 Airport SEIR, presents a comparative analysis of alternatives to the proposed project.

The other CEQA-required analyses described above are presented below.

SIGNIFICANT AND UNAVOIDABLE ADVERSE IMPACTS

Section 15126.2(b) of the CEQA Guidelines requires that an EIR describe any significant impacts that cannot be avoided, even with the implementation of feasible mitigation measures. The environmental effects of the proposed project on various aspects of the environment are discussed in detail in Chapters 4 through 19 of this Supplement to the 2022 Airport SEIR. Project-specific and cumulative impacts that cannot be avoided if the project is approved as proposed are identified below.

¹ CEQA Guidelines Sections 15126.2(a), 15126.2(c), 15126.2(d), 15126.2(e), 15126.4, and 15126.6.

PROJECT-SPECIFIC SIGNIFICANT AND UNAVOIDABLE IMPACTS

AGRICULTURAL RESOURCES

CONVERSION OF IMPORTANT FARMLAND TO NONAGRICULTURAL USES

The proposed project would result in the conversion of farmland of local importance to urban uses. However, even with the implementation of Mitigation Measure AG-1, which would require preservation of farmland of local importance at a 1:1 ratio, consistent with Policy AG-5 of the 2030 General Plan, it must be recognized that farmland is a finite resource. Therefore, as there would be a substantial net-loss of designated farmland within Sacramento County because of the proposed project, this impact would remain **significant and unavoidable**.

CUMULATIVE SIGNIFICANT AND UNAVOIDABLE IMPACTS

CONVERSION OF IMPORTANT FARMLAND TO NONAGRICULTURAL USES

The proposed project would result in the conversion of farmland of local importance to urban uses. However, even with the implementation of Mitigation Measure AG-1, which would require preservation of farmland of local importance at a 1:1 ratio, consistent with Policy AG-5 of the 2030 General Plan, it must be recognized that farmland is a finite resource. When an area is permanently taken out of agricultural production, there has been a net-loss of agricultural lands. Other agricultural lands may be preserved through compliance with mitigation, but new agricultural soils will not be created. Therefore, implementation of the proposed project would result in a considerable contribution to the cumulative loss of designated farmland in the County, and this cumulative impact would remain **significant and unavoidable**.

SIGNIFICANT AND IRREVERSIBLE ENVIRONMENTAL CHANGES

Under CEQA, an EIR must analyze the extent to which a project's primary and secondary effects would generally commit future generations to the allocation of nonrenewable resources and to irreversible environmental damage (CEQA Guidelines Sections 15126.2(d) and 15127). Section 15126.2(d) states:

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible, since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Generally, a project would result in significant irreversible environmental changes if:

- The primary and secondary impacts would generally commit future generations to similar uses;
- The project would involve a large commitment of nonrenewable resources;
- The project would involve uses in which irreversible damage could result from any potential;
- environmental accidents associated with the project; or
- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

As described in Chapter 2, *Project Description*, of this Supplement to the 2022 Airport SEIR, buildout of the proposed project would convert 110 acres of undeveloped grassland on the project site to a publicly accessible Electric Vehicle (EV) charging facility and related structures. As described in Chapter 5, *Agricultural Resources*, of this Supplement to the 2022 Airport SEIR, implementation of the proposed project would convert agricultural land to urban uses. Once agricultural land is developed, the loss of agricultural capabilities would be permanent as it is highly unlikely that the land would be restored for use as open space or agricultural land.

The State CEQA Guidelines also require a discussion of the potential for irreversible environmental damage caused by an accident associated with the project. While development allowed under the proposed project could result in the use, transport, storage, and disposal of hazardous wastes during construction and operation, as described in Chapter 12, *Hazards and Hazardous Materials*, of this Supplement to the 2022 Airport SEIR, all activities would comply with applicable state and federal laws related to hazardous materials, which significantly reduce the likelihood and severity of accidents that could result in irreversible environmental damage.

As is described in Chapter 10, *Energy*, of this Supplement to the 2022 Airport SEIR, construction of the proposed project would require the use of fuels (primarily gasoline and diesel) for construction equipment and vehicles that would perform a variety of activities, including excavation, hauling, paving, and general vehicle travel. In addition, minimal amounts of electricity would be consumed by some pieces of construction equipment, such as electric power tools, compressors, and the like. Construction of the proposed project would use fuel-efficient equipment consistent with federal and state regulations, such as fuel efficiency regulations in the California Air Resources Board (CARB) Pavley Phase II standards; the anti-idling regulation in 13 CCR Section 2485; and fuel requirements for stationary equipment in 17 CCR Section 93115 (concerning the Airborne Toxic Control Measures). In accordance with 13 CCR Sections 2485 and 2449, idling by commercial vehicles over 10,000 pounds and off-road equipment over 25 horsepower would be limited to a maximum of five minutes. The intent of these regulations is to reduce construction emissions; however, compliance with the anti-idling and emission reduction regulations discussed above would also result in fuel savings from the more efficient use of equipment. For the reasons described above,

construction activities associated with the proposed project would not result in wasteful, inefficient, or unnecessary consumption of fuel or energy.

In terms of operation, the proposed project includes a solar facility that would produce a new renewable source of energy in Sacramento County. The proposed project would provide a new source of renewable energy in the State and the specific existing sources of energy that would be replaced by the project would be related to combustion of diesel fuels for traditional diesel-powered trucks. The proposed solar facilities would power the proposed project's electric vehicle charging stations and appurtenant uses except during nighttime and cloudy weather. Any excess power would be exported to the SMUD system via an intertie with its existing 69 kilovolt (kV) distribution line along Power Line Road to the east and would be available to reduce the potential demand of nonrenewable diesel fuels. As discussed in Chapter 10, *Energy*, the proposed project would generate more renewable solar energy than the total energy consumed, which would be stored in the proposed onsite Battery Energy Storage System (BESS). This would provide a net positive energy impact attributable to the project and be a benefit to the County, as excess energy generation stored on-site could then be exported to SMUD's grid during off peak times, thereby assisting SMUD in achieving its goal to reach zero carbon emissions in its power supply by 2030 and in meeting its obligations under State energy storage targets and the CPUC's energy storage program. Therefore, the proposed project would directly support SB 100 and California's RPS goal of increasing the percentage of electricity procured from renewable sources to 100 percent by 2045.

In terms of mobile energy use, as described above, State of California Executive Order N-79-20 establishes the goal for all new medium and heavy-duty vehicles to be zero-emission by 2045. It also directs CARB to develop and propose rulemaking for passenger vehicles and trucks, medium-and heavy-duty fleets where feasible, drayage trucks, and off-road vehicles and equipment "requiring increasing volumes" of new ZEVs "towards the target of 100 percent". By providing the infrastructure necessary to implement executive Order N-79-90, the proposed project would serve to protect against inefficient, wasteful, and unnecessary use of energy and would, in fact, contribute to achievement of State goals for renewable energy and energy efficiency.

GROWTH-INDUCING EFFECTS

As stated in Section 15126.2(e) of the CEQA Guidelines, an EIR must discuss ways in which a proposed project could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Also, the EIR must discuss the characteristics of the project that could encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. Growth can be induced in a number of ways, such as through the elimination of obstacles to growth, through the stimulation of economic activity in the region, or through the establishment of policies or other precedents that directly or indirectly encourage additional growth.

In general, a project may foster spatial, economic, or population growth in a geographic area if the project removes an impediment to growth (e.g., establishes an essential public service; provides new physical or transportation access to an area; results in a change in zoning or approval of a general plan amendment), or if economic expansion or growth occurs in an area in response to the project (e.g., changes in revenue base, employment expansion). These circumstances are described further below.

- **Elimination of Obstacles to Growth:** The extent to which a proposed project removes infrastructure limitations, provides infrastructure capacity, or removes regulatory constraints that could result in growth unforeseen at the time of project approval.
- **Economic Effects:** The extent to which a proposed project could cause increased activity in the local or regional economy. Economic effects can include such effects as the multiplier effect. A multiplier is an economic term used to describe interrelationships among various sectors of the economy. The multiplier effect provides a quantitative description of the direct employment effect of a project, as well as indirect and induced employment growth. The multiplier effect acknowledges that the on-site employment and population growth of each project is not the complete picture of growth caused by the project.

As discussed in Chapter 19, *Other Resource Topics*, of this Supplement to the 2022 Airport SEIR, the proposed project would not include the development of infrastructure that would attract additional development in the surrounding area. All utility connections that would be extended to the project site are intended to serve the proposed project. Any new development in the project vicinity would need to be conducted in accordance with County General Plan policies and land use and zoning designations. Therefore, the project would not remove infrastructure limitations, provide infrastructure capacity for other uses outside of the project site, or remove regulatory constraints that could result in growth unforeseen at the time of project approval. The proposed project does not include the construction of new homes and would not increase the residential population in the area. The project would include various services and amenities, such as a convenience store, restrooms, resting lounges, and a public visitor center. However, these services and amenities are intended to serve thru-motorists on Interstate 5. The proposed project would generate long-term employment opportunities associated with the operation of the charging center and convenience store. It is expected that these jobs would be sourced from the local workforce and would not require people to relocate from surrounding communities. Therefore, the proposed project is not expected to contribute to direct unplanned growth in the area.

21 BIBLIOGRAPHY

EXECUTIVE SUMMARY

No references were used in this chapter.

CHAPTER 1, INTRODUCTION

California Environmental Quality Act (CEQA) Statutes and Guidelines; Public Resources Code 21000-21177) and California Code of Federal Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387. 2020.

Sacramento County, 2022. Sacramento International Airport Master Plan Update Supplemental Environmental Impact Report (SCH No. 2005082017). January 2023.

CHAPTER 2, PROJECT DESCRIPTION

California Air Resources Board (CARB), 2022, California moves to accelerate to 100% new zero-emission vehicle sales by 2035. Available: <https://ww2.arb.ca.gov/news/california-moves-accelerate-100-new-zero-emission-vehicle-sales-2035>. Accessed October 24, 2023.

———, 2023, California Approves World's First Regulation to Phase Out Dirty Combustion Trucks and Protect Public Health. Available: <https://www.gov.ca.gov/2023/04/28/california-approves-worlds-first-regulation-to-phase-out-dirty-combustion-trucks-and-protect-public-health/>

California Energy Commission (CEC), 2021. Report Shows California Needs 1.2 Million Electric Vehicle Chargers by 2030. Available: <https://www.energy.ca.gov/news/2021-06/report-shows-california-needs-12-million-electric-vehicle-chargers-2030>. Accessed October 24, 2023.

California Transportation Commission (CTC), *2022 Trade Corridor Enhancement Program, Program of Projects-Projects Recommended for Funding, Resolution G-22-46*, Reference No: 4.5, June 28-29, 2023, Attachment B.

Sacramento County, 2023. General Map Viewer (Parcel-Specific Maps and Information). Available: https://generalmap.gis.saccounty.gov/JSViewer/county_portal.html. Accessed October 25, 2023.

———, 2017. Sacramento County General Plan, Land Use Diagram, Adopted 2011, Amended 2017. Available: https://planning.saccounty.gov/LandUseRegulation/Documents/Documents/General-Plan/GPLU2030_UPDATED_FINAL_0918.pdf.

CHAPTER 3, ALTERNATIVES

No references were used in this chapter.

CHAPTER 4, AESTHETICS

California Department of Transportation (Caltrans), 2023. California State Scenic Highways. Available: <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>. Accessed September 1, 2023.

Federal Airport Administration (FAA), 2021. Federal Aviation Administration Policy: Review of Solar Energy System Projects on Federally Obligated Airports. Available: <https://www.federalregister.gov/documents/2021/05/11/2021-09862/federal-aviation-administration-policy-review-of-solar-energy-system-projects-on-federally-obligated>. Accessed September 28, 2023.

Federal Highway Administration (FHWA), 1988. Visual Impact Assessment for Highway Projects. Publication No. FHWA-HI-88-054. Office of Environmental Policy. Washington, D.C.

ForgeSolar, 2023. Glare Analysis, WattEV Sacramento Solar Project. Jun 16.

Sacramento Area Council of Governments (SACOG), 2013. Sacramento International Airport Land Use Compatibility Plan. Adopted December 12, 2013. Available: https://www.sacog.org/sites/main/files/file-attachments/smf-1-front_chapters_1-2-2013-12-12-complete.pdf. Accessed September 1, 2023.

Sacramento County, 2007. Sacramento International Airport Master Plan Final Environmental Impact Report (SCH No. 2005082017). July 2007.

United States Forest Service (USFS), 1995. Landscape Aesthetics: A Handbook for Scenery Management. Agriculture Handbook No. 701. Available: [https://blmwyomingvisual.anl.gov/docs/Landscape%20Aesthetics%20\(AH-701\).pdf](https://blmwyomingvisual.anl.gov/docs/Landscape%20Aesthetics%20(AH-701).pdf). Accessed September 1, 2023.

CHAPTER 5, AGRICULTURAL RESOURCES

California Department of Conservation (DOC), 2018. Farmland of Local Importance (2018). Available: https://www.conservation.ca.gov/dlrp/fmmp/Documents/Farmland_of_Local_Importance_2018.pdf. Accessed August 11, 2023.

———, 2020a. Sacramento County 1988-2020 Land Use Summary. Available: <https://www.conservation.ca.gov/dlrp/fmmp/Pages/Sacramento.aspx>. Accessed August 15, 2023.

———, 2020b. California Important Farmland Finder. Available: <https://maps.conservation.ca.gov/DLRP/CIFF/>. Accessed August 14, 2023.

———, 2023. Important Farmland Categories. Available: www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx#:~:text=The%20Rural%20Land%20categories%20include%3A%E2%80%8B%201%20Rural%20Residential,Agriculture%20%28CI%29%205%20Nonagricultural%20or%20Natural%20Vegetation%20%28nv%29. Accessed August 11, 2023.

Natural Resources Conservation Service (NRCS), 2012. Soil Survey Geographic Database (SSURGO) of Sacramento County. Soil types by Storie rating. Available: <https://websoilsurvey.nrcs.usda.gov/app/>. Accessed August 11, 2023.

Sacramento County, 2015. Complete Sacramento County Zoning Code. Available: <https://planning.saccounty.gov/LandUseRegulationDocuments/Pages/SacramentoCountyZoningCode.aspx>. Accessed August 15, 2023.

———, 2023. Williamson Act Parcels in Sacramento County. Available: <https://data.saccounty.gov/datasets/199810930ef9465a9a1ae0315e5a7535/explore>. Accessed August 14, 2023.

CHAPTER 6, AIR QUALITY

California Air Resources Board (CARB), 2005. Air Quality and Land Use Handbook: A Community Health Perspective. April 2005. p. 4. Available: https://ww2.arb.ca.gov/sites/default/files/2023-05/Land%20Use%20Handbook_0.pdf. Accessed October 2023.

———, 2016a. Visibility Reducing Particles and Health. Available: <https://ww2.arb.ca.gov/resources/vinyl-chloride-and-health>. Accessed May 2022.

———, 2016b. Ambient Air Quality Standards. Available: <https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf>. Standards last updated May 4, 2016. Accessed October 2023.

———, 2023a. Carbon Monoxide & Health. Available: <https://ww2.arb.ca.gov/resources/carbon-monoxide-and-health>. Accessed October 2023.

———, 2023b. Sulfur Dioxide & Health, 2019. Available: <https://ww2.arb.ca.gov/resources/sulfur-dioxide-and-health>. Accessed October 2023.

———, 2023c. Lead & Health. Available: <https://ww2.arb.ca.gov/resources/lead-and-health>. Accessed October 2023.

———, 2023d. Summaries of Air Quality Data, 2019-2021. Available: <https://www.arb.ca.gov/adam/index.html>. Accessed March 2023.

———, 2023e. Overview: Diesel Exhaust and Health. Available: <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health>. Accessed May 2022.

- California Air Resources Board (CARB) & California Air Pollution Control Officers Association (CAPCOA), 2022. CAPCOA Air Toxics “Hot Spots” Program: Gasoline Service Station Industrywide Risk Assessment Technical Guidance. February 2022. Available: <https://ww2.arb.ca.gov/sites/default/files/2022-03/Draft%202022%20Gas%20Station%20IWG%20-%20Technical%20Guidance%20ADA%20Compliant.pdf>. Accessed October 2023.
- International Agency for Research on Cancer (IARC), 2015. IARC Monographs on The Evaluation of Carcinogenic Risks to Humans. Outdoor Air Pollution, Volume 109. Available: <https://publications.iarc.fr/publications/media/download/4317/b1f528f1fca20965a2b48a220f47447c1d94e6d1.pdf>. Accessed May 2022.
- Kimley-Horn, 2024a. *Air Quality Assessment, Sacramento County WattEV Innovative Freight Terminal (SWIFT) Project, Sacramento County, California*. January.
- , 2024b. *Health Risk Assessment, Sacramento County WattEV Innovative Freight Terminal (SWIFT) Project, Sacramento County, California*. January.
- Pope, C.A., III & D. W. Dockery, 2006. Health Effects of Fine Particulate Air Pollution: Lines that Connect, June 2006, Journal of the Air & Waste Management Association, 56:6, 709-742, DOI: 10.1080/10473289.2006.10464485. Available: <https://www.tandfonline.com/doi/epdf/10.1080/10473289.2006.10464485?needAccess=true>. Accessed October 2023.
- Sacramento Metropolitan Air Quality Management District (SMAQMD), 2004. 2004 Revision to the California State Implementation Plan for Carbon Monoxide. July 22, 2004. Available: [https://www.airquality.org/ProgramCoordination/Documents/1\)%202004%20CO%20Maintenance%20Plan.pdf](https://www.airquality.org/ProgramCoordination/Documents/1)%202004%20CO%20Maintenance%20Plan.pdf). Accessed March 2023.
- , 2009. Guide to Air Quality Assessment. Adopted December 2009 and last updated July 2019. Page 4-7.
- , PM10 Implementation/Maintenance Plan and Redesignation Request for Sacramento County. October 28, 2010. Available: [https://www.airquality.org/ProgramCoordination/Documents/10\)%20%20PM10%20Imp%20and%20MP%202010.pdf](https://www.airquality.org/ProgramCoordination/Documents/10)%20%20PM10%20Imp%20and%20MP%202010.pdf). Accessed March 23.
- , 2013a. Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2013 SIP Revisions). Available: [https://www.airquality.org/ProgramCoordination/Documents/4\)%202013%20SIP%20Revision%20Report%201997%20Std.pdf](https://www.airquality.org/ProgramCoordination/Documents/4)%202013%20SIP%20Revision%20Report%201997%20Std.pdf). Accessed March 2023.
- , 2013b. PM2.5 Implementation/Maintenance Plan and Redesignation Request for Sacramento PM2.5 Nonattainment Area. October 24, 2013. Available: <https://www.airquality.org/ProgramCoordination/Documents/PM2.5%20Imp%20and%20Redesignation%202013.pdf>. Accessed March 2023.

- , 2015. Triennial Report and Air Quality Plan Revision. May 28, 2015. Available: [https://www.airquality.org/ProgramCoordination/Documents/11\)%20%202015%20TriennialReportandProgressRevision.pdf](https://www.airquality.org/ProgramCoordination/Documents/11)%20%202015%20TriennialReportandProgressRevision.pdf). Accessed March 2023.
- , 2017a. Air Quality Pollutants and Standards. Available: www.airquality.org/air-quality-health/air-quality-pollutants-and-standards. Accessed June 2022.
- , 2017b. Sacramento Regional 2008 8-Hour Ozone Attainment and Reasonable Further Progress Plan. July 24. Available: <http://www.airquality.org/ProgramCoordination/Documents/Sac%20Regional%202008%20NAAQS%20Attainment%20and%20RFP%20Plan.pdf>. Accessed October 2023.
- , 2017c. 2016 Annual Progress Report. Available: <http://www.airquality.org/ProgramCoordination/Documents/2016%20Annual%20Progress%20Report%20-%20final.pdf>. Accessed October 2023.
- , 2020a. Guide to Air Quality Assessment in Sacramento County. Last updated in April 2021. Available: <http://www.airquality.org/Residents/CEQA-Land-Use-Planning/CEQA-Guidance-Tools>. Accessed March 2023.
- U.S. Environmental Protection Agency (USEPA), 2021a. Basic Information about Carbon Monoxide (CO) Outdoor Air Pollution. Available: <https://www.epa.gov/co-pollution/basic-information-about-carbon-monoxide-co-outdoor-air-pollution#Effects>. Accessed June 2022.
- , 2021b. Particulate Matter (PM) Basics. Available: <https://www.epa.gov/pm-pollution/particulate-matter-pm-basics#effects>. Accessed June 2022.
- , 2021c. Basic Information about NO₂. Available: <https://www.epa.gov/no2-pollution/basic-information-about-no2#Effects>. Accessed June 2022.
- , 2021d. Basic Information about Lead Air Pollution, 2017a, last updated November 29. Available: <https://www.epa.gov/lead-air-pollution/basic-information-about-lead-air-pollution>. Accessed June 2022.
- , 2022a. Sulfur Dioxide (SO₂) Pollution. Available: <https://www.epa.gov/so2-pollution/sulfur-dioxide-basics>. Accessed October 2023.
- , 2022b. Monitor Values Report. Available: <https://www.epa.gov/outdoor-air-quality-data/monitor-values-report>. Accessed March 2023.

CHAPTER 7, BIOLOGICAL RESOURCES

Barron-Gafford, G. A., Minor, R. L., Allen, N. A., Cronin, A. D., Brooks, A. E., and M.A. Pavao-Zuckerman. 2016. The Photovoltaic Heat Island Effect: Larger solar power plants increase local temperatures. *Nature Scientific reports*, 6(1), 35070.

- California Department of Fish and Wildlife (CDFW), 2023a. RareFind 5. California Natural Diversity Database. CDFW, Biogeographic Data Branch. Accessed August 2023. Available: <https://www.dfg.ca.gov/biogeodata/cnddb/maps/anddata.asp>.
- , 2023b. California Wildlife Habitat Relationships: Life History Accounts and Range Maps. Accessed September 2023. Available: <https://www.wildlife.ca.gov/Data/CWHR/Life-History-and-Range>.
- , **2024. Conservation and Mitigation Banks Established in California by CDFW. Available: <https://wildlife.ca.gov/Conservation/Planning/Banking/Approved-Banks#r2>. Accessed: March 22, 2024.**
- California Native Plant Society, 2023. Inventory of Rare and Endangered Plants. Sacramento, CA.
- Conkling, T. J., A. L., Fesnock, and T.E. Katzner 2023. Numbers of wildlife fatalities at renewable energy facilities in a targeted development region. Plos One, 18(12): e0295552.**
- Dudek, 2023. Biological Resources Assessment: Watt EV Electric Vehicle Charging Project. Prepared for Kimley-Horn. September 2023.
- eBird, 2023. eBird: An online database of bird distribution and abundance [web application]. Cornell Lab of Ornithology: Ithaca, New York. Available: <http://www.ebird.org>.
- Environmental Science Associates, 2024. Evaluation of Tricolored Blackbird, Giant Garter Snake, and Giant Garter Snake Habitat Suitability Along Bayou Way. January 2024.
- Fthenakis, V. and Yuanhao Yu. 2013. Analysis of the Potential for a Heat Island Effect in Large Solar Farms. 2013 IEEE 39th Photovoltaic Specialists Conference.**
- Germano, D.J., and G.B. Rathbun, 2008. "Growth, Population Structure, and Reproduction of Northwestern pond Turtles (*Actinemys marmorata*) on the Central Coast of California." *Chelonian Conservation and Biology* 7(2): 188–194.
- Hansen, G. E., 1988. Review of the status of the giant garter snake (*Thamnophis couchi gigas*) and its supporting habitat during 1986-1987. Final report for California Department of Fish and Game, Contract C-2060. Unpublished.
- ICF, 2023. Biological Effectiveness Monitoring for the Natomas Basin habitat Conservation Plan Area 2022 Annual Survey Results. Prepared for the Natomas Basin Conservancy. April 2023. Available: https://natomasbasin.org/wp-content/uploads/2023/09/2023_04_28_Natomas_Basin_Conservancy_ICF_BEM_report_NBHCP_Public_SCREEN_ADA.pdf.

- Kaliski et al. 2020. An overview of sound from commercial photovoltaic facilities. NOISE-CON 2020. Available: <https://rsginc.com/wp-content/uploads/2021/04/Kaliski-et-al-2020-An-overview-of-sound-from-commercial-photovoltaic-facilities.pdf>. Accessed March 27, 2024.**
- Kosciuch, K., D. Riser-Espinoza, M. Geringer, and W. Erickson. 2020. A summary of bird mortality at photovoltaic utility scale solar facilities in the Southwestern US. PloS One, 15(4): e0232034.**
- Meese, R.J. and E.C. Beedy. 2015. Managing nesting and foraging habitats to benefit breeding Tricolored Blackbirds. Central Valley Bird Club Bulletin 17:79-96.
- National Renewable Energy Laboratory. 2018. Research and Analysis Demonstrate the Lack of Impacts of Glare from Photovoltaic Modules. July 31, 2018. Available: <https://www.nrel.gov/state-local-tribal/blog/posts/research-and-analysis-demonstrate-the-lack-of-impacts-of-glare-from-photovoltaic-modules.html>. Accessed March 27, 2024.**
- Natural Resources Conservation Service (NRCS). 2024. Web Soil Survey, National Cooperative Soil Survey. <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>. Accessed March 25, 2024.**
- Smallwood, K. S. 2022. Utility-scale solar impacts to volant wildlife. The Journal of Wildlife Management, 86(4): e22216.**
- Tinsley, E., J. S. Froidevaux, S. Zsebők, K.L. Szabadi, and G. Jones. 2023. Renewable energies and biodiversity: Impact of ground-mounted solar photovoltaic sites on bat activity. Journal of Applied Ecology, 60(9): 1752-1762.**
- U.S. Fish and Wildlife Service (USFWS). 2008. Project Description Modification for the Sacramento International Airport Terminal Modernization Project in Sacramento County, California. Letter from Susan K. More, USFWS Field Supervisor, to Douglas Pomeroy, FAA. July 14, 2008.**
- , 2008. Biological Opinion on the Sacramento International Airport Terminal Modernization Project in Sacramento County, California.**
- , 2017. Recovery Plan for the Giant Garter Snake (*Thamnophis gigas*). Sacramento, CA. Available: ecos.fws.gov/docs/recovery_plan/20170928_Signed%20Final_GGS_Recovery_Plan.pdf.
- , 2023. Information for Planning and Consultation (IPaC). Sacramento, CA.

CHAPTER 8, CLIMATE CHANGE

- California Air Resources Board (CARB), 2008. Climate Change Scoping Plan: A Framework for Change. Adopted December 11, 2008, re-approved on August 24, 2011. Available: https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed November 2023.
- , 2017. California’s 2017 Climate Change Scoping Plan: The Strategy for Achieving California’s 2030 Greenhouse Gas Target. November 2017. Available: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed November 2023.
- , 2022a. California Greenhouse Gas Emissions for 2000 – 2020 – Trends of Emissions and Other Indicators, October 26, 2022. Available: https://ww2.arb.ca.gov/sites/default/files/classic/cc/inventory/2000-2020_ghg_inventory_trends.pdf. Accessed November 2023.
- , 2022b. 2022 Scoping Plan for Achieving Carbon Neutrality. November 16, 2022. Available: <https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf>. Accessed November 2023.
- California Building Standards Commission (CBSC), 2022. 2022 California Green Building Standards Code, Title 24, Part 11 (CALGreen). Effective Date: January 1, 2023.
- California Energy Commission (CEC), 2016. California’s 2016 Building Energy Efficiency Standards for Residential and Nonresidential Buildings. Available: <https://www.energy.ca.gov/publications/2015/building-energy-efficiency-standards-residential-and-nonresidential-buildings>. Accessed November 2023.
- , California Energy Consumption Database. Available: <http://www.ecdms.energy.ca.gov/Default.aspx>. Accessed October 19, 2023.
- Kimley-Horn, 2024. *Greenhouse Gas Emissions Assessment, Sacramento County WattEV Innovative Freight Terminal (SWIFT) Project, Sacramento County, California*. January.
- U.S. Environmental Protection Agency (USEPA), 2023. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2021; Executive Summary, Table ES-2. April 2023. Available: <https://www.epa.gov/system/files/documents/2023-04/US-GHG-Inventory-2023-Main-Text.pdf>. Accessed November 2023.
- , 2023. State and Regional Regulations Related to SF6 Emissions from Electric Transmission and Distribution. Available: <https://www.epa.gov/eps-partnership/state-and-regional-regulations-related-sf6-emissions-electric-transmission-and>. Accessed December 2023.

PBL Netherlands Environmental Assessment Agency, 2022. Trends in Global CO2 and Total Greenhouse Gas Emissions, 2021 Report. August 2022. Available: https://www.pbl.nl/sites/default/files/downloads/pbl-2022-trends-in-global-co2-and-total-greenhouse-gas-emissions-2021-summary-report_4758.pdf. Accessed November 2023.

Sacramento County, 2011b. Climate Action Plan – Strategy and Framework Document. Available: <https://planning.saccounty.net/PlansandProjectsIn-Progress/Documents/Climate%20Action%20Plan/CAP%20Strategy%20and%20Framework%20Document.PDF>. Accessed November 2023.

———, 2020. Transportation Analysis Guidelines. September 2020. Available: <https://sacdot.saccounty.net/Documents/A%20to%20Z%20Folder/Traffic%20Analysis/Transportation%20Analysis%20Guidelines%2009.10.20.pdf>. Accessed November 2023.

———, 2022. Sacramento County Climate Action Plan. August 2022. Available: <https://planning.saccounty.gov/PlansandProjectsIn-Progress/Documents/Climate%20Action%20Plan/Final%20Climate%20Action%20Plan.pdf>. Accessed November 2023.

———, 2023. Sacramento County 2021 GHG Inventory. June 2023. Available: <https://green.saccounty.net/Documents/2021%20GHG%20Inventory%20Public%20Review%20Draft.pdf>. Accessed November 2023.

SMAQMD, 2021. Guide to Air Quality Assessment in Sacramento County, Chapter 6: Greenhouse Gas Emissions. Available: <https://www.airquality.org/LandUse/Transportation/Documents/Ch6GHG2-26-2021.pdf>. Accessed November 2023.

CHAPTER 9, CULTURAL RESOURCES

Dudek. 2023. Cultural Resources Inventory and Evaluation Report, Sacramento County WattEV Innovative Freight Terminal Project, Sacramento County, California. December.

Rosenthal, Jeffrey S., Gregory G. White, and Mark Q. Sutton, 2007, The Central Valley: A View from the Catbird's Seat, In California Prehistory: Colonization, Culture, and Complexity, edited by Terry L. Jones and Kathryn A. Klar, pp. 147-163, AltaMira Press, Lanham, Maryland.

CHAPTER 10, ENERGY

BP Global, 2023. Oil. Available: <https://www.bp.com/en/global/corporate/energy-economics/energy-outlook/oil.html>.

California Green Building Standards Code (CBSC), 2023. 2022 California Green Building Standards Code, Title 24, Part 11 (CALGreen). Available: <https://codes.iccsafe.org/content/CAGBC2022P1>.

- California Department of Tax and Fee Administration (CDTFA), 2023, Fuel Taxes Statistics & Reports, Available: <https://www.cdtfa.ca.gov/taxes-and-fees/spftrpts.htm>, accessed October 19, 2023.
- California Energy Commission (CEC), 2018a. Revised Transportation Energy Demand Forecast 2018-2030. 17-IEPR-05. Available: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?doctetnumber=17-IEPR-05>. Docketed April 19, 2018. Accessed November 1, 2019.
- , 2018b. The California Energy Demand 2018-2030 Revised Forecast, Document Number 17-IEPR-03, Docketed Date: January 22, 2018.
- , 2023a. 2021 Total System Electric Generation in Gigawatt Hours. Available: <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2021-total-system-electric-generation>.
- , 2023b. Gas Consumption by County. Available: <http://www.ecdms.energy.ca.gov/gasbycounty.aspx>.
- , 2023c. Supply and Demand of Natural Gas in California. Available: <https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california>.
- , 2023d. Oil Supply Sources to California Refineries, Available: <https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/oil-supply-sources-california-refineries>. Accessed October 25, 2023.
- , 2023e. California's Oil Refineries. Available: <https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/californias-oil-refineries#:~:text=California%20Oil%20Refinery%20Locations%20and%20Capacities%20%20,%20%20160%2C000%20%2010%20more%20rows%20>. Accessed October 25, 2023.
- , 2023f. Electricity Consumption by County. Available: <http://www.ecdms.energy.ca.gov/elecbycounty.aspx>.
- , 2023g. 2022 California Annual Retail Fuel Outlet Report Results (CEC-A15) Energy Assessments Division, September 22, 2020.
- , 2023h. 2022 Integrated Energy Policy Report Update. Available: <https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2022-integrated-energy-policy-report-update>. Accessed November 3, 2023.
- California Public Utilities Commission (CPUC), 2021. Renewables Portfolio Standard. Available: <https://rps.cpuc.ca.gov/login/?next=/>.

- , 2011. California Energy Efficiency Strategic Plan January 2011 Update. Available: <https://www.cpuc.ca.gov/-/media/cpuc-website/files/legacyfiles/c/5303-caenergyefficiencystrategicplan-jan2011.pdf>.
- Federal Energy Regulatory Commission (FERC), 2023, updated April 13, 2023. About FERC. Available: <https://www.ferc.gov/what-ferc>.
- Kimley-Horn, 2024. *Energy Assessment, Sacramento County WattEV Innovative Freight Terminal (SWIFT) Project, Sacramento County, California*. January.
- Pacific Gas & Electric (PG&E), 2023. Company Information. Available: <https://www.pge.com/en/about/company-information.html>.
- Sacramento Municipal Utility District (SMUD), 2022. 2022 Power Content Label. Available: <https://www.smud.org/SMUDPCL>. Accessed October 25, 2023.
- U.S. Energy Information Administration (USEIA). 2021. Motor Gasoline Consumption, Price, and Expenditure Estimates 2021. Available: https://www.eia.gov/state/seds/sep_fuel/html/fuel_mg.html.
- , 2023. California State Profile and Energy Estimates, updated July 15, 2021. Available: <http://www.eia.gov/state/data.cfm?sid=CA#ConsumptionExpenditures>. Accessed July 16, 2021.

CHAPTER 11, HAZARDS AND HAZARDOUS MATERIALS

- CAL FIRE, 2007. *Sacramento County Fire Hazard Severity Zones in SRA*. November 7.
- , 2008. *Sacramento County Very Fire Hazard Severity Zones in LRA*. July 30.
- Department of Toxic Substances Control and State Water Resources Control Board (DTSC/SWRCB), 2023. Combined Envirostor and GeoTracker Online Databases. September 12.
- Fthenakis. 2003. *Life Cycle impact analysis of cadmium in CdTe PV production*. December.
- Fthenakis, V. and K. Zweibel, 2003. *CdTe PV: Real and Perceived EHS Risks*. May.
- Fthenakis, V.M., M. Fuhrman, J. Heiser, A. Lanzirrotti, J. Fitts, and W. Wang, 2005. *Emissions and Encapsulation of Cadmium in CdTe PV Modules during Fires*. December.
- ForgeSolar, 2023. Glare Analysis, WattEV Sacramento Solar Project. Jun 16.
- Kimley-Horn, 2023. *Phase I Environmental Site Assessment, Sacramento County WattEV Innovative Freight Terminal (SWIFT), 5192 Bayou Way, Sacramento, Sacramento County, California 95837*. September 15.

Sacramento Area Council of Governments (SACOG), 2013. *Sacramento International Airport Land Use Compatibility Plan*. December 12.

Sacramento County Environmental Management Department (SCEMD), 2016. *Area Plan for Emergency Response to Hazardous Materials Incidents in Sacramento County*.

———, 2018. *Sacramento County Onsite Wastewater Treatment System Guidance Manual*.

Sacramento County Office of Emergency Services (SCOES), 2021. *Evacuation Functional Annex*. August.

———, 2022. *Emergency Operations Plan*. May.

Sacramento Municipal Utility District, 2018. *Electric Service Requirements, Commercial Distributed Generation with Optional Energy Storage Systems, Engineering Specification T015*. March.

Sinha, P., R. Balas, L. Krueger, and A. Wade, 2012. *Fate and transport evaluation of potential leaching risks from cadmium telluride photovoltaics*. *Environmental Toxicology and Chemistry*, 31(7), 1670-1675.

CHAPTER 12, HYDROLOGY AND WATER QUALITY

GEI Consultants, 2021. *North American Subbasin Groundwater Sustainability Plan*. December.

Kimley-Horn, 2023. *Sewer Feasibility [Study], Sacramento County WattEV Innovative Freight Terminal (SWIFT)*. September.

———, 2024a. *Water Supply Assessment, Sacramento County WattEV Innovative Freight Terminal (SWIFT)*. January.

———, 2024b. *WattEV Electric Truck Stop Level 3 Drainage Report*. January.

Reclamation District 1000, 2023a. *Frequently Asked Questions*.

———, 2023b. *RD 1000 Facilities*.

Regional Water Quality Control Board (RWQCB), Central Valley Region, 2019. *The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board, Central Valley Region, Fifth Edition, The Sacramento River Basin and the San Joaquin River Basin*. February.

Sacramento County Environmental Management Department, 2013. *Onsite Wastewater Treatment System Guidance Manual*. September 9.

CHAPTER 13, LAND USE

Kimley-Horn, 2023. *Sacramento WattEV Innovative Freight Terminal (SWIFT) Project – Usage Intensity Calculation* [Memorandum]. November 22.

Sacramento Area Council of Governments (SACOG), 2013. Sacramento International Airport Land Use Compatibility Plan. Adopted December 12, 2013. Available: https://www.sacog.org/sites/main/files/file-attachments/smf-1-front_chapters_1-2-2013-12-12-complete.pdf.

Sacramento County, 2015. Complete Sacramento County Zoning Code. Available: <https://planning.saccounty.gov/LandUseRegulationDocuments/Pages/SacramentoCountyZoningCode.aspx>.

———, 2017. Sacramento County General Plan, Land Use Diagram, Adopted 2011, Amended 2017. Available: https://planning.saccounty.gov/LandUseRegulationDocuments/Documents/General-Plan/GPLU2030_UPDATED_FINAL_0918.pdf.

———, 2023. Project: 2004-0018, Sacramento International Airport Master Plan. Mitigation Measure LU-1 – Equivalent or More Effective Determination. Memo to Project File. December 18, 2023.

CHAPTER 14, NOISE

California Department of Transportation (Caltrans), 2009. Technical Noise Supplement to the Caltrans Noise Analysis Protocol. September 2009.

———, 2013. Technical Noise Supplement to the Caltrans Noise Analysis Protocol. September 2013.

Elliott H. Berger, Rick Neitzel, and Cynthia A. Kladden, Noise Navigator Sound Level Database with Over 1700 Measurement Values, July 6, 2010.

Federal Highway Administration (FHWA), 2006. FHWA Highway Construction Noise Handbook. August 2006.

Federal Transit Administration (FTA), *Transit Noise and Vibration Impact Assessment Manual*, September 2018. Available: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf.

Federal Interagency Committee on Noise (FICON), *Federal Agency Review of Selected Airport Noise Analysis Issues*, August 1992.

Google Earth Pro, 2023. Google Earth.

Kariel, H. G., Noise in Rural Recreational Environments, *Canadian Acoustics* 19(5), 3-10, 1991.

Kimley-Horn, 2024. *Acoustical Assessment Sacramento County WattEV Innovative Freight Terminal Project (SWIFT)*. January.

Sacramento County, 2017. Sacramento County General Plan, Noise Element, Adopted 2011, Amended 2017. Available: <https://planning.saccounty.net/LandUse/RegulationDocuments/Documents/General-Plan/Noise%20Element%20-%20Amended%2012-13-17.pdf>.

———, 2013. Sacramento International Airport Land Use Compatibility Plan. Available: https://www.sacog.org/sites/main/files/file-attachments/smf_alucp_all_adopted_dec_2013.pdf?1456339912.

U.S. Department of Housing and Urban Development (HUD), 2009. *The Noise Guidebook*, prepared by The Environmental Planning Division, Office of Environment and Energy, March 2009.

U.S. Environmental Protection Agency (USEPA), *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances*, 1971.

World Health Organization (WHO), *Guidelines for Community Noise*, Geneva, 1999, Available: <http://www.euro.who.int/en/health-topics/environment-and-health/noise/environmental-noise-guidelines-for-the-european-region>.

CHAPTER 15, TRANSPORTATION

California Governor's Office of Planning and Research (OPR), 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. April.

Kimley-Horn, 2023. *WattEV EIR Vehicle Miles Traveled (VMT) Analysis* [Memorandum]. September 6.

———, 2024. *Local Transportation Analysis, Access, and Safety Evaluation, WattEV EIR, Sacramento County, California*. January 8.

Sacramento County, 2020. *Transportation Analysis Guidelines*. September 10.

———, 2022. *Sacramento County Active Transportation Plan*. June.

CHAPTER 16, TRIBAL CULTURAL RESOURCES

Levy, Richard, 1978, "Plains Miwok," In *California*, edited by Robert F. Heizer, pp. 398-405, *Handbook of North American Indians*, Vol. 8, William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Wilson, Norman L., and Arlean H. Towne, 1978, "Nisenan," In *California*, edited by Robert F. Heizer, pp. 387-397, *Handbook of North American Indians*, Vol. 8, William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

CHAPTER 17, UTILITIES

California Department of Resources Recycling and Recovery (CalRecycle), 2021. Mandatory Commercial Recycling: Key Elements of the Law. Available: <http://www.calrecycle.ca.gov/recycle/commercial/#Elements>. Accessed November 23, 2022.

———, 2023. Estimated Solid Waste Generation Rates, Available: <https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates>. Accessed November 2, 2022.

Kimley-Horn, 2023. *Sewer Feasibility [Study], Sacramento County WattEV Innovative Freight Terminal (SWIFT)*. September.

———, 2024a. *Final Draft Water Supply Assessment, Sacramento County WattEV Innovative Freight Terminal (SWIFT)*. January.

———, 2024b. *WattEV Electric Truck Stop Level 3 Drainage Report*. January 25.

Sacramento County, 2022. Sacramento International Airport Master Plan Update Environmental Impact Report (SCH No. 2005082017). February.

———, Department of Waste Management & Recycling (DWMR). 2021. Pers. Comm. September 1, 2021, Peter Hoseit, PE.

———, 2022a. North Area Recovery Station (NARS). Available: <https://wmr.saccounty.gov/Pages/NARS.aspx>. Accessed November 23, 2022.

———, 2022b. County DWMR Homepage. Available: <https://wmr.saccounty.gov/Pages/default.aspx>. Accessed November 23, 2022.

U.S. Environmental Protection Agency (USEPA), 2016. Volume-to-Weight Conversion Factors for Solid Waste. Available: <https://www.epa.gov/smm/volume-weight-conversion-factors-solid-waste>. Accessed November 2, 2023.

CHAPTER 18, CUMULATIVE IMPACTS

California Air Resources Board (CARB), 2022. 2022 Scoping Plan for Achieving Carbon Neutrality. November 16.

California Department of Conservation, 2018a. Historic Land Use Conversion. Available: <https://www.conservation.ca.gov/dlrp/fmmp/Pages/Sacramento.aspx>. Accessed May 6, 2022.

———, 2018b. The Williamson Act Status Report 2016-2017. Available: https://www.conservation.ca.gov/dlrp/wa/Documents/stats_reports/2018%20WA%20Status%20Report.pdf. Accessed August 19, 2022.

- , 2021. The Williamson Act Status Report 2018-2019. Available: https://www.conservation.ca.gov/dlrp/wa/Documents/stats_reports/2020%20WA%20Status%20Report.pdf. Accessed August 19, 2022.
- , 2022. The Williamson Act Status Report 2020-2021. Available: www.boe.ca.gov/CountyPortal/Training/Uploads/Course%20052/Class%20Materials/2021%20Williamson%20Act%20Status%20Report.pdf. Accessed August 19, 2022.
- California Department of Transportation (Caltrans), 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol, September 2013.
- Kimley-Horn, 2024. *Local Transportation Analysis, Access, and Safety Evaluation, WattEV EIR, Sacramento County, California*. January 8.
- Pacific Gas & Electric (PG&E), 2023. Company Information. Available: <https://www.pge.com/en/about/company-information.html>. Accessed December 13, 2023.
- Sacramento Metropolitan Utility District (SMUD), 2019. Resource Planning Report – IRP Filing Report for Submission to the California Energy Commission, April 2019. Available: <https://www.smud.org/-/media/Documents/Corporate/Environmental-Leadership/Integrated-Resource-Plan.ashx>. Accessed December 13, 2023.

CHAPTER 19, OTHER RESOURCE TOPICS

- California Geologic Energy Management Division (CalGEM), 2022. Well Finder online application. California Department of Conservation. Webpage. Available: <https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx>. Accessed August 15, 2023.
- Dupras, Don L., 1999a. Mineral Land Classification Map of PCC-Grade Aggregate Resources in Sacramento County. California Geological Survey. Map. Scale 1:90,000.
- , 1999b. Selected Historic and Active Mining Operations in Sacramento County. California Geological Survey. Map. Scale 1:90,000.
- Engeo, 2018. *Sacramento International Airport (SMF) Commercial Development, Sacramento, California, Geotechnical Feasibility Report*. March 28.
- Kimley-Horn, 2023. *Sewer Feasibility [Study], Sacramento County WattEV Innovative Freight Terminal (SWIFT)*. September.
- Sacramento Area Council of Governments (SACOG), 2019. Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS). Adopted November 18, 2019. Available: <https://www.sacog.org/2020-metropolitan-transportation-plan-sustainable-communities-strategy>. Accessed August 15, 2023.

- Sacramento County, 1993. Conservation Element: Background to the 1993 General Plan as Amended. Available: <https://planning.saccounty.net/LandUseRegulation/Documents/Documents/General-Plan/Conservation%20Element%20Background.pdf>. Accessed August 15, 2023.
- , 2010. Final Environmental Impact Report: Sacramento County General Plan Update. Available: <https://planning.saccounty.net/PlansandProjectsIn-Progress/Documents/General%20Plan%20FEIR%20%282030%29/General%20Plan%20Update%202030%20FEIR%20Vol%20II.pdf>. Accessed August 15, 2023.
- , 2018. Sacramento County Onsite Wastewater Treatment System Guidance Manual.
- , 2022. Sacramento County Housing Element of 2021-2029. Adopted March 8, 2022. Available: <https://planning.saccounty.net>. Accessed August 15, 2023.
- Sacramento County Airport. Personal communication between Angela Hourigan, C.M., Senior Airport Manager, Commercial Development, Sacramento County Department of Airports and Sheri Thompson-Duarte, Director of Operations and Maintenance, Sacramento International Airport. October 26, 2023.
- State of California, Department of Finance (DOF), 2021. E-5 Population and Housing Estimates for Cities, Counties and the State — January 1, 2011-2020. Sacramento, California, May 2021. Available: <https://dof.ca.gov/forecasting/demographics/estimates/estimates-e5-2010-2020/>. Accessed August 15, 2023.
- , 2023. E-5 Population and Housing Estimates for Cities, Counties and the State — January 1, 2021-2023. Sacramento, California. May 2023. Available: <https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2023>. Accessed August 15, 2023.
- Society of Vertebrate Paleontology, 2010. *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources*.

22 ACKNOWLEDGEMENTS

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23 RESPONSE TO COMMENTS

INTRODUCTION

The Draft Supplement to the 2022 Airport Master Plan Update Supplemental Environmental Impact Report (Draft SEIR) was released on February 2, 2024, for a public review period that concluded on March 18, 2024. A total of four individual letters were received during the comment period. This Final Supplemental EIR (Final SEIR) provides responses to comments received on the Draft SEIR. Each letter has been assigned a number, as indicated below.

For ease of review, individual comments addressing separate subjects within each letter are labeled based on the letter's numeric designation and comment number (e.g., the first comment in the first letter is Comment 1-1). The text of the comments has been provided, followed by a response. Note that the preface language of the letters is often excluded (where the text consists of salutations and brief descriptions of the commenting organization). Comment letters are included in their entirety in Appendix RTC-1.

Note that some of the written comments offer suggestions or express preferences related to the proposed development and do not address environmental issues or the adequacy of the Draft SEIR. All comment letters will be forwarded to the Board of Supervisors for consideration via this Final SEIR. In conformance with Section 15088(a) of the State California Environmental Quality Act (CEQA) Guidelines, written responses were prepared addressing comments on environmental issues raised in comments on the Draft SEIR.

LIST OF COMMENTERS

Comments on the SWIFT Project Draft SEIR:

WRITTEN COMMENTS: AGENCIES AND ORGANIZATIONS

1. California Department of Transportation (Caltrans), State of California transportation agency
2. California Department of Fish and Wildlife (CDFW), State of California natural resource agency
3. City of Sacramento, Community Development Department, incorporated city
4. Environmental Council of Sacramento (ECOS), non-profit organization

WRITTEN COMMENTS: INDIVIDUALS

None

LETTER 1

California Department of Transportation (Caltrans), State of California transportation agency, written correspondence; dated March 5, 2024.

RESPONSE TO COMMENT 1-1

Inputs for the SimTraffic model were developed using on-ground counts, resultant peak hour factors (PHF), and observed heavy vehicle percentages (HV%). The resultant outputs establish a baseline condition for evaluation. As such, no revisions to the Local Transportation Analysis (LTA) are required.

RESPONSE TO COMMENT 1-2

The use of 95th percentile queue is an accepted, standard industry practice to document reasonably anticipated queueing conditions within the confidence interval. The Sacramento County Department of Transportation (DOT) accepts this standard industry practice to evaluate the queueing conditions at the study facilities.

RESPONSE TO COMMENT 1-3

The existing conditions were established by collecting traffic data during a typical weekday (a Tuesday) in 2023 at all study facilities. Collecting traffic data on a typical weekday (Tuesday-Thursday) is an accepted industry practice when evaluating Weekday AM and PM peak-hour conditions for a traffic study. As the Power Line Road/Bayou Way intersection was closed for construction during the data collection period and may have led to a localized redistribution of trips through the network, it is also possible that some of these trips may have “inflated” traffic count numbers at the other facilities, therefore providing a conservative assessment. The Sacramento County DOT, the lead reviewing agency for the Local Transportation Assessment (LTA), has reviewed the collected data and deemed the existing conditions established in the LTA as representative of normal, prevailing conditions at the study facilities.

RESPONSE TO COMMENT 1-4

All interchange areas and proximate intersections were evaluated in all analysis scenarios by “balancing up” (increasing volume to account for differences in peak-hour between study facilities). The raw, unbalanced turning movement data for the study facilities is presented in Figure 4, Figure 7, Figure 9, and Figure 12 of the report.

RESPONSE TO COMMENT 1-5

At the request of Caltrans and Sacramento County DOT, ramp meter storage was evaluated per methodology outlined in the October 2022 version of the Caltrans Ramp Meter Design Manual. The project is anticipated to contribute a nominal amount of queueing at existing and future ramp meters. As any queueing from Caltrans ramp meters ultimately affects the County network, the County will continue to monitor the

effects of both future development in the area and planned interchange improvements in order to best address the effects of ramp metering on its facilities as necessary.

RESPONSE TO COMMENT 1-6

The purpose of the LTA is to evaluate the anticipated effects of the project on the local transportation network. Study facilities are selected on parameters including proximity to the project, volume of project trips using the study facility, and turning movements the project is expected to utilize at the study facility. Using these criteria (amongst others), Sacramento County DOT, the lead reviewing agency for the LTA, has determined the study facilities included in this study scope to be sufficient in documenting the anticipated effects of the project. As such, no modifications to the LTA are required.

RESPONSE TO COMMENT 1-7

The Cumulative baseline developed in the Draft SEIR assessment was established using existing traffic data collected in 2023 and the most recent available version of the SACSIM Transportation Demand Model (TDM). The SACSIM TDM that was utilized is more current and contains more relevant assumptions regarding land use and growth rates than the SACOG SACMET model used for the Airport Master Plan Update. As the SACSIM TDM was available, it was utilized for this assessment.

RESPONSE TO COMMENT 1-8

Typical industry practice centers around evaluating the peak hours of traffic when documenting the effects of a project. The peak-hour is utilized when evaluating a Cumulative forecast condition as the “growth” from Existing to Cumulative is best applied to a finite window of time during the day. To provide an “apples-to-apples” comparison between evaluation baselines (Existing and Cumulative), the LTA planning-level signal warrant analysis was completed using Warrant 3 from the California Manual on Uniform Traffic Control Devices (CAMUTCD). The Bayou Way/Power Line Road intersection was the only facility identified for consideration of signalization as it was the only study facility to operate below acceptable County standards in any of the study scenarios provided in the LTA. As is provided in the LTA from the CAMUTCD, “the satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.” Sacramento County DOT, the lead reviewing agency for the LTA, has deemed this analysis to be sufficient.

RESPONSE TO COMMENT 1-9

One year (2020) of County collision data may be affected by the COVID-19 pandemic. Removing 2020 data from the equation would result in removing only one documented collision from one of the study facilities. Sacramento County DOT, the lead reviewing agency for the LTA, has deemed the collision data sampled and presented for the study facilities to be representative of the prevailing conditions as removing the 2020 data does not significantly skew results or alter the conclusions presented in the LTA.

RESPONSE TO COMMENT 1-10

All collisions in the County record at the study facilities between August 1, 2018 and July 31, 2023 are included in Figure 13 of the LTA. The development timeline of the Metro Air Parkway interchange (not completed until after 2020) serves as a partial explanation for why there would not be a robust collision dataset for those study facilities during the years included in the LTA.

RESPONSE TO COMMENT 1-11

Sacramento County DOT, the lead reviewing agency for the LTA, has deemed the analysis provided in the Draft SEIR to be adequate. Table 17 in the LTA presents the operational findings from the simulation model and ingress/egress conditions at the project driveways. All driveways are shown to operate well within the acceptable County standards. The relatively low amount of conflicting peak-hour eastbound and westbound through volume on Bayou Way is not anticipated to significantly impede project vehicle movements.

RESPONSE TO COMMENT 1-12

This comment has been noted. Because revisions to simulation analyses are not required (see Responses to Comment 1-1 through 1-11, above), the conclusions in the LTA and the Draft SEIR have not changed.

RESPONSE TO COMMENT 1-13

Please see the response to comment 1-10. All collisions in the County record at the study facilities between August 1, 2018 and July 31, 2023 are included in Figure 13 of the LTA. Sacramento County DOT, the lead reviewing agency for the LTA, has deemed the collision data contained in the report sufficient to document the prevailing conditions. The County invites Caltrans to share any data they have that may be inconsistent with what the County has provided in the LTA and Draft SEIR. As such, no modifications to the LTA or the Draft SEIR are required.

RESPONSE TO COMMENT 1-14

This comment has been noted. No revisions to the LTA are required.

Vehicle Miles Traveled (VMT) are discussed in Chapter 15 (page 15-9) of the Draft SEIR. The analysis notes that the *Sacramento County Transportation Analysis Guidelines* provide screening criteria that determine whether a project requires a detailed CEQA transportation analysis. The analysis in the Draft SEIR discussed how the project is consistent with the screening criteria (from Table 3-1 of the *Sacramento County Transportation Analysis Guidelines*) of a local-serving retail operation of less than 200,000 square feet.

Additionally, the analysis in the Draft SEIR evaluates the project’s operations and notes the following:

“On a local level, the EV charging facility would provide long-term charging capacity to electric trucks that service many of the businesses operating in nearby Metro Air Park, located on Power Line Road just north of the project site. Based upon these considerations, the project would be more consistent with a local-serving use than a regional-serving use. Accordingly, the proposed project is not expected to generate a substantial amount of VMT and would not contribute to the VMT increase that was described for other portions of the Airport Master Plan Update in the 2022 Airport SEIR [for the implementation of the 2022 Airport Master Plan Update]”

The analysis in the Draft SEIR concludes that the amount of building space associated with the proposed project meets the above screening criteria for local serving retail, and thus a detailed CEQA transportation analysis of operational VMT is not required. Additionally, one of the principal intents of SB 743 and the statewide shift to analyzing a project’s VMT impacts was to direct lead agencies towards considering a project’s effect on VMT and the corresponding impacts related to criteria pollutants and GHG emissions. The project as proposed would provide substantial benefits with respect to criteria pollutant and GHG emissions reductions, as articulated in various discussions within the Draft SEIR, specifically those chapters related to air quality, climate change, and energy.

For these reasons, a VMT analysis is not required for the proposed project.

LETTER 2

California Department of Fish and Wildlife (CDFW), State of California natural resource agency, written correspondence; dated March 18, 2024.

RESPONSE TO COMMENT 2-1

The project description in the Draft SEIR anticipates construction to begin in summer of 2024, with preparation work to commence in June 2024 and grading to follow in July 2024. This period is within the breeding season for Swainson’s hawk. Mitigation Measure BR-2 requires that, if new disturbance must be conducted during the nesting season, preconstruction surveys for Swainson’s hawks shall be conducted by a qualified biologist in accordance with the Swainson’s Hawk Survey Protocol described in the Swainson’s Hawk Technical Advisory Committee 2000 paper. To ensure the surveys are conducted regardless of when construction begins, Mitigation Measure BR-2 will be revised for the Final SEIR to require preconstruction surveys for Swainson’s hawks in accordance with the Swainson’s Hawk Survey Protocol.

If active Swainson’s hawks are found during such pre-construction surveys, a site-specific avoidance plan would be required to include measures to comply with any applicable requirements in the California Endangered Species Act and Fish and Game

Code. If take of Swainson’s hawk cannot be avoided, the project applicant may seek related take authorization as provided by the Fish and Game Code. If project construction necessitates removal of any Swainson’s hawk nests, Mitigation Measure BR-2 requires submittal of documentation of take authorization from CDFW to Sacramento County prior to such activity taking place.

RESPONSE TO COMMENT 2-2

As stated in the Draft SEIR’s Mitigation Measure BR-3, compensatory mitigation for loss of Swainson’s hawk foraging habitat will be at a ratio 1:1, i.e., consistent with the CDFW recommendation that compensation be implemented at a ratio of no less than 1 acre of mitigation for every acre impacted.

If mitigation is achieved through acquisition of fee title or placement of a conservation easement of off-site property that provides value as Swainson’s hawk foraging habitat, the mitigation site must be approved by CDFW and at a minimum, any easement must prohibit any activity that impairs or diminishes the protected lands capacity as Swainson’s hawk foraging habitat as well as protect any existing water rights necessary to maintain the foraging habitat in agricultural production.

If the applicant elects to pursue an incidental take permit with CDFW for potential take of Swainson’s hawk (including removal of nest trees), CDFW may elect to provide additional specific requirements pertaining to acquisition of fee title or placement of consideration easement pursuant to mitigation for loss of Swainson’s hawk foraging habitat.

RESPONSE TO COMMENT 2-3

Mitigation Measure BR-7 was prescribed in the Draft SEIR to avoid impacts of the project to nesting migratory birds. This Mitigation Measure is the same as the Mitigation Measure BR-9 in the previously adopted 2022 Airport Master Plan Update Supplemental EIR. The scope and scale of impacts associated with the proposed project on migratory nesting birds are entirely within the scope of the analysis conducted in the 2022 Airport Master Plan Update Supplemental EIR that has previously been adopted. As such, no change in mitigation measure language in the Draft SEIR for proposed project pertaining to nesting birds is necessary.

As stated in Mitigation Measure BR-7 of the Draft SEIR, if active nests are found in the survey area, a non-disturbance buffer would be established and maintained around the nest to prevent nest failure. The size of the buffer would be determined by a qualified biologist and the buffer would be maintained until the qualified biologist has determined that the nestlings have fledged, or until September 1. The buffers would thus be tailored to the specific bird species and the particular circumstances of the nest location.

With respect to tree removals, and to address the Department’s concerns, Mitigation Measure BR-7 in the Draft SEIR will be revised to state that removal of known raptor nest trees will be replaced with appropriate native trees species at a ratio of 3:1 at a location within the Natomas Basin but outside the FAA-designated critical zone for the airport.

RESPONSE TO COMMENT 2-4

As requested, Mitigation Measure BR-6 in the Draft SEIR will be revised to include preparation of a relocation plan. This relocation plan will include: a summary of the species and habitat features; identification of habitat suitability in relation to the project site; acceptable methods to capture, handle, and relocate individuals out of the construction area; minimum qualifications for biologists to conduct physical relocation of turtle individuals, if necessary; identification of where salvaged individuals will be relocated; and identification of wildlife rehabilitation center or veterinary facility where any injured individuals found within the project site will be taken.

RESPONSE TO COMMENT 2-5

The Natomas Basin Habitat Conservation Plan (NBHCP) makes a number of assumptions in its conservation strategy, including an expectation that a certain amount of agricultural lands outside the plans' preserve areas will continue to be maintained in agricultural use. The project site is located on land that serves as a buffer for the Airport operations against incompatible land uses. These lands are therefore actively managed by the Airport to discourage the presence of wildlife that may be hazardous to flight operations. In general, this land is not in agricultural production. The NBHCP assumes that lands around the airport would remain in wildlife compatible uses, but the Sacramento County Department of Airports must comply with Federal Aviation Administration (FAA) regulations to reduce wildlife hazards on these airport buffer lands. The active management of airport buffer lands to reduce wildlife hazards already limits the habitat quality of these areas for covered species under the conservation plans, such as Swainson's hawk and giant garter snake.

The NBHCP states that the foreseeable urban development within the Natomas Basin ranges from 13,533 to 20,033 acres (Table III-5 of the 2003 NBHCP). These data were used in the NBHCP "...to provide an estimate of potential urban development and resulting take and to provide a basis to assess funding requirements" (at page III-12 of the 2003 NBHCP). The NBHCP assumes that the "permittees" for incidental take permits (City of Sacramento, Sutter County, and Metro Air Park using the NBHCP under the Metro Air Park Habitat Conservation Plan) will develop a maximum of 17,500 acres. This value is 2,533 acres below the maximum urban development projection used to develop the NBHCP. Development outside of the area of existing airport facilities proposed by the Airport Master Plan in combination with the 17,500 acres of development planned by City of Sacramento, Sutter County, and Metro Air Park are still below the maximum urban development area assumed by the NBHCP.

The project site has long been designated for commercial development within the Airport Master Plan in preparation at the time the NBHCP was adopted. As such, the project site was always expected to be developed by the County, as far back as when the HCPs were being developed. The project site would thus not reduce the total extent of agricultural land outside the NBHCP permitted area that was expected to remain in agricultural production for the foreseeable future. Furthermore, as previously noted,

airport buffer lands are generally not targeted for agricultural production due to their potential to attract hazardous wildlife.

The County of Sacramento General Plan Land Use Element identifies multiple categories of land use considered to be “Urban Designations”. These include the following: Mixed-Use Designations, Residential Designations, Commercial and Industrial Designations, Public and Quasi-Public Uses, and Urban Development Areas. The current General Plan land use designation for the project site is Public and Quasi-Public, i.e., a type of Urban Designation. The NBHCP calls for all mitigation lands acquired by the Natomas Basin Conservancy (TNBC) to be situated a minimum of 800 feet from existing urban lands or lands designated for urban uses in an adopted general plan. Because the project site is designated for urban uses, it would not be eligible for inclusion into the preserve system for either the NBHCP or the Metro Air Park HCP (notwithstanding the existing FAA restrictions on the land).

RESPONSE TO COMMENT 2-6

CDFW quotes the first sentence of the second full paragraph on page 7-38 of the Draft SEIR. The Draft SEIR states that direct mortality could occur to individual giant garter snakes if they are present and if construction activities were to take place within 200 feet of irrigation channels that provide suitable aquatic habitat for the species. The rest of the paragraph clarifies that the project design, as described in the project description in the Draft SEIR, would avoid the irrigation canals to the west and south of the project site by 200 feet.

To ensure exclusion of giant garter snake from areas of active construction, Mitigation Measure BR-6 in the Draft SEIR requires installation and maintenance of wildlife exclusion fencing along the western and southern perimeters of the project site (i.e., 200 feet away from the irrigation canals) to prevent giant garter snake individuals, if they are present in the irrigation channel, from entering the active construction area. The fencing would be installed 200 feet away from the edges of the irrigation channels to also ensure avoidance of potential suitable upland areas for giant garter snake. Given the project’s avoidance of upland habitat by design, the project would neither temporarily nor permanently convert upland habitat for giant garter snake.

RESPONSE TO COMMENT 2-7

Any special-status species observations detected as part of biological surveys pursuant to the proposed project will be reported to the CNDDDB.

RESPONSE TO COMMENT 2-8

Comment noted that CEQA filing fees are due and are necessary to help defray the cost of environmental review by CDFW.

RESPONSE TO COMMENT 2-9

For any notifications to CDFW regarding the proposed project, the CDFW office for the North Central Region located at Rancho Cordova, California will be contacted.

LETTER 3

City of Sacramento, Community Development Department, incorporated city, written correspondence; dated March 18, 2024.

RESPONSE TO COMMENT 3-1

The City of Sacramento requested that any biological/agricultural mitigation lands for the proposed project be designated on Airport/County-owned lands or located outside of the Natomas Basin. There are three potential options identified in the Draft SEIR regarding how this mitigation would be implemented for addressing biological habitat mitigation for the proposed project. Mitigation Measure BR-3 allows for either: 1) preservation and management of foraging habitat within 10 miles of the Natomas Basin; 2) preservation and management of foraging habitat within the Natomas Basin itself; or 3) purchase of credits from an agency-approved conservation bank.

Any biological habitat mitigation for the project which ultimately takes place in the Natomas Basin would be targeted on airport-controlled lands located south of the proposed project site near the Sacramento River. Since these lands are already airport-controlled, they are not available for inclusion into the preserve systems for either the NBHCP or the MAP HCP. This specific prospective mitigation location is outside the critical zone defined by the Federal Aviation Administration (FAA) (i.e., a 10,000-foot radius from the center lines of the two parallel runways at the airport). Therefore, management of land in a manner that is conducive for wildlife that can be hazardous (e.g., birds) to airport operations is permissible. These lands were purchased with FAA funds and thus their use and management are limited to those that support continuation of ongoing airport operations, i.e., the northernmost portions of this area that are located within the FAA critical zone would not be eligible for management in a manner that potentially attracts wildlife that can be hazardous to airport operations. Furthermore, if implementation of Mitigation Measure BR-3 occurs outside of the Natomas Basin or through purchase of credits from an approved bank, no conflicts with the HCPs would occur, since the respective conservation strategies of both HCPs target acquisition of available preserve lands within the Natomas Basin.

RESPONSE TO COMMENT 3-2

As stated above in the response to Comment 3-1, any mitigation within the Natomas Basin would be either on airport-controlled land (i.e., land located south of the project site) or through purchase of third-party mitigation bank credits whose service areas include the project site. While Mitigation Measure BR-3 includes the option to purchase third party mitigation credits, there are currently no conservation banks with available

Swainson’s hawk foraging habitat credits that are physically located within the Natomas Basin.¹ Thus, if third party conservation bank credits are purchased, those banks would be physically located outside the geographic area of the Natomas Basin. Agricultural lands would be similarly mitigated.

RESPONSE TO COMMENT 3-3

As described in pages 7-36 through 7-38 of the Draft SEIR, the proposed project is designed to avoid impacts to giant garter snake habitat. Under Mitigation Measure BR-6, prior to ground disturbing construction activities exclusion fencing would be installed 200 feet away from the irrigation canals near the western and southern margins of the project site to prevent giant garter snake individuals, if they are present in the irrigation channel, from entering the active construction area. No project-related construction would occur in any giant garter snake aquatic habitat or associated upland habitat, generally considered to be areas within 200 feet of suitable aquatic habitat, and exclusion fencing would be used to delineate this buffer to ensure avoidance of impacts to GGS individuals. The 200-foot upland range of giant garter snake is consistent with the species’ upland habitat component described in the 2017 USFWS Recovery Plan.²

RESPONSE TO COMMENT 3-4

The Cumulative horizon year for the project is assessed as 2040. The project applicants seek to construct a facility that accommodates anticipated growth in warehouse/local freight EV demand. By 2040, the project anticipates that much of the projected warehouse growth in Metro Air Park will shift to utilizing EV trucks. Therefore, by 2040 the project will shift from primarily serving diverted, regional freeway traffic to primarily serving local EV trips from Metro Air Park warehousing/industrial developments north of I-5 due to the anticipated shift in local fleet EV composition.

RESPONSE TO COMMENT 3-5

As discussed in the report, both Metro Air Parkway interchange intersections (Intersection #6 and Intersection #7) will be signalized by the County prior to the Cumulative analysis year. Future negotiations regarding cost sharing are noted.

RESPONSE TO COMMENT 3-6

The Draft SEIR discusses offsite roadways improvements under the heading *Offsite Improvements* on page 2.21 of the Draft SEIR. Improvements to Bayou Way include widening at the intersections of Bayou Way/Airport Boulevard and Bayou Way/Power Line Road, as well as widening of Bayou Way from two to three lanes along the project

¹ California Department of Fish and Wildlife (CDFW). 2024. Conservation and Mitigation Banks Established in California by CDFW. Available: <https://wildlife.ca.gov/Conservation/Planning/Banking/Approved-Banks#r2>. Accessed: March 22, 2024.

² United States Fish and Wildlife Service (USFWS). 2017. Recovery Plan for the Giant Garter Snake (*Thamnophis gigas*). Sacramento, CA. Available: https://ecos.fws.gov/docs/recovery_plan/20170928_Signed%20Final_GGS_Recovery_Plan.pdf. Accessed: April 10, 2024.

frontage. These improvements are proposed as part of the project. The study intersections would operate at an acceptable Level of Service with the addition of project traffic, per Sacramento County’s traffic analysis guidelines. Improvements to widening the entirety of Bayou Way are beyond the scope of the proposed project and are not discussed in the Draft SEIR.

RESPONSE TO COMMENT 3-7

As is already the case currently, EV trucks related to the project would be required to follow the same routing and enforcement restrictions as non-EV trucks attempting to access non- Surface Transportation Assistance Act (STAA) routes. Bayou Way east of Metro Air Parkway is not included in the City’s current network of truck routes. No modifications to the LTA are required.

RESPONSE TO COMMENT 3-8

Page 2-7 of the Draft SEIR contains the accurate count of Combined Charging Systems (CCS) (90), Megawatt Charging System (MCS) charging (18), and CCS chargers for passenger cars (30). The number of charging stations evolved as the project went through the design process. The LTA project description and analysis assumed a higher count of charging stations (120 CCS, 24 MCS, and 30 CCS for passenger cars), which therefore provides a conservative estimate of trip generation. The analysis is conservative because it overstates the number of trips generated by the project compared to what is proposed to be built. Even with these conservative assumptions, no additional or more significant impacts were identified that were not addressed in the original Draft SEIR or the LTA. The VMT memorandum applied Sacramento County’s screening criteria, which provides that a project is presumed to be local-serving if it is less than 200,000-square feet of greenfield development. Despite the addition of seven charging stalls (a change from 23 to 30), which would primarily serve pass-by trips, the project would continue to be less than 200,000 square feet of greenfield development and the screening criteria would still apply. Whether or not the project adds 23 or 30 charging stalls, the impact would still be less than significant.

RESPONSE TO COMMENT 3-9

The project includes 30 dedicated CCS passenger vehicle (PV) charging stalls, 120 CCS heavy vehicle (HV) charging stalls, and 24 MCS HV charging stalls. During the initial stages of the project’s development, passenger vehicles would have access to the 120 CCS HV charging stalls. The total number of usable CCS spaces for PV with the project would therefore be 150. Once the project has been built to its ultimate condition, including MCS charging stalls, and the characteristics have shifted to local fleet service, these 120 CCS HV spaces would no longer be accessible to PV.

RESPONSE TO COMMENT 3-10

As provided in response to Comment 3-9, the project includes 30 dedicated CCS passenger vehicle (PV) charging stalls, 120 CCS heavy vehicle (HV) charging stalls, and 24 MCS HV charging stalls. During the initial stages of the project’s development,

passenger vehicles would have access to the 120 CCS HV charging stalls. The total number of usable CCS spaces for PV with the project would therefore be 150 and 120 for HV. Once the project has been built to its ultimate condition, including MCS charging stalls, and the characteristics have shifted to local fleet service, these 120 CCS HV spaces would no longer be accessible to PV, bringing the number of PV accessible spaces down to 30 CCS stalls.

RESPONSE TO COMMENT 3-11

The increase in Cumulative year trips is attributable to the shift in anticipated site operating characteristics. In the Cumulative year, it is anticipated that truck drivers would enter the site in a private vehicle, collect a truck from a CCS charger, and then subsequently leave to operate the EV truck. EV truck drivers would also be expected to drop EV trucks off at a CCS point to recharge the battery, and then subsequently leave in a private vehicle. One-third of the capacity fleet (40 EV trucks) was assumed to be performing this operation during the AM and PM peak-hours. This fleet operation dynamic combined with the addition of MCS fast-chargers (new technology by 2040) to the site contributes to the difference in trip generation between Table 1 and Table 2. The County is satisfied with the trip generation presented in Table 1 and Table 2 and the underlying methodology. As such, no modifications to the LTA are required.

RESPONSE TO COMMENT 3-12

The number of peak-hour passenger vehicle trips decreases from Existing Proposed to Cumulative Proposed as there will be fewer CCS chargers available to PV (down from 150 to 30). This is due to the shift in site operations to local fleet service.

RESPONSE TO COMMENT 3-13

Per the responses provided in previous responses (3-4 through 3-12), revisions to the Trip Distribution in Figure 5, the Trip Assignment in Figure 7, and other applicable tables are not necessary. No modifications to the LTA are required.

RESPONSE TO COMMENT 3-14

Per the responses provided in previous comments (3-4 through 3-12), revisions to Figure 5, Figure 7, and the project trip generation are not necessary. As such, no modifications to the LTA are required.

RESPONSE TO COMMENT 3-15

The separate trip generation table for the Cumulative scenario is appropriate due to anticipated changes in local EV truck fleet composition and technology improvements (MCS charging) that are not realistic to apply to the Existing condition. Sacramento County DOT, the lead reviewing agency for the LTA, is satisfied with the trip generation presented in Table 1 and Table 2 and the underlying methodology behind the two tables. As such, no modifications to the LTA are required. The signalization of intersections 6

and 7 are already in the planning process and fair share contributions have not been identified by Sacramento County DOT.

RESPONSE TO COMMENT 3-16

As explained in response to Comment 3-11, the project is anticipated to serve a significant number of local Metro Air Park (and comparable development) EV fleet trucks by the Cumulative year. This service necessitates both EV trucks and employee passenger vehicles accessing the project. As project CCS chargers are anticipated to be used for local EV fleet service, this leaves fewer available for pass-by service to the I-5 corridor. This pass-by service continues to be captured by the dedicated passenger vehicle CCS and EV truck MCS charging stations. The County is satisfied with the trip distribution presented in Figure 10 and the underlying justifications behind it based on anticipated site operations for the Cumulative year. As such, no modifications to the LTA are required.

RESPONSE TO COMMENT 3-17

Appendix H of the LTA shows project related WB-67 truck turning movements at each of the study intersections. The Draft SEIR discusses offsite roadways improvements under the heading *Offsite Improvements* on page 2.21 of the Draft SEIR. Improvements to Bayou Way include widening at the intersections of Bayou Way/Airport Boulevard and Bayou Way/Power Line Road, as well as widening Bayou Way from two to three lanes along the project frontage. These improvements are proposed as part of the project. Improvements to widening the entirety of Bayou Way or western half of Power Line Road are beyond the scope of the proposed project and are not discussed in the Draft SEIR. As is already the case currently, EV trucks related to the project would be required to follow the same routing and enforcement restrictions as non-EV trucks attempting to access non-Surface Transportation Assistance Act (STAA) routes.

RESPONSE TO COMMENT 3-18

This comment has been noted.

RESPONSE TO COMMENT 3-19

As is currently the case, EV trucks related to the project would be required to follow the same routing and enforcement restrictions as non-EV trucks attempting to access non-Surface Transportation Assistance Act (STAA) routes. No modifications to the LTA are required.

RESPONSE TO COMMENT 3-20

See Response to Comment 3-11. No modifications to the LTA are required.

RESPONSE TO COMMENT 3-21

As mentioned in the earlier response to comment 3-5, both Metro Air Parkway interchange intersections (Intersection #6 and Intersection #7) will be signalized prior to

the Cumulative analysis year by the County. As mentioned in response to comment 3-16, the trip distribution analyzed is appropriate based on anticipated operational characteristics of the site in the Cumulative year. The project does not result in any of the study intersections included in this comment exceeding the County’s operational threshold.

RESPONSE TO COMMENT 3-22

This comment has been noted.

RESPONSE TO COMMENT 3-23

This comment has been noted.

LETTER 4

Environmental Council of Sacramento (ECOS), non-profit organization, written correspondence; dated March 18, 2024.

RESPONSE TO COMMENT 4-1

The ground beneath the solar panels and adjoining disturbed areas would be hydroseeded with native seed mix. As stated on page 2-20 of the Draft SEIR, the solar panels would be elevated on a single axis tracking system. At its highest edge, each rack would have a maximum height of approximately 10 feet above grade. The minimum clearance from the lower edge of each panel to ground level would be about three feet. These heights would vary during daylight hours as the system tracks the movement of the sun. While it is not anticipated that mowing would be required, sufficient access would be available to allow for mowing should the need arise. Herbicide application would not be required. As such, maintenance requirements would be minimal. The resultant vegetation provided by the groundcover would stabilize the soil and manage wind and water erosion. Ultimately the groundcover beneath the solar arrays would be similar to what is present currently, but with a native assemblage of groundcover rather than ruderal grasses. The resultant groundcover would prevent wind erosion and dust, similar to current conditions.

This Final SEIR has been revised to describe the project design features described above.

RESPONSE TO COMMENT 4-2

The Natural Resources Conservation Service (NRCS) classifies the soils on the project site as Cosumnes silt loam and Capay clay loam.³ The former soil type occupies two bands of soil that cover the western and eastern portions of the site, and the latter

³ Natural Resources Conservation Service (NRCS). 2024. Web Soil Survey, National Cooperative Soil Survey. <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>. Accessed March 25, 2024.

covers the middle portion of the site. The project site is roughly split evenly between the two soil types.

RESPONSE TO COMMENT 4-3

The NRCS lists Cosumnes silt loam as being comprised of 21 percent sand, 55 percent silt, and 24 percent clay, as measured in the topmost eight inches of soil. Capay clay loam is listed as being comprised of 32 percent sand, 31 percent silt, and 38 percent clay, as measured in the topmost five inches of soil.

RESPONSE TO COMMENT 4-4

The NRCS classifies Cosumnes silt loam as belonging in the “6” wind erodibility group, and Capay clay loam as belonging in the “4” wind erodibility group. Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. As such, Cosumnes silt loam has a low susceptibility to wind erosion, and Capay clay loam has a moderate susceptibility.

RESPONSE TO COMMENT 4-5

Please see the response to comment 4-1. Soils in the solar array area of the project site would be hydroseeded with native seed mix. Ultimately the groundcover beneath the solar arrays would be similar to what is present currently, but with a native assemblage of groundcover rather than ruderal grasses. The resultant groundcover would prevent wind erosion and dust, similar to current conditions.

RESPONSE TO COMMENT 4-6

Since the solar array area would hydroseeded with vegetative groundcover, dust control measures would not be required.

RESPONSE TO COMMENT 4-7

Since the solar array area would hydroseeded with vegetative groundcover, dust control measures would not be required.

RESPONSE TO COMMENT 4-8

Since the ground within the solar array area would be hydroseeded with vegetative groundcover, dust control measures and measures to lessen wind erosion would not be required. Consequently, mitigation to lessen wind erosion would not be required.

RESPONSE TO COMMENT 4-9

See the responses to comments 4-1, 4-5, 4-6, 4-7, and 4-8.

RESPONSE TO COMMENT 4-10

Mitigation Measure BR-2 requires a pre-construction focused survey for Swainson’s hawk within the project site and within a half mile buffer if initial ground disturbance is to occur during the nesting season. If active nests are found, Mitigation Measure BR-2 requires that a qualified biologist be retained to prepare a site-specific take avoidance plan that proposes measures to be implemented prior to the start of any-ground disturbing activities, in consultation with the California Department of Fish and Wildlife (CDFW). In the event that nesting Swainson’s hawks are found during the pre-construction survey, the project applicant may get an incidental take permit pursuant to Section 2081 of the Fish and Game Code. If the applicant implements the project without an incidental take permit issued by CDFW, they would risk unauthorized take of a species protected under the California Endangered Species Act.

The effects of operations of the proposed project on Swainson’s hawk would be the same in nature as described for construction of the proposed project, as described in the Draft SEIR, on pages 7-32 through 7-33. These include proximity of nests (if present) to elevated levels of noise and human activity, including from vehicle traffic along Bayou Way. Issues with human disturbance contributing to nest failures most commonly result from the commencement of the disturbance (or increase in the level of disturbance) after the hawk pair has started nesting. In that case, the adult pair may be motivated to abandon the nest upon becoming exposed to a level of disturbance that was not present during the period when the nest site for the year was selected. Here, operation of the facility would be year-round, meaning consistently elevated levels of vehicle traffic and associated noise along Bayou Way would be continuous. Adult Swainson’s hawk that choose to nest in trees within one-half mile of the project site would be comfortable with the new baseline level of human disturbance.

Individual pairs of Swainson’s hawks have varying tolerances to disturbance. Some hawks may be very sensitive to disturbance while others are comfortable with nesting in areas subject to high levels of noise and human activity. Swainson’s hawk nesting has been documented along Bayou Way, as summarized in the biological reconnaissance survey report for the project prepared by Dudek. Given the proximity of those nest trees to Interstate 5 and being directly under the flight path of aircraft utilizing Sacramento International Airport, it is expected that any pairs that choose to nest in those trees are generally more comfortable with human-related disturbances. As such, the project is not expected to result in a reduction in available nesting habitat for Swainson’s hawk.

RESPONSE TO COMMENT 4-11

The commenter raises issues regarding the Draft SEIR’s consideration of reflection, heat, and sound generated from the solar array on Swainson’s hawk nesting conditions. These factors were evaluated in the Draft SEIR and are discussed further below.

NOISE

The level of sound generated by the solar array field would be minimal. The sound power output from the single axis tracking motors that would be installed with

photovoltaic arrays is estimated at 70dBA.⁴ This level of sound from the solar arrays would be quickly attenuated with further distance from the solar array. For context, the project site is located within the Airport Noise Zone of 70dB, so this same level of noise already exists on the project site.

As stated in the Draft SEIR's project description, while power output from the solar field would principally go to the charging stations in the vehicle charging area, any remaining power generated would be sent to a Battery Energy Storage System (BESS) for export to the grid during off-peak times. As described in the Draft SEIR (14-26 through 14-28), the mechanical equipment noise associated with the BESS – and heating, venting, and air conditioning (HVAC) units associated with the BESS – would result in a noise level of 68dBA at 50 feet away and 33dBA at a reference distance of approximately one-half mile (2,800 feet) away. Because the project site is located within the Airport Noise Zone of 70dB, the existing noise levels already exceed those amounts. These levels of noise are not louder than existing conditions and therefore would not be expected to reduce nesting success of Swainson's hawks.

REFLECTION

Modern photovoltaic panels reflect as little as two percent of incoming sunlight, i.e., about the same as water and less than soil or wood singles.⁵ As the expected level of glare or reflection from the photovoltaic panels would match ambient conditions in the vicinity (e.g., reflections from aquatic habitat in the Sacramento River), these effects would have minimal to no effect on the success of foraging or nesting behaviors by nearby Swainson's hawks.

HEAT

A study of the "heat island" effect associated with photovoltaic facilities found temperatures over the studied plant were 5.4 to 7.2 degrees Fahrenheit higher than wildlands at night.⁶ Based on another study, the heat associated from solar fields was found to dissipate relatively quickly; less than 1,000 feet away from the solar field, air temperatures were found to be consistent with ambient conditions.⁷ Given the location of the solar array on the south side of the project site and away from previously identified potential nest trees, the effect of heat directly associated with the presence of

⁴ Kaliski et al. 2020. An overview of sound from commercial photovoltaic facilities. NOISE-CON 2020. Available: <https://rsginc.com/wp-content/uploads/2021/04/Kaliski-et-al-2020-An-overview-of-sound-from-commercial-photovoltaic-facilities.pdf>. Accessed March 27, 2024.

⁵ National Renewable Energy Laboratory. 2018. Research and Analysis Demonstrate the Lack of Impacts of Glare from Photovoltaic Modules. July 31, 2018. Available: <https://www.nrel.gov/state-local-tribal/blog/posts/research-and-analysis-demonstrate-the-lack-of-impacts-of-glare-from-photovoltaic-modules.html>. Accessed March 27, 2024.

⁶ Barron-Gafford, G. A., Minor, R. L., Allen, N. A., Cronin, A. D., Brooks, A. E., and M.A. Pavao-Zuckerman. 2016. The Photovoltaic Heat Island Effect: Larger solar power plants increase local temperatures. *Nature Scientific reports*, 6(1), 35070.

⁷ Fthenakis, V. and Yuanhao Yu. 2013. Analysis of the Potential for a Heat Island Effect in Large Solar Farms. 2013 IEEE 39th Photovoltaic Specialists Conference.

the solar panels would be substantially or entirely attenuated so as to not affect nesting performance of any Swainson’s hawk pairs that are present in the area.

RESPONSE TO COMMENT 4-12

Based on an analysis of various photovoltaic solar facilities located in California and Nevada, estimates of bird fatalities ranged from 0.031 birds/hectare/year to 5.170 birds/hectare/year, with a mean of 1.088 birds/hectare/year.⁸ Songbirds, pigeons and doves, and more specifically, mourning doves, western meadowlark, and horned lark, were the most frequently detected bird groups at solar facilities in this study. Mourning dove, western meadowlark, and horned lark share several traits, including that these species are primarily ground dwelling and have comparatively large populations in regions where the studies occurred.

Assuming this range of avian mortality is directly translatable to the project site, there would be predicted mortality of between approximately one bird/year to about 207 birds/year, with a mean of around 43 birds/year. The project site is located within the “Critical Zone” for the Airport, defined by the Federal Aviation Administration (FAA) as a 10,000-foot radius around the centerlines of the Airport’s two runways. Areas around the airport are actively managed to discourage occupation by wildlife that could potentially fly into the flight path of airplanes landing or taking off from the runway. As a result, the risk of birds incidentally colliding with the solar related infrastructure that would be installed within the project site is thereby commensurately reduced. For this reason, it is reasonable to assume that mortality directly attributable to the presence of a new solar array within the project site would be lower than the range in the study cited above.

There is less information available regarding bat impacts at solar facilities compared to studies of avian mortality, likely because energy facilities in the United States typically require documentation of avian fatalities but not bats.⁹ The U.S. Geological Survey is conducting a before-after-control-impact (i.e., BACI design) study to better understand the impacts of solar facilities on birds and bats. One study in the United Kingdom found that bat activity was significantly reduced at solar farms compared to other nearby areas.¹⁰ This reduction in bat use around solar facilities reduces the risk of their mortality through accidental collisions with solar infrastructure. This reduction of use by bat species of areas with solar arrays could also be a reason why Smallwood (the author of the article quoted by the commenter) previously calculated estimates of

⁸ Kosciuch, K., D. Riser-Espinoza, M. Geringer, and W. Erickson. 2020. A summary of bird mortality at photovoltaic utility scale solar facilities in the Southwestern US. *PloS One*, 15(4): e0232034.

⁹ Conkling, T. J., A. L., Fesnock, and T.E. Katzner 2023. Numbers of wildlife fatalities at renewable energy facilities in a targeted development region. *Plos One*, 18(12): e0295552.

¹⁰ Tinsley, E., J. S. Froidevaux, S. Zsebők, K.L. Szabadi, and G. Jones. 2023. Renewable energies and biodiversity: Impact of ground-mounted solar photovoltaic sites on bat activity. *Journal of Applied Ecology*, 60(9): 1752-1762.

mortality of bat individuals at solar facilities to be approximately orders of magnitude lower compared to bird fatalities.¹¹

It would also be difficult to separate fatalities directly linked to a solar facility from those brought about through natural mortality. Because only a few bird mortalities per year would be anticipated at the project facility once operational, and even fewer bats would potentially be impacted, the project would not result in a significant impact.

RESPONSE TO COMMENT 4-13

Consideration of the effects of the proposed project on the 22 species protected by the Natomas Basin Habitat Conservation Plan (NBHCP) is included in the Draft SEIR, on pages 7-50 through 7-52. The site does not provide habitat for any invertebrate or plant species covered by the NBHCP or Metro Air Park HCPs. The Draft SEIR identified species-specific biological mitigation measures for western pond turtle (BR-6), burrowing owl (BR-5), and Swainson’s hawk (BR-7), which are NBHCP covered species.

Table BR-3 in the Draft SEIR identifies those mitigation measures that would be implemented that would simultaneously provide direct or ancillary protection for the 22 wildlife and plant species covered by the NBHCP and the 14 species covered by the Metro Air Park HCP. The analysis contained in the response to comments 4-11 and 4-12 would similarly apply to the covered wildlife species (e.g., peregrine falcon) for the NBHCP or Metro Air Park.

RESPONSE TO COMMENT 4-14

The project site is designated for commercial development by the Sacramento International Airport Master Plan, which was in development at the time of the NBHCP’s adoption. As such, the project site was always expected to be developed, as far back as when the HCP was being drafted over two decades ago. Development of the proposed project site to a vehicle charging area and solar fields would not reduce the total extent of agricultural land outside the NBHCP permitted area that was expected to remain in agricultural production for the foreseeable future.

The project site is located within the “Critical Zone” for the Sacramento International Airport. This critical zone is defined by the FAA as a 10,000-foot radius from the center lines of the two parallel runways (16L/34R and 16R/34L) for turbine-powered (jet) aircraft. FAA policy discourages development of habitat for wildlife that can be hazardous to airport operations (generally birds). Most air traffic at Sacramento International Airport is south flow because prevailing winds throughout most of the year are from the south to southwest. As a result, most air traffic occurs in the direction of the project site which is located approximately one mile south of the airport runways. Consequently, the project site has been managed in a manner specifically designed to avoid attracting birds to the location, particularly larger birds such as raptors; these management actions have

¹¹ Smallwood, K. S. 2022. Utility-scale solar impacts to volant wildlife. *The Journal of Wildlife Management*, 86(4): e22216.

included ensuring no agricultural operations occur on the site (e.g., disconnecting the site from irrigation channels) and conducting regular mowing of vegetation.

As described in the analysis in the Draft SEIR's biological resources chapter, the project by design is not expected to result in take of any state or federally listed species. The potential for impacts to these species is further minimized due to implementation of mitigation measures specifically intended to be protective of special-status species including Mitigation Measures BR-2 through BR-6.

RESPONSE TO COMMENT 4-15

The commenter asserts that the project is very likely to interfere with Swainson's hawk nesting, which could result in take of Swainson's hawk through nest abandonment, loss of young, or reduced health and vigor of eggs/nestlings. However, the Draft SEIR prescribed Mitigation Measure BR-2 to minimize the potential for impacts to Swainson's hawk. This measure requires a pre-construction focused survey for Swainson's hawk within the project site and within a half mile buffer if initial ground disturbance is to occur during the nesting season. If no active nests are found during the focused survey, no further mitigation is necessary or required to protect nesting Swainson's hawks. In the event that nesting Swainson's hawks are found during the pre-construction survey conducted under Mitigation Measure BR-2, a qualified biologist shall be retained to prepare a site-specific take avoidance plan that identifies proposed measures that will be implemented prior to the start of any-ground disturbing activities. In addition, acquisition of an incidental take permit pursuant to Section 2081 of the Fish and Game Code would be an option.

RESPONSE TO COMMENT 4-16

The comment appears to be mistakenly quoting text from another project. Mitigation Measure BR-2 calls for conducting a pre-construction focused survey for Swainson's hawk within the project site and within a half-mile buffer if initial ground disturbance is to occur during the nesting season. If active nests are found, a site-specific take avoidance plan is to be prepared that includes proposed protective measures to be implemented prior to the start of any ground-disturbing activities. Such protective measures to be implemented may include use of nest-specific no disturbance buffers. The information in the Draft SEIR for the proposed project does not dictate that buffer distances for active Swainson's hawk nest (if applicable) must be one-quarter mile in size (versus half-mile) as implied by the commenter.

RESPONSE TO COMMENT 4-17

In the circumstance that mitigation for loss of Swainson's hawk foraging habitat occurs in the Natomas Basin, that mitigation would occur in designated airport-controlled lands located south of the proposed project's footprint area (i.e., within what the NBHCP refers to as the Swainson's Hawk Zone). This specific prospective mitigation location is outside the critical zone defined by the FAA (i.e., a 10,000-foot radius from the center lines of the two parallel runways at the airport). Therefore, management of land in a manner that is conducive for wildlife that can be hazardous (e.g., birds) to airport

operations is permissible. These lands south of the project site were purchased with FAA funds and thus their use and management are limited to those that support continuation of ongoing airport operations. This area could only be used to support airport-related mitigation and would not be eligible for acquisition by the Natomas Basin Conservancy (TNBC) as a new preserve area pursuant to the NBHCP. As such, if mitigation pursuant to the proposed project occurs on airport property located south of the project area, then while mitigation would take place within the Natomas Basin proper, it would not interfere with TNBC achieving its mitigation objectives.

Other options for mitigation under Mitigation Measure BR-3 include purchase of third-party bank credits or mitigation sites located within 10 miles of the Natomas Basin, but geographically outside the basin. The purpose of locating Swainson's hawk mitigation site outside the Natomas Basin itself is to avoid any potential competition, and hence conflict, for suitable mitigation lands that may be targeted in the future by the TNBC for NBHCP conservation strategy implementation. Limiting mitigation sites to within 10 miles of the Natomas Basin would maintain benefits to Swainson's hawks individually and specifically nesting within the Natomas Basin.

RESPONSE TO COMMENT 4-18

As described in the Draft SEIR (page 7-32), protocol-level Swainson's hawk surveys conducted by Dudek in 2020 identified Swainson's hawks actively nesting in two trees along Bayou Way. In order to minimize the potential impacts of the proposed project to Swainson's hawks to a less-than-significant level, the Draft SEIR identified Mitigation Measure BR-2. This measure calls for conducting a pre-construction focused survey for Swainson's hawk within the project site and within a half mile buffer if initial ground disturbance is to occur during the nesting season. If active Swainson's hawk nests are found, protective measures to be implemented pursuant to Mitigation Measure BR-2 may include use of nest-specific no disturbance buffers.

RESPONSE TO COMMENT 4-19

The Draft SEIR's environmental setting section explains that the Natomas Basin is an important nesting area for Swainson's hawk. The specific number of nesting pairs supported in the Natomas Basin changes over time, and this information does not affect the impact analysis approach or findings of the Draft SEIR regarding Swainson's hawk. As noted previously, the Draft SEIR identified Mitigation Measure BR-2 specifically to minimize potential impacts of the proposed project on Swainson's hawks.

RESPONSE TO COMMENT 4-20

The information cited in the Draft SEIR regarding potential use of reserve lands in "Area B" can be found on pages IV-17 and IV-18 in the NBHCP conservation strategy. The County also is not party to the NBHCP and therefore the take permits provided to the City of Sacramento and the County of Sutter are not applicable to the proposed project.

RESPONSE TO COMMENT 4-21

The NBHCP assumes continued farming on private farmland in the Natomas Basin as part of its overall conservation strategy. The proposed project site, however, is controlled by the Airport, and is not private farmland. The site is also not maintained for agricultural production and hasn't been for many years. The project site has long been identified for commercial development through the Airport Master Plan, an effort already underway during the NBHCP development. Furthermore, while the project site is mapped as a "farmland of local importance" – existing management of the site includes specifically ensuring no agricultural operations occur on the site (e.g., disconnecting the site from irrigation channels) in order to maintain the 10,000-foot radius of critical zone around the airport runways in a manner that discourages the presence of potentially hazardous wildlife, such as flocks of birds or large raptors. Ultimately, the project site cannot be managed in a manner that benefits NBHCP covered species, including Swainson's hawk, because such a use would be incompatible with the site's primary purpose to function as bufferlands for airport operations, in alignment with FAA requirements to ensure public safety.

RESPONSE TO COMMENT 4-22

One of the nest trees along Bayou Way is located west of the project footprint and east of the off-site improvements around Airport Boulevard. Therefore, no ground disturbance or vegetation removal activities would occur particularly close to the base of this tree.

The other nest tree along Bayou Way is located along the northern margin of the project site. Site layout of the driveways into the project site and associated vehicle parking areas is being designed in a manner to preserve this tree.

RESPONSE TO COMMENT 4-23

As stated in the Draft SEIR, the project site is not located in close proximity to existing preserve areas under the management of the TNBC. The lands to the south identified as airport mitigation are managed by the County under prior agreements and are not associated with the TNBC preserve network.

The County of Sacramento General Plan Land Use Element identifies multiple categories of land use considered to be "Urban Designations". These include the following: Mixed-Use Designations, Residential Designations, Commercial and Industrial Designations, Public and Quasi-Public Uses, and Urban Development Areas. The current General Plan land use designation for the project site is Public and Quasi-Public, i.e., a type of Urban Designation. The NBHCP calls for all mitigation lands acquired by TNBC to be situated a minimum of 800 feet from existing urban lands or lands designated for urban uses in an adopted general plan. The project site is clearly designated for urban uses and hence would be ineligible for consideration into the preserve system for either the NBHCP or the Metro Air Park HCP. Other areas adjacent to the project site are also identified by the Airport Master Plan for commercial development.

RESPONSE TO COMMENT 4-24

Please see the responses to comments 4-1 through 4-9 for information on the planned maintenance of the ground beneath the solar array. In general, the project would be prohibited from enhancing wildlife habitat based on FAA restrictions on the site. Please see response to comment 4-14 for information on those restrictions.

RESPONSE TO COMMENT 4-25

Please see the responses to comments 4-1 through 4-9 for information on the planned maintenance of the ground beneath the solar array. Dust control measures would not be required. Further, the project site is not within a preserve area managed pursuant to an adopted conservation plan, nor is it proposed for such use or in proximity to such lands.

RESPONSE TO COMMENT 4-26

The analysis of alternatives to the proposed project was provided in Chapter 3 of the Draft SEIR, *Alternatives*. In that chapter, a subsection provided an extensive discussion of an Alternative Project Location that was considered but ultimately dismissed from further consideration. The commenter is referred to page 3-2 of the Draft SEIR for this discussion. As noted there, and in the project’s grant application included in Appendix PD-1 of the Draft SEIR, the project is a public/private partnership between the County and WattEV that is made financially feasible through the award of a competitive grant administered by the California Transportation Commission (CTC). As also noted on page 3-3, the project site is on land owned by Sacramento County, and the County therefore has control over the leasing terms. Further, the project is not just a charging station, but it is also a cogeneration facility, meaning that the charging facility would be powered by solar power generated on the site. This arrangement would make the project net-zero and therefore meet the purpose of the CTC grant while achieving substantial public benefits related to emissions reductions and encouragement of zero-emissions technologies. The cogeneration component would also enhance the financial viability of the project since power would not need to be purchased and imported to the site from elsewhere. However, cogeneration requires a substantial quantity of land for an appropriately sized solar array, and the location of that land must meet other project requirements, such as proximity to major trade corridors, proximity to a nearby transmission line, existing area circulation that is favorable for the project’s operation, and other goals and benefits as articulated on pages 3-3 through 3-5 of the Draft SEIR. Metro AirPark does not have available sites that meet these requirements as well as the proposed project site.

The same limitations would also apply to sites in south Sutter County or south Sacramento County. While the commenter does not provide specific locations that they believe would be superior to the proposed project site while still meeting the project objectives, sites in those generalized locations would likely not meet the project objectives and the purposes of the CTC grant since they would not provide the location-specific benefits that are provided by the proposed project site. Please see pages 3-3 through 3-5 of the Draft SEIR for a description of those site-specific benefits, which include immediate proximity to two major transportation and freight corridors, nearby

users of the project facilities, proximity to an existing transmission line, favorable area circulation, and an adequately sized parcel, among other factors. It is unlikely that those favorable site characteristics could be replicated at either of the generalized locations alluded to by the commenter.

As stated in the Draft SEIR, the project site has been planned for commercial development for several decades. As stated on page 2-4 of the Draft SEIR, the project site is designated as Public-Quasi Public in the County’s General Plan and is located within the southern portion of the Sacramento International Airport Master Plan area and is designated for commercial development under the Master Plan and has been so designated since at least 2007 (see Plate PD-4 of the 2007 Final EIR for the Airport Master Plan). In 2008, the project site was approved by the FAA and the U.S. Fish and Wildlife Service (USFWS)^{12,13} for development of a surface parking lot, using biological resources mitigation measures not dissimilar from that prescribed for the proposed project. While those surface parking lots were ultimately not developed, the fundamental basis of that decision remains—the project site is not part of any established habitat conservation or preservation plan for any agency or organization, nor has the Airport made any plans to preserve it for such purposes. The current General Plan land use designation for the project site is Public and Quasi-Public, i.e., a type of Urban Designation. The NBHCP calls for all mitigation lands acquired by TNBC to be situated a minimum of 800 feet from existing urban lands or lands designated for urban uses in an adopted general plan. As the project site is clearly designated for urban uses, it would be categorically not eligible for consideration for inclusion into the preserve system for either the NBHCP or the Metro Air Park HCP (notwithstanding the existing FAA restrictions on the land; see below).

Of particular importance with respect to the site’s suitability as wildlife habitat is the fact that the site is within the FAA’s 10,000-foot critical zone for wildlife safety hazards, which requires that the area to be managed in such a manner as to reduce or eliminate hazards associated with wildlife (particularly birds, but also creatures that attract birds) that pose a hazard to aviation.¹⁴ The site was specifically excluded from the Swainson’s Hawk Foraging Habitat Plan in 2007 for this reason. In approving that plan, the FAA encouraged the Airport to “move wildlife habitat and wildlife attractants” from the Airport’s perimeter.¹⁵ Since November 9, 2011, the Board of Supervisors no longer allows agricultural use of airport lands. Land north of Elverta Road and south of I-5 are designated as Airport Management Areas and managed exclusively by the Airport to

¹² U.S. Fish and Wildlife Service (USFWS). 2008. Project Description Modification for the Sacramento International Airport Terminal Modernization Project in Sacramento County, California. Letter from Susan K. More, USFWS Field Supervisor, to Douglas Pomeroy, FAA. July 14, 2008.

¹³ USFWS. 2008. Biological Opinion on the Sacramento International Airport Terminal Modernization Project in Sacramento County, California.

¹⁴ Sacramento Area Council of Governments (SACOG). 2013. Sacramento International Airport Land Use Compatibility Plan.

¹⁵ Federal Aviation Administration (FAA). 2008. Swainson’s Hawk Mitigation Plan, Letter from George Aiken, Manager, Safety and Standards Branch, Western-Pacific Region, Federal Aviation Administration, to G. Hardy Acree, Director of Airports, Sacramento County Airport System. March 6, 2008.

minimize hazardous wildlife attractants in the airport approach, departure, and circling airspace. Setting the area aside for preservation or conservation of wildlife would be in direct conflict with the FAA's directives and would be prohibited per FAA regulations for lands within a designated wildlife safety hazard zone. This is the principal reason the project site was removed from agricultural production and why the irrigation channel along Bayou Way was abandoned; the goal of these measures and delineation of the Swainson's Hawk Foraging Habitat area to the south of the project site was to reduce wildlife attractants in proximity to the airport. Removing wildlife attractants also has a beneficial effect on birds since it lessens incidences of avian mortality due to collisions with aircraft. Bird strikes are a very real hazard to aviation and to public safety, and tens of thousands of strikes are reported in the U.S. each year. The Airport had 208 reported bird strikes last year, 16 of which were damaging to aircraft.¹⁶ What is often overlooked in the discussion of bird strikes is the toll that those strikes take on birds themselves. Tens of thousands of birds are killed each year in collisions with aircraft, and the Airport has one of the highest bird strike rates in the U.S. Any activity or land use change that could reduce those rates must be viewed as beneficial not just to public safety, but also to birds.

Partly in response to this situation, the long-established plan for the project site has been to develop it for either parking or commercial purposes. Such development would serve the dual purpose of providing regional-serving services as well as removing the site as an attractant to wildlife, as directed by the FAA. Because the land use and planning provisions that govern use of the site have long contemplated potential commercial use, the County elected not to reconsider those determinations in the context of the Draft SEIR. The project is consistent with the applicable plans for the site and is in conformance with both the County's and the Airport's long-term objectives for the site.

The analysis of an alternative site was neither appropriate nor required.

RESPONSE TO COMMENT 4-27

Please see the last paragraph of page 7-53 of the Draft SEIR. As stated there, the project site is located entirely outside the Swainson's Hawk Zone. The commenter implies that there is a potential for conflict with the NBHCP for projects located near to the Swainson's Hawk Zone. The NBHCP does not establish a buffer zone outside the Swainson's Hawk Zone that restricts land use, rather any requirements are specifically focused on the zone itself (i.e., one-mile-wide area from the Sacramento River). Furthermore, the project would not result in fragmentation of Swainson's hawk habitat that connect to and extend from the Swainson's hawk zone, because the site is already located well within the limits of the FAA critical zone such that land management must be conducted in a manner that discourages attraction of wildlife hazardous to airport operations (e.g., birds). Given these considerations, the project would therefore not be in conflict with the HCP's provisions concerning that zone.

¹⁶ FAA. 2024. Bird Strike Database. Available at: <https://wildlife.faa.gov/search>. Accessed March 28, 2024.

RESPONSE TO COMMENT 4-28

The commenter is referred to the response to comment 4-26. As noted there, the site has been planned for development since at least 2007. In 2008, a surface parking lot was approved for the site by the FAA and USFWS. While those surface parking lots were ultimately not developed, the site has retained its commercial land use designation in the Airport's Master Plan for many years. Both a surface parking lot and a large commercial center would likely have greater impacts than the proposed project with respect to air quality emissions, energy use, greenhouse gas emissions, noise, drainage, water quality, and VMT, and it would have all the same or greater impacts to biological resources as the proposed project. When measured against those likely impacts, the proposed project would be comparatively benign, and the project would also provide demonstrable public benefits with respect to air quality and greenhouse gas emissions that those other uses would not.

Based upon these considerations, substantial evidence demonstrates that the proposed project would be environmentally superior to the types of projects that would likely be developed on the site if the proposed project is not implemented. The No Project Alternative (i.e., non-implementation of *this* project) does not mean that nothing could ever be developed on the site. As stated on page 3-6 of the Draft SEIR, selection of the No Project Alternative would not preclude future projects from being proposed and developed on the site in accordance with the allowed uses provided for under the site's existing land use designations.

Further, the Draft SEIR does not conclude that the award of a grant for the project makes consideration of alternatives moot. Rather, the Draft SEIR concludes that the grant for the project placed constraints on the selection of alternatives and rendered some potential alternatives infeasible. In total, four alternatives were considered. Two of those alternatives were evaluated and determined to be infeasible. Those alternatives therefore were not carried forward for additional analysis. Two additional alternatives were carried forward for a full analysis.

RESPONSE TO COMMENT 4-29

It is acknowledged that the NBHCP assumes continued farming on private farmland in the Natomas Basin as part of its overall conservation strategy. The proposed project site, however, is controlled by the Airport, and is not private farmland. The site is also not maintained for agricultural production and hasn't been for many years.

Further, the project site is designated for commercial development under the Sacramento International Airport Master Plan, which was in development at the time of the NBHCP's adoption. As such, the project site has always been expected to be developed, as far back as when the NBHCP was being drafted over two decades ago. Development of the proposed project site to a vehicle charging area and solar fields would not reduce the total extent of agricultural land outside the NBHCP permitted area that was expected to remain in agricultural production for the foreseeable future.

Finally, the County of Sacramento General Plan Land Use Element identifies multiple categories of land use considered to be “Urban Designations”. These include the following: Mixed-Use Designations, Residential Designations, Commercial and Industrial Designations, Public and Quasi-Public Uses, and Urban Development Areas. The current General Plan land use designation for the project site is Public and Quasi-Public, i.e., a type of Urban Designation. The NBHCP calls for all mitigation lands acquired by TNBC to be situated a minimum of 800 feet from existing urban lands or lands designated for urban uses in an adopted general plan. As the project site is clearly designated for urban uses, it would be categorically not eligible for consideration for inclusion into the preserve system for either the NBHCP or the Metro Air Park HCP (notwithstanding the existing FAA restrictions on the land).

Based upon these considerations, the project would not contribute to a significant cumulative impact to an adopted HCP.

RESPONSE TO COMMENT 4-30

As described previously, the project site has been identified for urban development since before the NHBCP was adopted. Draft and adopted Airport Master Plan documents have consistently mapped the project site and neighboring parcels for commercial development since at least 2007. Furthermore, the area of the project site has an “Urban Designation” as identified in the Sacramento County General Plan. Given these considerations, the site should not be considered a part of the agricultural baseline conditions for the NBHCP.

RESPONSE TO COMMENT 4-31

Please see the response to comment 4-29. The project will not involve a change in land use designation from agricultural to industrial. The project site has long been targeted for commercial development under the Sacramento International Airport Master Plan and the site is already zoned by the Sacramento County General Plan under an “Urban Designation”.

RESPONSE TO COMMENT 4-32

Please see the response to comment 4-26. As discussed there, alternative site locations were properly evaluated in the Draft SEIR. Please see pages 3-2 through 3-5 of the Draft SEIR for that evaluation.

RESPONSE TO COMMENT 4-33

Please see the last paragraph of page 7-53 of the Draft SEIR. As stated there, the project site is located entirely outside the Swainson’s Hawk Zone.

RESPONSE TO COMMENT 4-34

The Airport controls just over 400 acres of land south of I-5 at Sacramento Airport that is outside of the FAA’s 10,000-foot critical zone for wildlife safety hazards (south of the

West Drainage Canal that forms the southern boundary of the project site). This land was set aside in 2007 as a mitigation bank for possible environmental impacts from future projects at the airport. The lands set aside include some upland habitat for GGS as well as foraging habitat for Swainson's hawk.

RESPONSE TO COMMENT 4-35

As stated previously in these responses, the project site is not targeted for conservation by any agency or jurisdiction. The site can no longer be used for agricultural purposes based upon its location within the FAA's 10,000-foot Separation Area for Wildlife Attractants.¹⁷ The site has been targeted for development since at least 2007. In addition, and as provided for under Mitigation Measure AG-1 on page 5-7 of the Draft SEIR, as a condition of development the project would be required to set aside an equal amount of farmland of local importance (or better) via a deed restriction. In this manner, the project would be contributing to the goal of the State's 30x30 initiative by permanently conserving agricultural lands in the area.

¹⁷ Sacramento Area Council of Governments (SACOG). 2013. Sacramento International Airport Land Use Compatibility Plan. See specifically Map 5, Compatibility Policy Map: Wildlife Hazards on page 2-60 of this document.