City of SACRAMENTO
Community Development

300 Richards Blvd., 3rd Floor
Sacramento, CA 95811

Help Line: 916-264-5011
CityofSacramento.org/dsd

PROPOSED MITIGATED NEGATIVE DECLARATION

The City of Sacramento, California, a municipal corporation, does hereby prepare, declare, and publish this Mitigated Negative Declaration for the following described project:

Greenfair Project (P14-040): The proposed project consists of an approval of a General Plan Amendment from Traditional Neighborhood High Designation to Traditional Neighborhood Low and a Rezone of the project site from Multi-Unit Dwelling to (R-3) to Single-Unit or Duplex Dwelling (R-1A). In addition, the proposed project includes a Tentative Map to subdivide the 6.9-acre site into 44 residential lots. As part of construction, four existing onsite cul-de-sacs and carports would be demolished and replaced with four larger cul-de-sacs consistent with City roadway standards. All necessary on-site water and wastewater infrastructure would be included and would connect to existing City facilities within Fairgrounds Drive.

The Lead Agency is the City of Sacramento. The City of Sacramento, Community Development Department, has reviewed the proposed project and, on the basis of the whole record before it, has determined that there is no substantial evidence that the project, with mitigation measures as identified in the attached Initial Study, will have a significant effect on the environment. This Mitigated Negative Declaration reflects the lead agency's independent judgment and analysis. An Environmental Impact Report is not required.

This Mitigated Negative Declaration has been prepared pursuant to the California Environmental Quality Act (Public Resources Code Sections 21000 et seq.), CEQA Guidelines (Title 14, Sections 15000 et seq. of the California Code of Regulations), the Sacramento Local Environmental Regulations (Resolution 91-892), and the Sacramento City Code.

A copy of this document and all supportive documentation may be reviewed or obtained at the City of Sacramento, Community Development Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA 95811 from 9:00 a.m. to 4:00 p.m.

Greenfair Project
P14-040

Initial Study / Mitigated Negative Declaration

PREPARED FOR THE
CITY OF SACRAMENTO

PREPARED BY RANEY PLANNING & MANAGEMENT, INC.
SACRAMENTO, CALIFORNIA

MAY 2015

GREENFAIR PROJECT

INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION FOR ANTICIPATED SUBSEQUENT PROJECTS UNDER THE 2035 GENERAL PLAN MASTER EIR

This Initial Study has been prepared by the City of Sacramento, Community Development Department, 300 Richards Boulevard, Third Floor, Sacramento, CA 95811, pursuant to the California Environmental Quality Act (Public Resources Code Sections 21000 *et seq.*), CEQA Guidelines (Title 14, Section 15000 *et seq.* of the California Code of Regulations) and the Sacramento Local Environmental Regulations (Resolution 91-892) adopted by the City of Sacramento.

ORGANIZATION OF THE INITIAL STUDY

This Initial Study is organized into the following sections:

SECTION I - BACKGROUND: Provides summary background information about the project name, location, sponsor, and the date this Initial Study was completed.

SECTION II - PROJECT DESCRIPTION: Includes a detailed description of the proposed project.

SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION: Reviews proposed project and states whether the project would have additional significant environmental effects (project-specific effects) that were not evaluated in the Master EIR for the 2035 General Plan.

SECTION IV - ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: Identifies which environmental factors were determined to have additional significant environmental effects.

SECTION V - DETERMINATION: States whether environmental effects associated with development of the proposed project are significant, and what, if any, added environmental documentation may be required.

REFERENCES CITED: Identifies source materials that have been consulted in the preparation of the Initial Study.

SECTION I - BACKGROUND

Project Name and File Number:	Greenfair Project [Application Number P14-040]
Project Location:	Located north of Fairgrounds Drive off of Broadway, east of 5th Street, south of 2nd Avenue, and east of 50th Street in Sacramento, CA. APNs 011-0350-001 through -023 and -044; 001-0360-001 through -004, -007 through -023 -040, -041, and -043
Project Applicant:	Caleps Development 3001 I Street. 2nd Floor Sacramento, CA 95816
Project Planner:	Antonio Ablog, Associate Planner Community Development Dept. City of Sacramento 300 Richards Blvd, 3rd Floor Sacramento, CA 95811
Environmental Planner:	Dana Mahaffey, Associate Planner Community Development Dept. City of Sacramento 300 Richards Blvd, 3rd Floor Sacramento, CA 95811
Date Initial Study Completed:	May 11, 2015

This Initial Study was prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Sections 1500 *et seq*.). The Lead Agency is the City of Sacramento.

The City of Sacramento, Community Development Department, has reviewed the proposed project and, on the basis of the whole record before it, has determined that the proposed project would not result in any impacts beyond those identified and described in the 2035 General Plan Master EIR.

The City has prepared the attached Initial Study to (a) review the discussions of cumulative impacts, growth inducing impacts, and irreversible significant effects in the 2035 General Plan Master EIR to determine their adequacy for the project (see CEQA Guidelines Section 15178(b),(c)) and (b) identify any potential new or additional project-specific significant environmental effects that were not analyzed in the Master EIR and any mitigation measures or alternatives that may avoid or mitigate the identified effects to a level of insignificance, if any.

As part of the Master EIR process, the City is required to incorporate all feasible mitigation measures or feasible alternatives appropriate to the project as set forth in the Master EIR (CEQA Guidelines Section 15177(d)) The Master EIR mitigation measures that are identified as appropriate are set forth in the applicable technical sections below. Policies included in the 2035 General Plan that reduce significant impacts identified in the Master EIR are identified and discussed in the Master EIR.

This analysis incorporates by reference the general discussion portions of the 2035 General Plan Master EIR. (CEQA Guidelines Section 15150(a)). The Master EIR is available for public review at the City of Sacramento, Community Development Department, 300 Richards Boulevard, Third Floor, Sacramento, CA 95811, and on the City's web site at: http://portal.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports

The City is soliciting views of interested persons and agencies on the content of the environmental information presented in this document. Due to the time limits mandated by state law, your response must be sent at the earliest possible date, but no later than the ***20-day*** review period ending June 8, 2015.

Please send written responses to:

Dana Mahaffey, Associate Planner
Community Development Department
City of Sacramento
300 Richards Blvd, 3rd Floor
Sacramento, CA 95811
Direct Line: (916) 808-2762
DMahaffey@cityofsacramento.org

SECTION II - PROJECT DESCRIPTION

Introduction

The Project Description section of the Initial Study provides a description of the Greenfair Project's (proposed project) location, existing conditions, surrounding land uses, and project components.

Project Location

The proposed project site is approximately 6.9 acres and is located on the north side of Fairgrounds Drive off of Broadway in the southeastern area of the City of Sacramento (see Figure 1, Regional Project Location). The site is located five miles southeast from the downtown core of the City of Sacramento. The surrounding roadway network consist of Fairgrounds Drive to the south, 57th Street to the east, 2nd Avenue to the north, and 50th Street to the west (see Figure 2, Project Vicinity Map). Access to the project site is provided via Fairgrounds Drive off of Broadway. The site is identified by Sacramento County Assessor's Parcel Numbers (APNs) 011-0350-001 through 023 and 044; 001-0360-001 through 004; 007 through 023; 040, 041, and 043.

Existing Conditions and Surrounding Land Uses

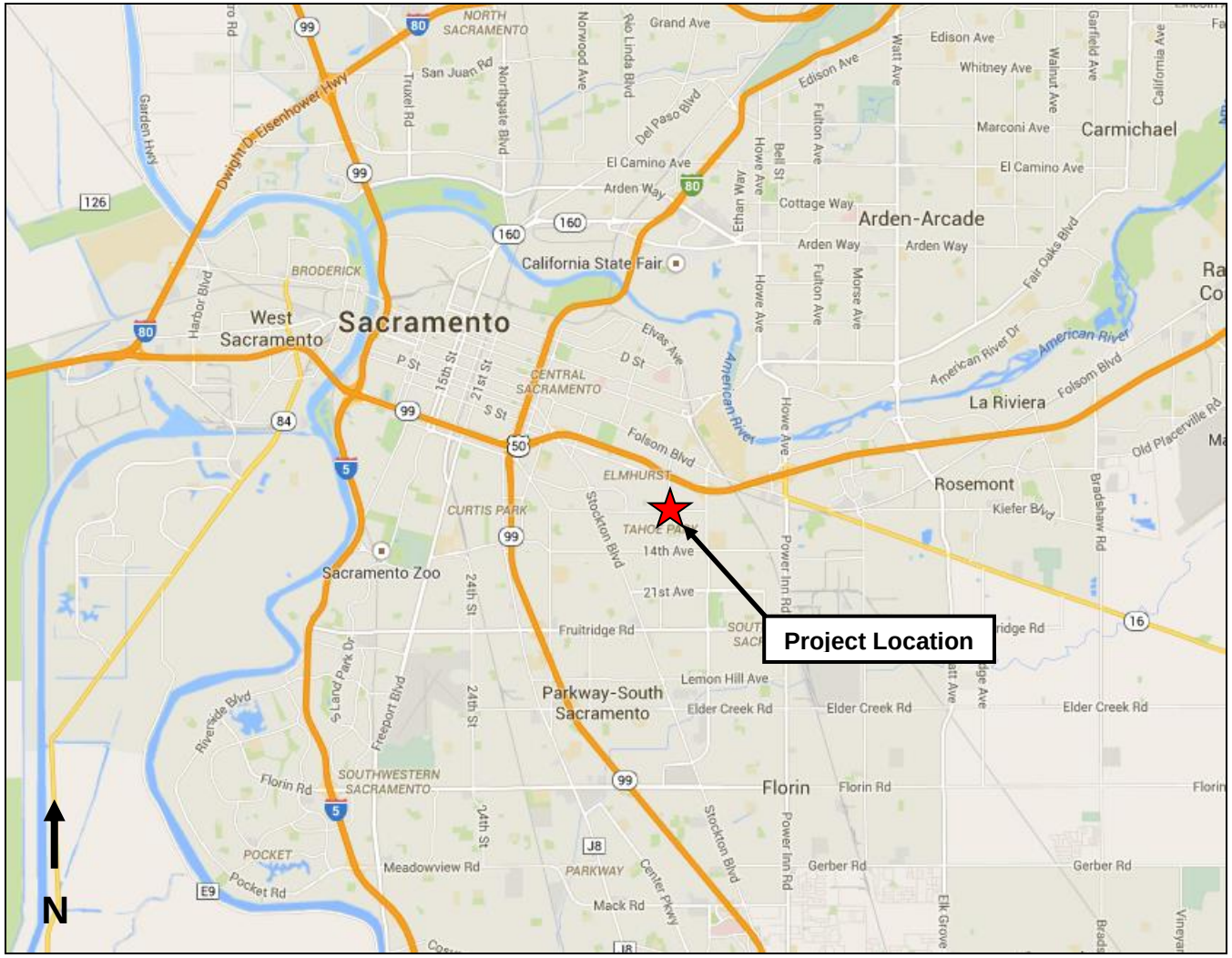
The project site has been previously graded and consists of four existing paved cul-de-sacs directly accessing Fairgrounds Drive. The project site is vacant of any buildings; however, existing carports are located on-site. The existing project site is zoned for Multi-Unit Dwelling (R-3) and designated as Traditional Neighborhood High Density in the City of Sacramento General Plan. Surrounding land includes single-family residential to the north and east, general commercial to the west, and open space to the south. Beyond the open space to the south, is a multi-story senior residential building.

Project Components

The proposed project consists of an approval of a General Plan Amendment from Traditional Neighborhood High Designation to Traditional Neighborhood Low and a Rezone of the project site from Multi-Unit Dwelling to (R-3) to Single-Unit or Duplex Dwelling (R-1A). In addition, the proposed project includes a Tentative Map to subdivide the 6.9-acre site into 44 residential lots. As part of construction, four existing onsite cul-de-sacs and carports would be demolished and replaced with four larger cul-de-sacs consistent with City roadway standards (see Figure 3, Project Site Plan). All necessary on-site water and wastewater infrastructure would be included and would connect to existing City facilities within Fairgrounds Drive.

Six-inch sewer and 21-inch drainage lines existing within Fairgrounds Drive along the project frontage. In addition, a six-inch private water line exists within Fairgrounds Drive along the project frontage. The project would be required to construct a sewer main extension to serve lots 33 to 44. In addition, a water main extension may be required to service lots one through 44 since the existing water system on-site is a private system that is owned by the Greenfair Association. The aforementioned detail is yet to be worked out with Sacramento Department of Utilities (DOU) and the Greenfair Association.

Figure 1
Regional Project Location

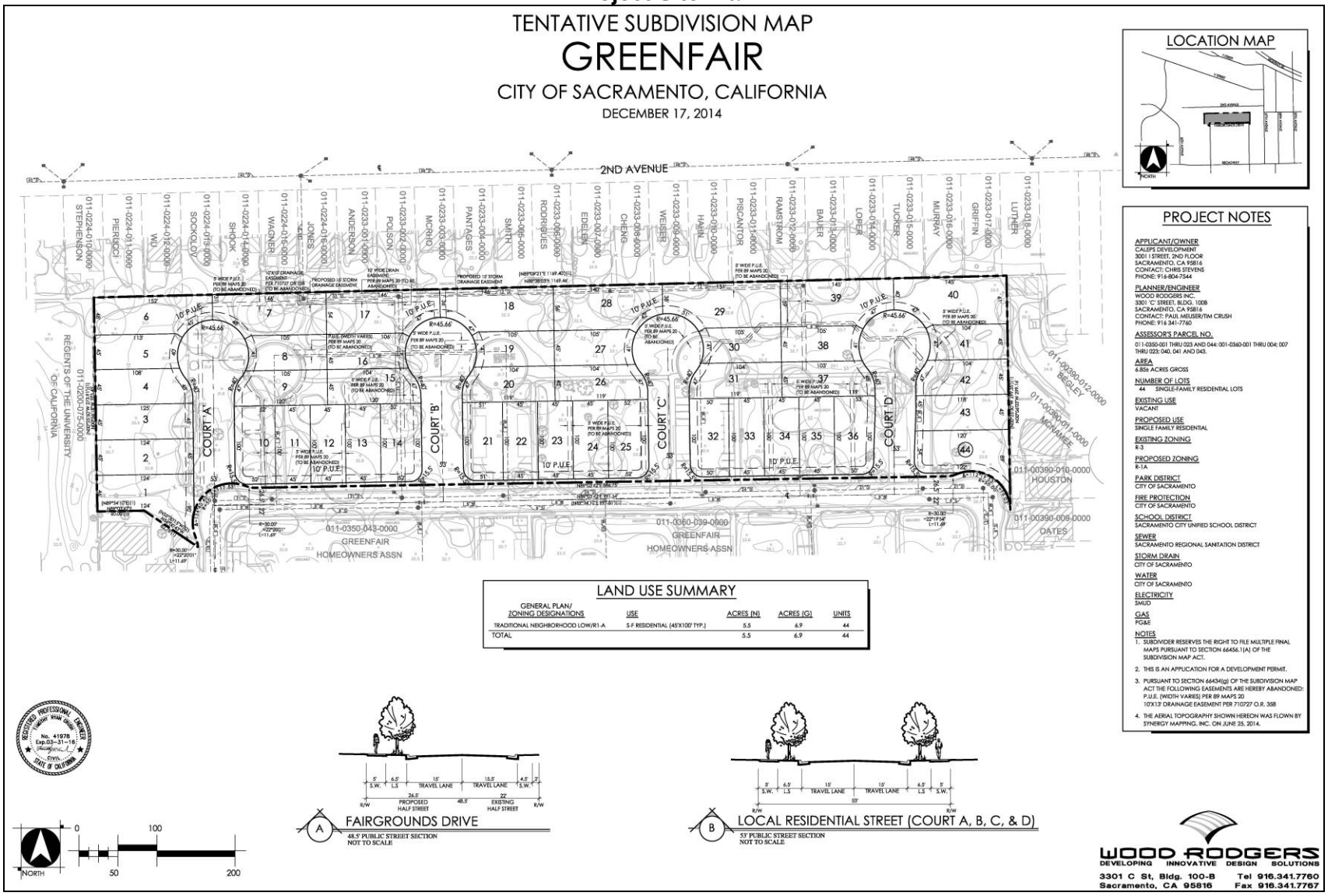


Source: Google Earth, 2015.

Figure 2
Project Vicinity Map

Source: Google Earth, 2015.

Figure 3
Project Site Plan



Project Approvals

The proposed project would require the following approvals by the City of Sacramento:

- Approval of the IS/MND and adoption of the associated Mitigation Monitoring and Reporting Program;
- Approval of a General Plan Amendment from Traditional Neighborhood High to Traditional Neighborhood Low;
- Approval of a Rezone from R-3 to Standard R-1A; and
- Approval of a Tentative Map subdividing the site into 44 single-family residential lots.

SECTION III – ENVIRONMENTAL CHECKLIST AND DISCUSSION

LAND USE, POPULATION AND HOUSING, AGRICULTURAL RESOURCES AND ENERGY

Introduction

The California Environmental Quality Act (CEQA) requires the Lead Agency to examine the effects of a project on the physical conditions that exist within the area that would be affected by the project. CEQA also requires a discussion of any inconsistency between the proposed project and applicable general plans and regional plans.

An inconsistency between the proposed project and an adopted plan for land use development in a community would not constitute a physical change in the environment. When a project diverges from an adopted plan, however, it may affect planning in the community regarding infrastructure and services, and the new demands generated by the project may result in later physical changes in response to the project.

In the same manner, the fact that a project brings new people or demand for housing to a community does not, by itself, change the physical conditions. An increase in population may, however, generate changes in retail demand or demand for governmental services, and the demand for housing may generate new activity in residential development. Physical environmental impacts that could result from implementing the proposed project are discussed in the appropriate technical sections.

This section of the initial study identifies the applicable land use designations, plans and policies, and permissible densities and intensities of use, and discusses any inconsistencies between these plans and the proposed project. This section also discusses agricultural resources and the effect of the project on these resources.

Discussion

Land Use

The project site has been designated as Traditional Neighborhood High in the 2035 General Plan, and is zoned R-3. The project site is located in an urbanized portion of the community. Existing land uses surrounding the project site include single-family residential to the north and east, general commercial to the west, and a park to the south. The current land use designation allows a density range of 18 to 36 units per net acre; however, the proposed project would include 44 units on 5.5 net acres for a density of eight units per acre. Therefore, a General Plan Amendment from Traditional Neighborhood High to Traditional Neighborhood Low is required. Development of the site as proposed would alter the existing landscape, but the project site has been designated for urban development in the 2035 General Plan. With the approval of the General Plan Amendment, development of the project site would be consistent with the Planning and Development Code, and the amended planning designations. Requested project entitlements include approval of a General Plan Amendment and a Rezone from R-3 to Single-Unit and Duplex Dwelling (R-1A).

Population and Housing

The proposed project consists of constructing a total of 44 single-family residential lots. Development of the project would add to the population in the project area. Implementation of the proposed project would not displace any existing housing units or people. Construction or replacement of housing elsewhere would not be required for the project. In addition, the project site is designated as residential development and would include less population than anticipated in the City's General Plan Master EIR.

Agricultural Resources

The Master EIR discussed the potential impact of development under the 2035 General Plan on agricultural resources. See Master EIR, Chapter 6.2. In addition to evaluating the effect of the general plan on sites within the City, the Master EIR noted that to the extent the 2035 General Plan accommodates future growth within the City limits, the conversion of farmland outside the City limits is minimized. (Master EIR, page 6.2-13) The Master EIR concluded that the impact of the 2035 General Plan on agricultural resources within the City was less than significant.

The project site does not contain soils designated as Important Farmland (i.e., Prime Farmland, Unique Farmland or Farmland of Statewide Importance). (NRCS 2010) The site is not zoned for agricultural uses, and there are no Williamson Act contracts that affect the project site. No existing agricultural or timber-harvest uses are located on or in the vicinity of the project site. Development of the site would result in no impacts on agricultural resources.

Energy

Structures built as part of the project would be subject to Titles 20 and 24 of the California Code of Regulations, which serve to reduce demand for electrical energy by implementing energy-efficient standards for residential and non-residential buildings. The 2035 General Plan includes policies (see Policies 6.1.10 through 6.1.13) to encourage the spread of energy-efficient technology by offering rebates and other incentives to commercial and residential developers, and recruiting businesses that research and promote energy conservation and efficiency.

Policies 6.1.6 through 6.1.8 focus on promoting the use of renewable resources, which would reduce the cumulative impacts associated with use of non-renewable energy sources. In addition, Policies 6.1.5 and 6.1.12 call for the City to work closely with utility providers and industries to promote new energy conservation technologies.

The Master EIR evaluated the potential impacts on energy and concluded that the effects would be less than significant. (See Impacts 6.11-9 and 6.11-10) The proposed project would not result in any impacts not identified and evaluated in the Master EIR.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
1. AESTHETICS, LIGHT AND GLARE Would the project: A) Create a new source of glare that would cause a public hazard or annoyance?			X
B) Create a new source of light that would be cast onto oncoming traffic or residential uses?			X
C) Substantially degrade the existing visual character of the site or its surroundings?			X

ENVIRONMENTAL SETTING

The project site is located on a vacant site encompassing four paved cul-de-sacs. Requested project entitlements include a Rezone from the current Multi-Unit Dwelling R-3 to Single-Unit and Duplex Dwelling (R-1A) resulting in a lower intensity use than originally anticipated. The project site is located on flat terrain in a residential area. The surrounding areas include single family residential uses to the north and east, general commercial area to the west, and open space to the south. The surrounding areas to the north and east share the same zoning designation as the proposed zoning for the project site. The proposed development would change the appearance of the site as viewed from nearby areas, but would be consistent with the height, bulk, and character of the surrounding uses. Water features are not located on or immediately adjacent to the site. The project site does not contain scenic resources, is not located in an area designated as a scenic resource or vista, and is not visible from any state-designated scenic highways.

STANDARDS OF SIGNIFICANCE

The significance criteria used to evaluate the project impacts to aesthetics are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, thresholds of significance adopted by the City in applicable general plans and previous environmental documents, and professional judgment. A significant impact related to aesthetics would occur if the project would:

- substantially degrade the existing visual character or quality of the site and its surroundings; or
- create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR described the existing visual conditions in the general plan policy area, and the potential changes to those conditions that could result from development consistent with the 2035 General Plan. See Master EIR, Chapter 6.13, Urban Design and Visual Resources.

The Master EIR identified potential impacts for glare (Impact 6.13-1). Mitigation Measure 6.13-1, set forth below, was identified to reduce the effect to a less-than-significant level.

Light cast onto oncoming traffic or residential uses was identified as a potential impact (Impact 6.13-2). The Master EIR identified Policy LU 6.1.14 (Compatibility with Adjoining Uses) and its requirement that lighting must be shielded and directed downward as reducing the potential effect to a less-than-significant level.

MITIGATION MEASURES FROM 2035 GENERAL PLAN MASTER EIR THAT APPLY TO PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

Questions A and B

The project site is predominately vacant and located on flat terrain surrounded by development in a residential area. In general, the proposed operations would be similar to the neighboring sites. New sources of light or glare will result from development of 44 single-family residential units; however, day or nighttime views in the area would not be affected because the proposed project would be required to adhere to Policy LU 6.1.14 that requires lighting to be shielded and directed downward. In addition, the project site's residential lighting would be consistent with the surrounding land uses. The project site is infill and the surrounding land uses are built out. Thus, lighting from the project site would not be expected to cause a public annoyance or cast onto residential uses. As such, the proposed project would result in a ***less-than-significant*** impact associated with light and glare.

Question C

The proposed project site has been previously disturbed, is surrounded by existing development, and is designated for residential use by the City's General Plan. Surrounding land includes single-family residential to the north and east, general commercial to the west, and open space to the south. Beyond the open space to the south, is a multi-story senior residential building. As such, the proposed project would be consistent and compatible with the existing visual character and quality of the immediate project area.

The other buildings in the area are mainly one- or two-story residential buildings with some taller residential buildings located to the south of the site. The proposed single-family residences would be consistent with the urban use planned for the site and would complement the building sizes that exist in the vicinity. As a result, a ***less-than-significant*** impact would occur in relation to substantially degrading the existing visual character of the site or its surroundings.

MITIGATION MEASURES

None required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Aesthetics.

Issues:		Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
2. AIR QUALITY Would the project:				
A)	Result in construction emissions of NO_x above 85 pounds per day?			X
B)	Result in operational emissions of NO_x or ROG above 65 pounds per day?			X
C)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X
D)	Result in PM_{10} concentrations equal to or greater than five percent of the State ambient air quality standard (i.e., 50 micrograms/cubic meter for 24 hours) in areas where there is evidence of existing or projected violations of this standard?			X
E)	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)?			X
F)	Result in exposure of sensitive receptors to substantial pollutant concentrations?			X
G)	Result in TAC exposures create a risk of 10 in 1 million for stationary sources, or substantially increase the risk of exposure to TACs from mobile sources?			X
H)	Conflict with the Climate Action Plan?			X

ENVIRONMENTAL AND REGULATORY SETTING

The City of Sacramento is within Sacramento County, which is within the boundaries of the Sacramento Valley Air Basin (SVAB) and under the jurisdiction of the Sacramento Metropolitan Air Quality Management District (SMAQMD). Federal and State air quality standards have been established for six common air pollutants, known as criteria pollutants, because the criteria air pollutants could be detrimental to human health and the environment. The criteria pollutants include particulate matter, ground-level ozone, carbon monoxide, sulfur oxides, nitrogen oxides, and lead. At the federal level, Sacramento County is designated as severe nonattainment for the 8-hour ozone standard, nonattainment for the 24-hour $PM_{2.5}$ standard, and attainment or unclassified for all other criteria pollutants. At the State level, the area is designated as a serious nonattainment area for the 1-hour ozone standard, nonattainment for the 8-hour ozone standard, nonattainment for the PM_{10} and $PM_{2.5}$ standards, and attainment or unclassified for all other State standards.

Due to the nonattainment designations, SMAQMD, along with the other air districts in the SVAB region, is required to develop plans to attain the federal and State standards for ozone and

particulate matter. The attainment plans currently in effect for the SVAB are the *2013 Revisions to the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (2013 Ozone Attainment Plan), *$PM_{2.5}$ Implementation/Maintenance Plan and Re-designation Request for Sacramento $PM_{2.5}$ Nonattainment Area* ($PM_{2.5}$ Implementation/Maintenance Plan), and the 1991 Air Quality Attainment Plan (AQAP), including triennial reports. The air quality plans include emissions inventories to measure the sources of air pollutants, to evaluate how well different control measures have worked, and show how air pollution would be reduced. In addition, the plans include the estimated future levels of pollution to ensure that the area would meet air quality goals.

Nearly all development projects in the Sacramento region have the potential to generate air pollutants that may increase the difficultly of attaining federal and State AAQS. Therefore, for most projects, evaluation of air quality impacts is required to comply with CEQA. In order to help public agencies evaluate air quality impacts, SMAQMD has developed the *Guide to Air Quality Assessment in Sacramento County*. The SMAQMD's guide includes recommended thresholds of significance, including mass emission thresholds for construction-related and operational ozone precursors, as the area is under nonattainment for the federal and State ozone AAQS. The SMAQMD's guide also includes screening criteria for localized carbon monoxide (CO) emissions and thresholds for new stationary sources of toxic air contaminants (TACs).

In addition to criteria air pollutants, TACs are also a category of environmental concern. TACs are present in many types of emissions with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Cars and trucks release at least 40 different TACs. In terms of health risks, the most volatile contaminants are diesel particulate matter (DPM), benzene, formaldehyde, 1,3-butadiene and acetaldehyde. Gasoline vapors contain several TACs, including benzene, toluene, and xylenes. Public exposure to TACs can result from emissions from normal operations as well as accidental releases. Health risks from TACs are a function of both the concentration of emissions and the duration of exposure, which typically are associated with long-term exposure and the associated risk of contracting cancer. Health effects of exposure to TACs other than cancer include birth defects, neurological damage, and death.

Naturally occurring asbestos (NOA) was identified as a TAC in 1986 by CARB. Earth disturbance activity could result in the release of NOA to the air. NOA is located in many parts of California and is commonly associated with ultramafic rocks. According to mapping prepared by the California Geological Survey, the only area within Sacramento County that is likely to contain NOA is eastern Sacramento County. The project site is not located in eastern Sacramento County and is not in an area identified as likely to contain NOA.

Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, childcare centers, playgrounds, retirement homes, convalescent homes, hospitals, and medical clinics. Existing sensitive receptors in the vicinity of the project site include the single-family residences and a retirement community, located to the south, southwest, and east of the site.

Greenhouse Gas Emissions

Emissions of Greenhouse Gas (GHG) contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. A project's GHG emissions are at a micro-scale relative to global emissions, but could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact.

In September 2006, then-Governor Arnold Schwarzenegger signed Assembly Bill (AB) 32, which requires that statewide GHG emissions be reduced to 1990 levels by the year 2020. AB 32 delegated the authority for implementation to the CARB and directs the CARB to enforce the statewide cap. In accordance with AB 32, CARB prepared the *Climate Change Scoping Plan* (Scoping Plan) for California, which was approved in 2008. The Scoping Plan provides the outline for actions to reduce California's GHG emissions. Based on the reduction goals called for in the 2008 Scoping Plan, a 29 percent reduction in GHG levels relative to a Business As Usual (BAU) scenario would be required to meet 1990 levels by 2020. A BAU scenario is a baseline condition based on what could or would occur on a particular site in the year 2020 without implementation of a proposed project or any required or voluntary GHG reduction measures. A project's BAU scenario is project and site specific, and varies from project to project.

In 2011, the baseline or BAU level for the Scoping Plan was revised to account for the economic downturn and State regulation emission reductions (i.e., Pavley, Low Carbon Fuel Standard [LCFS], and Renewable Portfolio Standard [RPS]). Again, the BAU condition is project site specific and varies. The BAU scenario is based on what could or would occur on a particular site in the year 2020 without implementation of a proposed project or consideration of any State regulation emission reductions or voluntary GHG reduction measures. Accordingly, the Scoping Plan emission reduction target from BAU levels required to meet 1990 levels by 2020 was modified from 29 percent to 21.7 percent (where BAU levels is based on 2010 levels). The amended Scoping Plan was re-approved August 24, 2011.

The City adopted the City of Sacramento Climate Action Plan (CAP) on February 14, 2012 to comply with AB 32. The CAP identified how the City and the broader community could reduce Sacramento's GHG emissions and included reduction targets, strategies, and specific actions. In 2015, the City of Sacramento adopted the 2035 General Plan Update. The update incorporated measures and actions from the CAP into Appendix B, General Plan CAP Policies and Programs, of the General Plan Update. Appendix B includes all City-Wide policies and programs that are supportive of reducing GHG emissions. The General Plan CAP Policies and Programs per the General Plan Update supersede the City's CAP. Rather than compliance and consistency with the CAP, all proposed projects must now be compliant and consistent with the General Plan CAP Policies and Programs outlined in Appendix B of the General Plan Update.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, air quality impacts may be considered significant if construction and/or implementation of the Proposed Project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan Master EIR:

- construction emissions of NO_x above 85 pounds per day;
- operational emissions of NO_x or ROG above 65 pounds per day;
- violation of any air quality standard or contribute substantially to an existing or projected air quality violation;
- PM_{10} concentrations equal to or greater than five percent of the State ambient air quality standard (i.e., 50 micrograms/cubic meter for 24 hours) in areas where there is evidence of existing or projected violations of this standard. However, if project emissions of NO_x and ROG are below the emission thresholds given above, then the project would not result in violations of the PM_{10} ambient air quality standards;
- 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
- exposure of sensitive receptors to substantial pollutant concentrations.

Ambient air quality standards have not been established for toxic air contaminants (TAC). TAC exposure is deemed to be significant if:

- TAC exposures create a risk of 10 in 1 million for stationary sources, or substantially increase the risk of exposure to TACs from mobile sources.

A project is considered to have a significant effect relating to greenhouse gas emissions if it fails to satisfy the requirements of the City's Climate Action Plan.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR addressed the potential effects of the 2035 General Plan on ambient air quality and the potential for exposure of people, especially sensitive receptors such as children or the elderly, to unhealthful pollutant concentrations. See Master EIR, Chapter 6.1.

Policies in the 2035 General Plan in Environmental Resources were identified as mitigating potential effects of development that could occur under the 2035 General Plan. For example, Policy ER 6.1.1 calls for the City to work with the California Air Resources Board and the Sacramento Metropolitan Air Quality Management District (SMAQMD) to meet state and federal air quality standards; Policy ER 6.1.12 requires the City to review proposed development projects to ensure that the projects incorporate feasible measures that reduce construction and operational emissions; Policy ER 6.1.11 calls for coordination of City efforts with SMAQMD; and Policy ER 6.1.15 requires the City to give preference to contractors using reduced-emission equipment.

The Master EIR identified exposure to sources of toxic air contaminants (TAC) as a potential effect. Policies in the 2035 General Plan would reduce the effect to a less-than-significant level. The policies include ER 6.1.5, requiring consideration of current guidance provided by the Air Resources Board and SMAQMD; requiring development adjacent to stationary or mobile TAC sources to be designed with consideration of such exposure in design, landscaping and filters; as well as Policies ER 6.11.1 and ER 6.11.15, referred to above.

The Master EIR found that greenhouse gas emissions that would be generated by development consistent with the 2035 General Plan would be a significant and unavoidable cumulative impact. The discussion of greenhouse gas emissions and climate change in the 2035 General Plan Master EIR are incorporated by reference in this Initial Study. (CEQA Guidelines Section 15150)

The Master EIR identified numerous policies included in the 2035 General Plan that addressed greenhouse gas emissions and climate change. See Draft Master EIR, Chapter 8, and pages 8-49 et seq. The Master EIR is available for review at the offices of Community Development Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA during normal business hours, and is also available online at:

http://portal.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports

Policies identified in the 2035 General Plan include directives relating to sustainable development patterns and practices, and increasing the viability of pedestrian, bicycle and public transit modes. A complete list of policies addressing climate change is included in the Master EIR in Table 8-5, pages 8-50 et seq; the Final Master EIR included additional discussion of greenhouse gas emissions and climate change in response to written comments. See changes to Chapter 8 at Final Master EIR pages 2-19 et seq. See also Letter 2 and response.

MITIGATION MEASURES FROM 2035 GENERAL PLAN MASTER EIR THAT APPLY TO PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

Questions A through C

In order to evaluate ozone and other criteria air pollutant emissions and support attainment goals for those pollutants that the area is designated nonattainment, the SMAQMD has established recommended thresholds of significance, including mass emission thresholds for construction-related and operational ozone precursors, as the area is under nonattainment for ozone. The SMAQMD's recommended thresholds of significance for ozone precursors, which are expressed in pounds per day (lbs/day), are presented in Table 1.

Table 1
SMAQMD Thresholds of Significance (lbs/day)

Pollutant	Construction Thresholds	Operational Thresholds
NO_X	85	65
ROG	-	65

Source: SMAQMD, November 2014.

Construction

During construction of the project, various types of equipment and vehicles would temporarily operate on the project site. Construction exhaust emissions would be generated from construction equipment, vegetation clearing and earth movement activities, construction workers' commute, and construction material hauling for the entire construction period. The aforementioned activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants. Project construction activities also represent sources of fugitive dust, which includes PM_{10} emissions.

Projects that are 35 acres or less in size generally would not exceed the SMAQMD's construction NO_x threshold of significance; however, lead agencies cannot use the screening level to determine if a project's construction emissions would have less-than significant impact

on air quality unless specific parameters are met. The parameters are based on default construction inputs in the California Emissions Estimator Model. The proposed project site consists of 6.9 acres, which is much less than 35 acres. In addition, the proposed project would meet all of the parameters set forth by the SMAQMD for determination of whether construction emissions would have a less-than-significant impact on air quality. For example, the proposed buildings would not exceed four stories in height, the project would not include demolition or significant trenching activities, and the site would have a normal construction schedule that complies with the City of Sacramento's regulations and does not require unusually compact, fast paced, or two phased schedules that occur simultaneously. In addition, cut-and-fill operations would not be required on the project site, nor would the site require import or export of soils. Furthermore, the project site would not require soil disturbance activity that exceeds 15 acres per day. Thus, per the SMAQMD's screening criteria, the proposed project would be expected to result in less than significant impacts to air quality during construction.

Operational

Construction of the proposed project includes the development of 44 single-family residential dwelling units (du). The air quality analysis for the proposed project shall be performed following City of Sacramento and Sacramento Metropolitan Air Quality Management District (SMAQMD) CEQA. Based on the operational screening levels displayed below in Table 2, during the preliminary analysis, the proposed number of single-family du falls under SMAQMD's screening threshold of 316 du.

Table 2
SMAQMD Screening Levels

Category of screening level	Land Use Category	CalEEMod Land Use	Screening Level	Units
Operational	Residential	Single Family Housing	316	Dwelling Units

Source: SMAQMD, February 2015.

Conclusion

Development proposed project is compliant with SMAQMD's analysis of long-term (i.e., operational) air quality impacts due to and upon the proposed project. Given that the proposed project is under the screening threshold, air quality impacts shall be identified as ***less than significant***.

Question D

During typical construction projects, the majority of PM_{10} and $PM_{2.5}$ emissions are generated in the form of fugitive dust during ground disturbance activities, most of which is generated during the grading phase. PM emissions are also generated in the form of equipment exhaust and re-entrained road dust from vehicle travel on paved and unpaved surfaces. The SMAQMD recommends that PM_{10} emissions be addressed as a localized pollutant in comparison to concentration-based threshold of significance at an off-site receptor location. Because $PM_{2.5}$ is a subset of PM_{10}, SMAQMD assumes that construction projects that do not generate concentrations of PM_{10} that exceed the concentration-based threshold of significance would also be considered less than significant for $PM_{2.5}$ impacts.

Per SMAQMD, for construction-related PM emissions, projects that meet the following two conditions would not have the potential to exceed or contribute to the concentration-based threshold of significance for PM_{10} (and, therefore, $PM_{2.5}$) at an off-site location:

- The project would implement all Basic Construction Emission Control Practices; and
- The maximum daily disturbed area (i.e., grading, excavation, cut and fill) would not exceed 15 acres. (If the maximum daily disturbed area is not known at the time of the analysis, SMAQMD guidance states that users shall assume that up to 25 percent of the total project area would be disturbed in a single day.)

The SMAQMD's Rule 403 requires control of fugitive dust, and the SMAQMD's Basic Construction Emission Control Practices are feasible control measures for fugitive dust from a construction site. Thus, according to the SMAQMD's guide, all construction projects regardless of screening level are required to implement the Basic Construction Emission Control Practices. Thus, the proposed project would be required to implement the Basic Construction Emission Control Practices and would meet the first condition listed above. The entire project site consists of only 6.9 acres. Accordingly, development of the project site would not involve disturbance in excess of 15 acres per day, which meets the second condition listed above. Therefore, per the SMAQMD's screening thresholds, the proposed project does not have the potential to exceed or contribute to the concentration-based threshold of significance for PM_{10} (and, therefore, potentially $PM_{2.5}$) at an off-site location during construction.

Vehicle travel-related emissions of PM_{10} and $PM_{2.5}$ could have the potential to exceed their respective air quality standards if a project would generate a high volume of vehicle trips on unpaved roadways. Otherwise, emissions of PM_{10} and $PM_{2.5}$ are primarily a concern during the construction phase of proposed projects. The project includes 44 single-family units, which would generate 493 daily trips, and 41 and 50 during the AM peak hour and PM peak hour respectively and would not generate what would be considered a high volume of vehicle trips. In addition, all roadways within the project site and in the vicinity would be paved. Because the proposed project would not generate a high volume of vehicle trips on unpaved roadways, the project's associated operational PM_{10} and $PM_{2.5}$ emissions would not have the potential to exceed their respective air quality standards.

Therefore, the proposed project would result in a ***less-than-significant*** impact related to PM_{10} concentrations.

Question E through G

The proposed project involves the creation of 44 new housing units; thus, would introduce new sensitive receptors to the area. In addition, the existing nearby residences would be considered sensitive receptors. The major pollutant concentrations of concern are localized CO emissions and TAC emissions, which are addressed in further detail below.

Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. Implementation of the proposed project would increase traffic volumes on streets near the project site; therefore, the project would be expected to increase local CO concentrations. Concentrations of CO approaching the ambient air quality standards are only expected where background levels are high, and traffic volumes and congestion levels are high. The SMAQMD's preliminary screening methodology for localized CO emissions provides a

conservative indication of whether project-generated vehicle trips would result in the generation of CO emissions that contribute to an exceedance of the applicable threshold of significance. The first tier of SMAQMD's recommended screening criteria for localized CO states that a project would result in a less-than-significant impact to air quality for local CO if:

- Traffic generated by the project would not result in deterioration of intersection level of service (LOS) to LOS E or F; and
- The project would not contribute additional traffic to an intersection that already operates at LOS of E or F.

Even if a project would result in either of the above, under the SMAQMD's second tier of localized CO screening criteria, if all of the following criteria are met, the project would still result in a less-than-significant impact to air quality for localized CO:

- The project would not result in an affected intersection experiencing more than 31,600 vehicles per hour;
- The project would not contribute traffic to a tunnel, parking garage, bridge underpass, urban street canyon, or below-grade roadway; or other locations where horizontal or vertical mixing of air would be substantially limited; and
- The mix of vehicle types at the intersection is not anticipated to be substantially different from the County average (as identified by the EMFAC or CalEEMod models).

The project site would require the approval of a General Plan Amendment from Traditional Neighborhood High to Traditional Neighborhood Low; however, because of the General Plan Amendment, development of the project site would result in less population and transportation trips from what were anticipated in the 2035 General Plan. Based on the City's preliminary trip generation analysis, the proposed project would generate 493 daily trips, and 41 and 50 during the AM peak hour and PM peak hour respectively. The am and pm peak trips fall below the City's Public Works threshold for preparing a Traffic Impact Study. As such, the increase in trips associated with the proposed project is not anticipated to cause deterioration in LOS at any nearby intersection or contribute a substantial contribution to an intersection already operating at unacceptable LOS. Therefore, in accordance with SMAQMD's screening criteria, the proposed project would not be expected to result in the generation of localized CO emissions in excess of the applicable threshold of significance.

TAC Emissions

The CARB Handbook provides recommendations for siting new sensitive land uses near sources typically associated with significant levels of TAC emissions, including, but not limited to, freeways and high traffic roads, distribution centers, and rail yards. The CARB has identified DPM from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Health risks from TACs are a function of both the concentration of emissions and the duration of exposure.

Construction activities have the potential to generate DPM emissions related to the number and types of equipment typically associated with construction. Off-road heavy-duty diesel equipment used for site grading, paving, and other construction activities result in the generation of DPM. However, construction is temporary and occurs over a relatively short duration in comparison to the operational lifetime of the proposed project. In addition, only portions of the site would be disturbed at a time, with operation of construction equipment regulated by federal, State, and

local regulations, including SMAQMD rules and regulations, and occurring intermittently throughout the course of a day. Thus, the likelihood that any one sensitive receptor would be exposed to high concentrations of DPM for any extended period of time would be low.

Operational-related emissions of TACs are typically associated with stationary diesel engines or land uses that involve heavy truck traffic or idling. The proposed project does not involve long-term operation of any stationary diesel engine or other major on-site stationary source of TACs. The CARB's Handbook includes facilities (distribution centers) with associated diesel truck trips of more than 100 trucks per day as a source of substantial TAC emissions. The project is not a distribution center, would not involve heavy diesel truck traffic, and is not located near any existing distribution center. Therefore, overall, the proposed project would not expose any existing sensitive receptors to any new permanent or substantial TAC emissions.

The CARB, per its Handbook, recommends the evaluation of emissions when freeways are within 500 feet of sensitive receptors. Any project placing sensitive receptors within 500 feet of a major roadway or freeway may have the potential to expose those receptors to DPM. The nearest freeway to the project site would be Highway 50, which is located approximately 1,650 feet north of the project site. Due to the buffer between the project site and Highway 50, the proposed on-site sensitive receptors would not be exposed to DPM associated with freeway traffic.

As discussed above, the project site is not located in eastern Sacramento County and is not in an area identified as likely to contain NOA. Thus, sensitive receptors would not be exposed to NOA as a result of the proposed project.

Conclusion

As discussed above, the proposed project would not cause or be exposed to substantial pollutant concentrations, including localized CO or TAC emissions, including DPM and NOA. Therefore, exposure of sensitive receptors to substantial pollutant concentrations would not occur as a result of the proposed project, and impacts would be ***less than significant***.

Question H

The proposed project is required to comply with the General Plan CAP Policies and Programs set forth in Appendix B of the General Plan Update. The majority of the policies and programs set forth in Appendix B are city-wide efforts in support of reducing overall city-wide emissions of GHG. However, Policy ER 6.1.5 could be applied at a project-level. Policy ER 6.1.5, Community GHG Reductions, states that, "The City shall reduce community GHG emissions by 15 percent below 2005 baseline levels by 2020, and strive to reduce community emissions by 49 and 83 percent by 2035 and 2050, respectively." Therefore, in order to show compliance with the General Plan Update, the proposed project must be capable of reducing project-specific operational emissions of GHG from a 2005 baseline level by 15 percent by 2020, consistent with Policy ER 6.1.5.

The proposed project's operational GHG emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2013.2.2 software - a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including GHG emissions, from land use projects. The model applies inherent default values for various land uses, including trip generation rates based on the ITE Manual, vehicle mix, trip length, average speed, etc. The 2005 baseline level modeling assumes buildout of the proposed project in the year 2005 without

incorporation of any regulatory required GHG reduction measures. The 2020 modeling assumes buildout of the proposed project in the year 2020, including compliance with the 2013 California Building Energy Efficiency Standards Code and RPS. All CalEEMod modeling results are included as Appendix A to this document.

Based on the CalEEMod results, as shown in Table 3, the proposed project would result in approximately a 25.69 percent reduction in annual operation GHG emissions from 2005 baseline levels by 2020 ([736.39 MTCO2*e* – 547.20 MTCO2*e*] / 736.39 MTCO2*e* x 100% = 25.69%). The reduction in GHG emissions would primarily be attributable to the advancement of vehicle and equipment efficiency as a result of federal and State regulations, as well as more stringent building energy efficiency and green building standards, RPS reductions, and other regulations related to climate change as time progresses. Although a reduction related to such attributes would occur for every development project, CalEEMod takes into consideration how much of each attribute is applied for each specific project based on the size of the project and associated land uses.

Table 3
Proposed Project Percent GHG Reduction From 2005 Baseline Levels by 2020

	Annual GHG Emissions ($MTCO_2e$/yr)
2005 Baseline Levels	736.39
Proposed Project Year 2020	547.20
Total Reduction from 2005 Baseline Levels by 2020	189.19
PERCENT REDUCTION[1]	**25.69%**
Minimum Percent Reduction Required Per Policy ER 6.1.5	**15%**

[1] See calculation in text above.

As shown in Table 3, the project would result in a 25.69 percent reduction in GHG emissions from 2005 baseline levels by 2020, which would meet the minimum reduction requirement of 15 percent set forth in General Plan Policy ER 6.1.5. Accordingly, the proposed project would be considered consistent with the General Plan Update and would not be expected to hinder the City's ability to achieve the General Plan CAP Policies and Programs. Therefore, impacts related to a conflict with the Climate Action Plan would be considered ***less than significant.***

FINDINGS

The project would have no additional project-specific environmental effects relating to Air Quality.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
3. BIOLOGICAL RESOURCES Would the project: A) Create a potential health hazard, or use, production or disposal of materials that would pose a hazard to plant or animal populations in the area affected?			X
B) Result in substantial degradation of the quality of the environment, reduction of the habitat, reduction of population below self-sustaining levels of threatened or endangered species of plant or animal species?		X	
C) Affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands)?		X	

ENVIRONMENTAL SETTING

Vegetation

The proposed project site of 6.9 acres is currently vacant of any existing structures with four existing paved cul-de-sacs directly accessing Fairgrounds Drive. Existing vegetation on the project site consists primarily of ruderal vegetation.

Wildlife

Due to the disturbed nature of the pavement, surrounding residential neighborhoods, and ruderal vegetation on the project site, the potential for a diversified amount of wildlife is anticipated to be low; however, scattered trees on and adjacent to the project site could potentially provide nesting habitat for bird species and other raptors.

Trees

The City of Sacramento adopted a Tree Preservation Ordinance to protect trees as an important resource for the community. When circumstances do not allow for retention of trees, permits are required to remove heritage trees that are within the City's jurisdiction. The Ordinance (per Chapter 12.64 of the Sacramento City Code) states that heritage trees are protected in order to "promote scenic beauty, enhance property values, reduce soil erosion, improve air quality, abate noise and provide shade to reduce energy consumption." In addition, the Street Tree Ordinance (12.56.060) states that "No person shall remove, trim, prune, cut or otherwise perform any maintenance on any city street tree without first obtaining a permit from the director pursuant to Section 12.56.070." Any non-heritage street trees planned for removal will require a permit from the City. Heritage trees are likely to provide high quality nesting and roosting sites for wildlife.

Sierra Nevada Arborists conducted a tree inventory summary and prepared an arborist report for the project site (see Appendix B). During the evaluation of the trees found on the project site, Sierra Nevada Arborists did not find any trees with a DBH over 31.82 inches, any protected

native species with a DBH greater than 11 inches, and any tree or grove of frees that have been designated by the city to have a significant environmental of historical benefit. In addition, riparian habitat does not occur on the project site; therefore any tree with a DBH of 36 inches or greater in a riparian area does not exist on site. Therefore, the report concludes that heritage trees do not exist on the project site. The arborist field reconnaissance found 102 trees measuring four inches in diameter and larger. The trees were measured at breast height to determine the diameter. Table 4 provides the list species found on the project site.

Table 4
Species Diversification

Tree Species (Common name)	Total Number of Trees
Almond	1
American Elm	26
Arizona Cypress	1
Ash	5
Black Locust	2
California Black Walnut	2
Canary Island Pine	3
Chinese Elm	20
Chinese Hackberry	6
Chinese Pistache	4
Chinese Tallow	1
Coast Live Oak	2
Crabapple	3
Eucalyptus	1
Fig	1
Fruitless Mulberry	3
Italian Stone Pine	1
Liquidambar	6
Lumbar Poplar	1
Pecan	1
Plane Tree	2
Privet	1
Silk	2
Zelkova	7

Jurisdictional Waters

The U.S. Army Corps of Engineers (USACE) has regulatory authority of “waters of the United States,” which include wetlands, pursuant to Section 404 of the Clean Water Act (CWA). Waters of the U.S. includes navigable waters, interstate waters, and all other waters where the use, degradation, or destruction of the waters could affect interstate or foreign commerce, tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries. Aquatic resources do not exist on or in the immediate vicinity of the project site.

Sensitive Biological Resources

Sensitive biological resources include those that are afforded special protection through the following: CEQA, California Fish and Wildlife Code, the federal Endangered Species Act (ESA), the California Endangered Species Act (CESA), or the CWA. Sensitive biological resources in the project area also include those afforded protection under the City of Sacramento General Plan.

Special-status species include plants and animals in the following categories:

- Species listed or proposed for listing as threatened or endangered under ESA or CESA;
- Species considered as candidates for listing as threatened or endangered under ESA or CESA;
- Wildlife species identified by the California Department of Fish and Wildlife (CDFW) as California Species of Special Concern and by USFWS as Federal Species of Concern;
- Animals fully protected in California under the California Fish and Game Code; and
- Plants on California Native Plant Society (CNPS) List 1B (plants rare, threatened, or endangered in California and elsewhere) or List 2 (plants rare, threatened, or endangered in California but more common elsewhere).

Special-Status Plants

According to the CDFW California Natural Diversity Database (CNDDB), the sanford's arrowhead is the only special-status plant species that has the potential to occur in the project vicinity; however, the plant species is associated with freshwater marshes, swamps, and slow gradient streams. The aforementioned habitat types are not present on the project site.

Special-Status Wildlife

A variety of special-status wildlife species have the potential to occur in the vicinity of the project site, including: burrowing owl, white-tailed kite, Modesto song sparrow, Swainson's hawk, bank swallow, purple martin, American badger, steelhead salmon, vernal pool fairy shrimp, and valley elderberry longhorn beetle. The project site, which consists of four paved cul-de-sacs, ruderal vegetation, and scattered trees, does not provide potential habitat for the above-mentioned special-status wildlife species; however, existing trees have the potential to provide raptors with low quality nesting habitat. Further analysis on the potential of special-status wildlife species to occur on the project site is discussed below.

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policies would avoid or lessen environmental impacts as identified in the Master EIR and are considered mitigation measures for the following project-level and cumulative impacts.

Impact 6.3-2: Implementation of the 2035 General Plan could adversely affect special-status plant species due to the substantial degradation of the quality of the environment or reduction of population or habitat below self-sustaining levels.

and

Impact 6.3-3: Implementation of the 2035 General Plan could result in substantial degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels of special-status invertebrates.

and

Impact 6.3-4: Implementation of the 2035 General Plan could result in substantial degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels with special-status birds, through the loss of both nesting and foraging habitat.

and

Impact 6.3-5: Implementation of the 2035 General Plan could result in substantial degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels of special-status amphibians and reptiles.

and

Impact 6.3-6: Implementation of the 2035 General Plan could result in substantial degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels of special-status mammals.

and

Impact 6.3-10: Implementation of the 2035 General Plan could result in the loss of California Department of Fish and Game (CDFG)-defined sensitive natural communities such as elderberry savanna, northern claypan vernal pools, and northern hardpan vernal pools.

and

Impact 6.3-13: Implementation of the City's 2035 General Plan and regional buildout assumed in the Sacramento Valley could result in a regional loss of special-status plant or wildlife species or their habitat.

Mitigation Measure 6.3-2 - General Plan Policy ER 2.1.10 - Habitat Assessments: The City shall consider the potential impact on sensitive plants and for each project requiring discretionary approval and shall require preconstruction surveys and/or habitat assessments for sensitive plant and wildlife species. If the preconstruction survey and/or habitat assessment determines that suitable habitat for sensitive plant and/or wildlife species is present, then either (1) protocol-level or industry recognized (if no protocol has been established) surveys shall be conducted; or (2) presence of the species shall be assumed to occur in suitable habitat on the project site. Survey Reports shall be prepared and submitted to the City and the CDFG or USFWS (depending on the species) for further consultation and development of avoidance and/or mitigation measures consistent with state and federal law.

Impact 6.3-8: Implementation of the 2035 General Plan could result in the loss or modification of riparian habitat, resulting in a substantial adverse effect.

Mitigation Measure 6.3-8 – General Plan Policy ER 2.1.5 - Riparian Habitat Integrity: The City shall preserve the ecological integrity of creek corridors, canals, and drainage ditches that support riparian resources by preserving native plants and, to the extent feasible, removing

invasive, non-native plants. If not feasible, adverse impacts on riparian habitat shall be mitigated by the preservation and/or restoration of this habitat at a 1:1 ratio, in perpetuity.

Impact 6.3-9: Implementation of the 2035 General Plan could result in a substantial adverse effect on state or federally protected wetlands and/or waters of the United States through direct removal, filling, or hydrological interruption.

Mitigation Measure 6.3-9 – General Plan Policy ER 2.1.6 – Wetland Protection: The City shall preserve and protect wetland resources including creeks, rivers, ponds, marshes, vernal pools, and other seasonal wetland, to the extent feasible. If not feasible, the mitigation of all adverse impacts on wetland resources shall be required in compliance with State and Federal regulations protecting wetland resources, and if applicable, threatened or endangered species. Additionally, the City may require either on- or off-site permanent preservation of an equivalent amount of wetland habitat to ensure no-net-loss of value and/or function.

Impact 6.3-14: Implementation of the 2035 General Plan and regional buildout assumed in the Sacramento Valley could contribute to the cumulative loss of sensitive natural communities including wetlands and riparian habitat in the region.

Implement Mitigation Measures 6.3-8 and 6.3-9.

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact would be significant if any of the following conditions or potential thereof, would result with implementation of the proposed project:

- Substantial degradation of the quality of the environment, reduction of the habitat, reduction of population below self-sustaining levels of threatened or endangered species of plant or animal;
- Affect other species or habitats of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands);
- Interfere with native resident or migratory wildlife species or with established migratory wildlife corridors, or impede the use of wildlife nursery sites; or
- Conflict with any local policies or ordinances protecting biological resources or with the provisions of any adopted or approved habitat conservation plan.

For the purposes of this document, “special-status” has been defined to include those species, which are:

- Listed as endangered or threatened under the federal ESA (or formally proposed for, or candidates for, listing);
- Listed as endangered or threatened under the CESA (or proposed for listing);
- Designated as endangered or rare, pursuant to California Fish and Game Code (Section 1901);
- Designated as fully protected, pursuant to California Fish and Game Code (Section 3511, 4700, or 5050);
- Designated as species of concern by U.S. Fish and Wildlife Service (USFWS), or as species of special concern to CDFW; or
- Plants or animals that meet the definition of rare or endangered under CEQA.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Chapter 6.3 of the Master EIR evaluated the effects of the 2035 General Plan on biological resources within the General Plan policy area. The Master EIR identified potential impacts in terms of degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels of special-status birds, through the loss of both nesting and foraging habitat.

Policies in the 2035 General Plan were identified as mitigating the effects of development that could occur under the provisions of the 2035 General Plan. Policy 2.1.5 calls for the City to preserve the ecological integrity of creek corridors and other riparian resources; Policy ER 2.1.10 requires the City to consider the potential impact on sensitive plants for each project and to require pre-construction surveys when appropriate; and Policy 2.1.11 requires the City to coordinate its actions with those of the California Department Fish and Game, U.S. Fish and Wildlife Service, and other agencies in the protection of resources.

The Master EIR concluded that the cumulative effects of development that could occur under the 2035 General Plan would be significant and unavoidable as they related to effects on special-status plant species (Impact 6.3-2), reduction of habitat for special-status invertebrates (Impact 6.3-3), loss of habitat for special-status birds (Impact 6.3-4), loss of habitat for special-status amphibians and reptiles (Impact 6.3-5), loss of habitat for special-status mammals (Impact 6.5-6), special-status fish (Impact 6.3-7) and, in general, loss of riparian habitat, wetlands and sensitive natural communities such as elderberry savannah (Impacts 6.3-8 through 10).

MITIGATION MEASURES FROM 2035 GENERAL PLAN MASTER EIR THAT APPLY TO PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

Question A

Implementation of the project site would not use, produce, or dispose of any hazardous material. Therefore, plant or animal species would not be affected by development on the project site resulting in a ***less-than-significant*** impact.

Question B

The CDFW CNDDB was utilized to determine the special-status or sensitive plant and wildlife species to potentially occur in the project area. The special-status or sensitive plant and wildlife species identified to potentially occur in the project area, as well as the likelihood for the species to occur on the project site based on the presence of suitable habitat, are presented in Table 5 below. The proposed project site does not contain suitable habitat for those species identified as not having the potential to occur on-site.

Table 5
Special-Status Species in Project Area

Species		Potential to Occur On-Site	Notes
Common Name	**Scientific Name**		
PLANTS			
Sanford's arrowhead	*Sagittaria sanfordii*	None	Occurs in shallow freshwater marshes, swamps, and slow gradient streams at elevations less than 610 meters. Blooms from May to October. The history of disturbance related to the past uses of the project site in combination with the lack of marsh habitat and surrounding exiting development makes presence of the species unlikely.
ANIMALS			
Birds			
Burrowing owl	*Athene cunicularia*	Low	Nests in small mammal burrows that are in or adjacent to open dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel. Although the project is infill development and lacks open grasslands in the vicinity, the project site may provide for low quality nesting habitat on the project site.
White-tailed kite	*Elanus leucurus*	None	Occurs in rolling foothills/valley margins with scattered oaks, river bottomlands, riparian woodlands, partially cleared or cultivated fields, or marshes next to deciduous woodland. Open grasslands, meadows, or marshes required for foraging close to isolated, dense-topped trees for nesting and perching. Nests placed near tops of dense oak, willow, or other tree stands. The lack of suitable foraging habitat in the vicinity of the project site, in combination with the lack of dense oak, willow, makes presence of the species unlikely.
Song sparrow ("Modesto")	*Melospiza melodia*	None	Occurs near emergent freshwater marshes dominated by tules (*Scirpus spp*.), cattails (*Typha spp.*), and riparian willow (*Salix spp.*). Song sparrows nest in riparian forests of Valley Oak with a sufficient understory of blackberry (*Rubus spp.*), along vegetated irrigation canals and levees, and in recently planted Valley Oak restoration sites. Canals, levees, and riparian forests do not occur on the project site.
Swainson's hawk	*Buteo swainsoni*	Low	Forages in a variety of open habitats such as grasslands, open scrub, and agricultural fields. Nests in large riparian trees, but will occasionally utilize ornamental species such as Eucalyptus if they are near foraging habitat. Disturbance of the project site, surrounding residential development, and lack of continuous open grasslands and riparian habitat on the site makes the project area unsuitable foraging habitat for the species. Existing trees on site provide for low quality nesting habitat on the project site.

(Continued on next page)

Table 5
Special-Status Species in Project Area

Species		Potential to Occur On-Site	Notes
Common Name	**Scientific Name**		
Bank swallow	*Riparia riparia*	None	A colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole. Suitable nesting habitat is not present in the project area because the project site is surrounded by residential development and is not located in a riparian area.
Purple martin	*Progne subis*	None	Occupies woodlands and low elevation coniferous forests of Douglas fir, ponderosa pine, and Monterey pine. Nests in old woodpecker cavities, man-made structures, and tall, isolated tree snags. Forest habitat, woodlands, and isolated tree snags do not exist on-site.
Mammals			
American badger	*Taxidea taxus*	None	Occupies a diversity of habitats throughout the State; principal habitat requirements include sufficient prey base, friable soils, and relatively open, uncultivated ground. The project site's surrounding land uses in combination with the lack of open, uncultivated ground makes presence of the species unlikely.
Fish			
Steelhead – Central Valley DPS	*Oncorhyn-chus mykiss irideus*	None	The most recent occurrence of Steelhead in the Sacramento East quadrangle was in 2012. The species was observed in the Lower American River. Aquatic habitat does not exist on the project site. Therefore, suitable habitat is not present in the project area.
Invertebrates			
Vernal pool fairy shrimp	*Branchinecta lynchi*	None	Endemic to the grasslands of the central valley, central coast mountains, and south coast mountains, in astatic rain-filled pools. Typically inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools. The lack of vernal pool habitat in the vicinity makes the project area unsuitable for the species.
Valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	None	Entirely reliant on on elderberry shrubs (*Sambucus spp*.) for all stages of the life cycle. Occurs in or near riparian habitats where the elderberry host plant is present. Riparian habitat and elderberry shrubs do not exist in the project area. Therefore, suitable habitat is not present in the project area.

Source: CNDDB, 2015.

As shown in Table 5 above, the project site of 6.9 acres does not provide suitable habitat for any of the special-status plant, mammal, invertebrate, or fish species. Furthermore, the project site is surrounded by land includes that include single-family residential to the north and east, general commercial to the west, and a park to the south which decreases the feasibility of the project site as habitat for special-status species. In addition, the existing paved cul-de-sacs do not provide habitat for any special-status species. Therefore, the proposed project would not have a substantially 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; however, because existing trees on the project site have the potential to provide nesting habitat, impacts would result in a potentially significant impact to special status bird species.

In addition, although special-status raptors or other special-status birds have a low expectation to occur on the project site, migratory birds and raptors protected under the Migratory Bird Treaty Act (MBTA) and Section 3503 of the California Fish and Game Code could nest in trees on or adjacent to the project site and could be disturbed by construction activities conducted during the bird nesting season. Bird nesting season is generally considered to be February 15 to September 15. Project construction would result in direct removal of 17 trees from the project site. Tree removal and ground disturbances associated with project construction could result in the direct loss or destruction of active nests of birds protected under the MBTA or California Fish and Game Code. Project construction could also result in disturbance of breeding birds, causing nest abandonment by the adults and subsequent mortality of chicks and eggs. While loss of some nests of common migratory bird species (e.g., northern mockingbird, house sparrow) would not be considered a significant impact under CEQA because it would not result in a substantial effect on their populations locally or regionally, destruction of any migratory bird or raptor nest is a violation of the MBTA and Section 3503 of the California Fish and Game Code. The potential loss of an active nest or mortality of chicks and eggs of common raptor species and migratory birds would be an effect on other species of special concern to agencies or natural resource organizations. The project site is a developed urban site, and for the reasons outlined above, there is a very low likelihood of any impact; however, because of the tree removal and ground disturbance, impacts to migratory birds and raptors protected under the MBTA would be ***potentially significant*.**

Question C

Existing water bodies or features, such as rivers, creeks, or natural ditches do not exist on the project site or in the immediate vicinity. In addition, the project site is surrounded by urban development, which does not contain any riparian areas, vernal pools, or wetlands. Therefore, the proposed project would not have a substantially adverse effect on any sensitive protected wetlands.

In addition, the project site contains 102 trees, of which 22 trees are designated as City Street Trees protected under Chapter 12.56 of the City's Code. Construction of the proposed project is expected to result in the removal of a total of 17 trees, of which 15 are City Street Trees with an aggregate DBH of 183 inches (Sierra Nevada Arborists 2014). The City's policy is to retain trees whenever feasible and a permit is required to remove City Street Trees that cannot feasibly be retained. The removal of Heritage Trees and City Street Trees would be considered a significant impact requiring mitigation. Construction of the proposed project is expected to result in the removal of a majority of the existing trees on site; however, according to the Sierra Nevada Arborists report, special status trees were not identified. The City's policy is to retain trees whenever feasible and a permit is required to remove City Street Trees that cannot feasibly be retained. The removal of Heritage Trees and City Street Trees would be considered a ***potentially significant*** impact.

MITIGATION MEASURES

Implementation of Mitigation Measures 3-1 through 3-4 below would reduce the impacts identified above related to nesting habitat for special-status bird species, migratory birds and raptors protected under the MBTA, and protected trees to a *less-than-significant* level.

Burrowing Owls

3-1 *Prior to construction, the project contractor shall initiate preconstruction surveys of the project site to determine if burrowing owls are present during the non-nesting season prior to any breeding season construction (nesting season is active during the dates of February 1 - August 30 annually). The results of the preconstruction surveys shall then be submitted to the City for review. If burrowing owls are not present, further mitigation is not required. If occupied burrows are found during the non-breeding season, the project contractor shall implement standard "passive relocation" measures to exclude burrowing owls from burrows that need to be disturbed, consistent with CDFW guidelines. If breeding owls are found on-site during the nesting season, the project contractor shall establish a no-disturbance buffer around nesting burrows until the nesting is completed. The buffer distance and verification of completion of nesting shall be determined by a qualified biologist with experience working with burrowing owls and construction activities. If it is not feasible to avoid removal of nesting burrows, the project contractor shall consult with the CDFW to determine if any options for active nest relocation are feasible.*

Swainson's Hawk

3-2 *One of the following mitigation options shall be implemented by the project contractor to avoid disturbing or removing any active nest tree during construction:*

- *If project construction plans require removal of a tree that represents potential nesting habitat for migratory birds or other raptors including Swainson's hawk, the project contractor shall remove such trees during the non-nesting season, (nesting season is active during the dates of March 1 - September 15 annually), prior to initiation of major construction.*

Or

Construction is planned during the nesting season for the species, preconstruction surveys shall be conducted to determine if migratory birds or other raptors including Swainson's hawk are using suitable nest trees prior to construction. The results of the preconstruction surveys shall then be submitted to the City for review. If active nests are present on the property, construction shall be avoided within a buffer area designated to protect the nesting pair. The size of the buffer shall be determined by a qualified biologist with experience in nest protection and will be based on the location of the nest, the background level of disturbance in the nest area, and observed reactions of the nesting species to human activity. Further action is not required if active nests are not identified on the project site during preconstruction surveys.

Migratory Birds and Raptors Protected Under the MBTA

3-3 *If tree removal or construction activities on the project site are to begin during the nesting season for raptors or other protected bird species in the region (generally February 15-September 15), a qualified biologist shall be retained by the project*

applicant to conduct preconstruction surveys in areas of suitable nesting habitat for common raptors and other bird species protected by the MBTA or California Fish and Game Code located within 500 feet of project activity. Surveys shall be conducted no more than 10 days before tree removal or ground disturbance is expected to occur. The preconstruction surveys shall be submitted to the City's Community Development Department.

If active nests are not found, further mitigation is not required. If active nests are found, the construction contractor shall avoid impacts on such nests by establishing a no-disturbance buffer around the nest. The appropriate buffer size for all nesting birds shall be determined by a qualified biologist, but shall extend at least 50 feet from the nest. Buffer size will vary depending on site-specific conditions, the species of nesting bird, nature of the project activity, the extent of existing disturbance in the area, visibility of the disturbance from the nest site, and other relevant circumstances.

Construction activity shall not occur within the buffer area of an active nest until a qualified biologist confirms that the chicks have fledged and are no longer dependent on the nest, or the nesting cycle has otherwise completed. Monitoring of the nest by a qualified biologist during construction activities shall be required if the activity has the potential to adversely affect the nest. The qualified biologist shall determine the status of the nest at least weekly during the nesting season. If construction activities cause the nesting bird to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then the no-disturbance shall be increased until the agitated behavior ceases.

Protected Trees

3-4 *Prior to issuance of a grading permit, the project applicant shall comply with tree permit requirements in effect at the time of project approval for removal, pruning, or soil disturbance within the canopy dripline of a Heritage or City Street Tree. In addition, the following measures shall be implemented to reduce impacts from the removal of City Street Trees:*

- *Replacement trees for City Street Trees shall be replanted within the City right-of-way in coordination with the City's Urban Forester. If replacement trees for City Street Trees cannot be accommodated in the City's right-of-way, they shall be planted on site and incorporated into the project landscape plan or be planted at another off-site location at the City's direction.*
- *Replacement plantings shall consist of shade tree species recommended by the Urban Forestry Director.*
- *Tree planting shall comply with the City's landscaping requirements (City Code Sections 17.612.010 and 17.612.040).*
- *Canopy or root pruning of any retained City Street Trees to accommodate construction and/or fire lane access shall be conducted according the American National Standards Institute (ANSI) creates standards and the International Society of Arboriculture (ISA) creates best management practices (BMPs)All City Street Trees shall be protected from construction-related*

impacts pursuant to Sacramento City Code Section 12.64.040 (Heritage Trees) and Section 12.56.060 (City Street Trees).

The aforementioned measures shall be reflected on the grading plans, subject to review and approval by the City's Community Development Department.

FINDINGS

All additional significant environmental effects of the project relating to Biological Resources could be mitigated to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
4. CULTURAL RESOURCES Would the project: A) Cause a substantial adverse change in the significance of a historical or archaeological resource as defined in § 15064.5?		X	
B) Directly or indirectly destroy a unique paleontological resource?			X

ENVIRONMENTAL SETTING

The proposed project is located within the City of Sacramento, within the Central Valley. The valley lies between the Sierra Nevada Mountains on the east and the North Coast Range on the west. Sacramento is situated on alluvial valley land south of the American River and east of the Sacramento River. Elevation ranges from about five feet above mean sea level along the Sacramento and American river banks to about 35 feet in the highest downtown areas. The average elevation is approximately 15 to 20 feet above sea level. The project site has been previously excavated and graded. The Master EIR includes a substantial discussion of the history of the Sacramento area. In addition, according to the Archaeological Sensitivity Map located in the Sacramento 2035 General Plan EIR, the project site does not fall under any archeological sensitive areas. Furthermore, the project site is not identified on the Historical Structures Map located in the Sacramento 2035 General Plan EIR.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, cultural resource impacts may be considered significant if the proposed project would result in one or more of the following:

- Cause a substantial change in the significance of a historical or archaeological resource as defined in CEQA Guidelines Section 15064.5; or
- Directly or indirectly destroy a unique paleontological resource.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR evaluated the potential effects of development under the 2035 General Plan on prehistoric and historic resources. See Chapter 6.4. The Master EIR identified significant and unavoidable effects on historic resources and archaeological resources.

General Plan policies identified as reducing such effects call for identification of resources on project sites (Policy HCR 2.1.1), implementation of applicable laws and regulations (Policy HCR 2.1.2 and HCR 2.1.15), early consultation with owners and land developers to minimize effects (Policy HCR 2.1.10 and encouragement of adaptive reuse of historic resources (Policy HCR 2.1.13). Demolition of historic resources is deemed a last resort. (Policy HCR 1.1.14)

MITIGATION MEASURES FROM 2035 GENERAL PLAN MASTER EIR THAT APPLY TO PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

Questions A and B

Figure 6.4-1 of the 2035 Sacramento General Plan Background Report shows that the project area is considered to be an area of low sensitivity for historic and pre-historic resources. Archeological sensitive areas and historical cultural landmarks are not known or suspected on-site. Due to the disturbed nature of the project site from previous grading of the site, the potential for encountering any significant cultural resources during the on-site improvements associated with the project is relatively low. Although low, the potential does exist for previously unknown or unidentified cultural resources to be encountered below the surface that could be inadvertently damaged or lost during grading and construction of the proposed improvements. Because the possibility exists for previously unknown or unidentified cultural resources to be encountered during implementation of the proposed project, a ***potentially significant*** impact could occur related to unknown archaeological and paleontological resources as well as to the disruption of human remains during grading and excavation activities.

MITIGATION MEASURES

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

4-1 *If archaeological artifacts or unusual amounts of stone, bone, or shell are uncovered during construction activities, work within 50 feet of the specific construction site at which the suspected resources have been uncovered shall be suspended. At that time, the property owner shall retain a qualified professional archaeologist. The archaeologist shall conduct a field investigation of the specific site and recommend mitigation deemed necessary for the protection or recovery of any archaeological resources concluded by the archaeologist to represent significant or potentially significant resources as defined by CEQA. The mitigation shall be implemented by the property owner to the satisfaction of the Planning Division prior to resumption of construction activity.*

4-2 *In accordance with Section 7050.5 of the Health and Safety Code and Sections 5097.94 and 5097.98 of the Public Resources Code, if human remains are uncovered during project construction activities, work within 50 feet of the remains shall be suspended immediately, and the City of Sacramento Planning Division and the County Coroner shall be immediately notified. If the remains are determined by the Coroner to be Native American in origin, the Native American Heritage Commission (NAHC) shall be notified within 24 hours, and the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. The property owner shall also retain a professional archaeological consultant with Native American burial experience. The archaeologist shall conduct a field investigation of the specific site and consult with the Most Likely Descendant identified by the NAHC. As necessary, the archaeological consultant may provide professional assistance to the Most Likely Descendant including the excavation and removal of the human remains. The property owner shall*

implement any mitigation before the resumption of activities at the site where the remains were discovered.

FINDINGS

All additional significant environmental effects of the project relating to Cultural Resources can be mitigated to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
4. GEOLOGY AND SOILS Would the project: A) Would the project allow a project to be built that will either introduce geologic or seismic hazards by allowing the construction of the project on such a site without protection against those hazards?			X

ENVIRONMENTAL SETTING

Seismicity

The Sacramento 2035 General Plan Master EIR identifies all of the City of Sacramento as being subject to potential damage from earthquake groundshaking at a maximum intensity of VIII on the Modified Mercalli scale (SGP Master EIR, Table 6.5-6). The closest potentially active faults to the project area include the Foothills Fault System, located approximately 23 miles from Sacramento; the Great Valley fault, located 26 miles from Sacramento; Concord-Green Valley Fault, located approximately 38 miles from Sacramento; and the Hunting Creek-Berryessa Fault, located 38 miles from Sacramento. The Foothills Fault System is considered capable of generating an earthquake with a Richter-Scale magnitude of 6.5; the Great Valley Fault is capable of generating an earthquake with a magnitude of 6.8; the Concord-Green Valley fault is capable of generating an earthquake with a magnitude 6.9, and the Hunting Creek-Berryessa Fault could generate a 6.9 magnitude earthquake. A major earthquake on any of these faults could cause strong groundshaking in the project area.

Topography

Topography of the site is generally flat. Due to the relatively flat topography of the area, the potential for slope instability within the City of Sacramento and at the project site is minor.

Geology

The City of Sacramento is located in the Great Valley of California. The Great Valley is a flat alluvial plain approximately 50 miles wide and 400 miles long in the central portion of California. The northern portion of the Great Valley is the Sacramento Valley drained by the Sacramento River, and its southern part is the San Joaquin Valley drained by the San Joaquin River. The valley is surrounded by the Sierra Nevada to the east, the Tehachapi Mountains to the south, Coastal Range to the west, and Cascade Range to the north.

According to the U.S. Department of Agriculture (USDA)'s Natural Resources Conservation Service (NRCS) Web Soil Survey for the proposed project, the project site is made up of San Joaquin-Urban land complex which consist of zero to two percent slopes. The drainage class is considered to be moderately well drained and the runoff class is considered to be high. The depth to water table is more than 80 inches. In addition, the soils in the San Joaquin-Urban land complex are used mainly for urban development.

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact is considered significant if it allows a project to be built that will either introduce geologic or seismic hazards by allowing the construction of the project on such a site without protection against those hazards.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Chapter 6.5 of the Master EIR evaluated the potential effects related to seismic hazards, underlying soil characteristics, slope stability, erosion, existing mineral resources and paleontological resources in the general plan policy area. Implementation of identified policies in the 2035 General Plan reduced all effects to a less-than-significant level. Policies EC 1.1.1 through 1.1.3 require regular review of the City's seismic and geologic safety standards, geotechnical investigations for project sites and retrofit of critical facilities such as hospitals and schools.

MITIGATION MEASURES FROM 2035 GENERAL PLAN MASTER EIR THAT APPLY TO PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

Question A

The City of Sacramento's topography is relatively flat, the City is not located within an Alquist-Priolo Earthquake Fault Zone, and the City is not located in the immediate vicinity of an active fault. However, the 2035 General Plan indicates that groundshaking would occur periodically in Sacramento as a result of distant earthquakes. The 2035 General Plan further states that the earthquake resistance of any building is dependent on an interaction of seismic frequency, intensity, and duration with the structure's height, condition, and construction materials. Although the project site is not located near any active or potentially active faults, strong groundshaking could occur at the project site during a major earthquake on any of the major regional faults.

The proposed project would include 44 single-family units. Due to the seismic activity in the State, construction is required to comply with Title 24 of the Uniform Building Code (UBC). Chapter 15.20 of the Sacramento City Code adopts the UBC and mandates compliance. All new construction and modifications to existing structures within the City are subject to the requirements of the UBC. The UBC contains standards to ensure that all structures and infrastructure are constructed to minimize the impacts from seismic activity, to the extent feasible, including exposure of people or structures to substantial, adverse effects as a result of strong groundshaking, seismic-related ground failure, liquefaction, lateral spreading, landslides, or lurch cracking. As a result, seismic activity in the area of the proposed development would not expose people or structures to substantial, adverse effects as a result of strong groundshaking and seismic-related ground failure.

In addition, issues related to fault rupture, seismic groundshaking and seismically induced ground failures are addressed in the City's adopted Standard Specifications for Public Works Construction (2007), which requires construction contractors to build to City standards related to structural integrity, thus, ensuring that erosion and unstable soil conditions do not occur as a

result of construction. The construction specification document contains provisions that require contractors to be responsible for damage caused during construction and to be responsible for the repair of such damages (e.g., settling of adjacent land and structures). The proposed project would require minor construction, and individual components used in the construction of the project would be constructed to industry-provided design specifications and requirements, including the American Society for Testing and Materials (ASTM) standards.

Liquefaction occurs where surface soils, generally alluvial soils, become saturated with water and become mobile during groundshaking caused by a seismic event. When these soils move, the foundations of structures move as well which can cause structural damage. Liquefaction generally occurs below the water table, but can move upward through soils after it has developed. The Master EIR identified soils subject to liquefaction to be found within areas primarily within the Central City, Pocket, and North and South Natomas Community.

According to USDA's Web Soil Survey Map, the soil profile of the project site consists of silt loam soil from 0 to 23 inches, clay loam soil from 23 to 28 inches, indurated soil from 28 to 54 inches, and stratified sandy loam to loam soil from 54 to 60 inches. The aforementioned soils do not contain adequate amounts of sand, and as a result, water does not flow rapidly through the soil types. The natural drainage class is moderately well drained and the water table is more than 80 inches below the soils surface. In addition, The Draft Master EIR does not identify the project site to be in an area with soils that are subject to liquefaction. Furthermore, development of the project site would be built to City of Sacramento Building Code, Uniform Building Code Standards, and California Building Code Standards. Therefore, liquefaction has a low potential to occur on site. Therefore, the proposed project would not introduce geologic or seismic hazards by allowing the construction of the project site and a ***less-than-significant*** impact would occur.

MITIGATION MEASURES

None required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Geology and Soils.

Issues:	Potentially Significant Impact	Less-Than-Significant Impact With Mitigation Incorporated	Less-Than-Significant Impact
6. HAZARDS Would the project: A) Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities?			X
B) Expose people (e.g., residents, pedestrians, construction workers) to asbestos-containing materials or other hazardous materials?			X
C) Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during dewatering activities?			X

ENVIRONMENTAL AND REGULATORY SETTING

Federal regulations and regulations adopted by the Sacramento Metropolitan Air Quality Management District (SMAQMD) apply to the identification and treatment of hazardous materials during demolition and construction activities. Failure to comply with these regulations respecting asbestos may result in a Notice of Violation being issued by the SMAQMD and civil penalties under state and/or federal law, in addition to possible action by U.S. EPA under federal law.

Federal law covers a number of different activities involving asbestos, including demolition and renovation of structures (40 CFR § 61.145).

SMAQMD RULE 902 AND COMMERCIAL STRUCTURES

The work practices and administrative requirements of Rule 902 apply to all commercial renovations and demolitions where the amount of Regulated Asbestos-Containing Material (RACM) is greater than:

- 260 lineal feet of RACM on pipes, or
- 160 square feet of RACM on other facility components, or
- 35 cubic feet of RACM that could not be measured otherwise.

The administrative requirements of Rule 902 apply to any demolition of commercial structures, regardless of the amount of RACM.

Asbestos Surveys

To determine the amount of RACM in a structure, Rule 902 requires that a survey be conducted prior to demolition or renovation unless:

- the structure is otherwise exempt from the rule, or
- any material that has a propensity to contain asbestos (so-called "suspect material") is treated as if it is RACM.

Surveys must be done by a licensed asbestos consultant and require laboratory analysis. Asbestos consultants are listed in the phone book under "Asbestos Consultants." Large industrial facilities may use non-licensed employees if those employees are trained by the U.S. EPA. Questions regarding the use of non-licensed employees should be directed to the SMAQMD.

Removal Practices, Removal Plans/Notification and Disposal

If the survey shows that there are asbestos-containing materials present, the SMAQMD recommends leaving it in place.

If it is necessary to disturb the asbestos as part of a renovation, remodel, repair or demolition, Cal OSHA and the Contractors State License Board require a licensed asbestos abatement contractor be used to remove the asbestos-containing material.

There are specific disposal requirements in Rule 902 for friable asbestos-containing material, including disposal at a licensed landfill. If the material is non-friable asbestos, any landfill willing to accept asbestos-containing material may be used to dispose of the material.

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact is considered significant if the proposed project would:

- Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities;
- Expose people (e.g., residents, pedestrians, construction workers) to asbestos-containing materials or other hazardous materials; or
- Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during dewatering activities.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR evaluated effects of development on hazardous materials, emergency response and aircraft crash hazards. See Chapter 6.6. Implementation of the General Plan may result in the exposure of people to hazards and hazardous materials during construction activities, and exposure of people to hazards and hazardous materials during the life of the General Plan. Impacts identified related to construction activities and operations were found to be less than significant. Policies included in the 2035 General Plan, including PHS 3.1.1 (investigation of sites for contamination) and PHS 3.1.2 (preparation of hazardous materials actions plans when appropriate) were effective in reducing the identified impacts

MITIGATION MEASURES FROM 2035 GENERAL PLAN MASTER EIR THAT APPLY TO PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

Question A

Implementation of the proposed project includes demolishing the existing cul-de-sacs and carports on the project site; however, the cul-de-sacs do not contain hazardous materials. Thus, construction workers or the public would not be exposed to hazardous materials during the demolishing activities. The proposed project consists of constructing 44 single-family residential lots on approximately 6.9 acres. Construction and maintenance of the project site would use fuels, oils, lubricants, paint and paint thinners, glues, cleaners and other hazardous materials. However, compliance with the City Code and State regulations for the handling of hazardous materials would be required by the project applicant. Therefore, impacts relating to asbestos-containing materials or other hazardous materials would be ***less than significant***.

Questions B

Known contaminated soils on the project site or vicinity do not exist according to the Department of Toxic Substances Control. Thus, construction would not encounter contaminated soils and groundwater quality would not be affected. Therefore, impacts relating to exposing people to existing contaminated soils during construction activities would be ***less than significant***.

Question C

Groundwater dewatering is not anticipated with the implementation of the proposed project. In addition, contaminated water does not exist on the project site. Therefore, impacts related to exposing people to existing contaminated groundwater during dewatering activities would be ***less than significant***.

MITIGATION MEASURES

None required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Hazards.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
7. HYDROLOGY AND WATER QUALITY Would the project: A) Substantially degrade water quality and violate any water quality objectives set by the State Water Resources Control Board, due to increases in sediments and other contaminants generated by construction and/or development of the project?			X
B) Substantially increase the exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood?			X

ENVIRONMENTAL SETTING

Habitable structures do not exist on the site. The site is located four miles east of the Sacramento River and 1.5 miles south of the American River; however, the site does not contains any creeks, wetlands or other hydrologic features. The project site is located in a residential area in Sacramento. Currently the project site has very little impervious surfaces and as a result, storm water is either absorbed on site or drains to the adjacent storm drain system. Stormwater from the project site generally flows into gutters and storm drains that surround the project site due to surrounding residential land uses.

The Federal Emergency Management Agency (FEMA) publishes Flood Insurance Rate Maps (FIRM) that delineate flood hazard zones for communities. The project site is located within an area designated as shaded Zone X (Community Panel Number 06067C0190H), which is applied to areas of 0.2 percent annual chance flood, areas of 1 percent annual chance flood with average depths of less than one foot, or with drainage areas less than one square mile, and areas protected by levees from 1 percent annual chance flood. The project site is in an area protected from the one percent annual chance (100-year) flood by levee, dike, or other structures subject to possible failure or overtopping during larger storms. FEMA does not have building regulations for development in areas designated Zone X and would not require mandatory flood insurance for structures in Zone X.

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policy would avoid or lessen environmental impacts as identified in the Master EIR and is considered a mitigation measure for the following project-level and cumulative impacts.

Impact 6.7-3: Implementation of the 2035 General Plan could increase exposure of people and/or property to risk of injury and damage from a localized 100-year flood.

and

Impact 6.7-6: Implementation of the 2035 General Plan, in addition to other projects in the watershed, could result in increased numbers of residents and structures exposed to a localized 100-year flood event.

Mitigation Measure 6.7-6 - General Plan Policy ER 1.1.5 - No Net Increase: The City shall require all new development to contribute no net increase in stormwater runoff peak flows over existing conditions associated with a 100-year storm event.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts to hydrology and water quality may be considered significant if construction and/or implementation of the proposed project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan Master EIR:

- Substantially degrade water quality and violate any water quality objectives set by the State Water Resources Control Board, due to increases in sediments and other contaminants generated by construction and/or development of the Specific Plan; or
- Substantially increase the exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Chapter 6.7 of the Master EIR evaluates the potential effects of the 2035 General Plan as they relate to surface water, groundwater, flooding, stormwater and water quality. Potential effects include water quality degradation due to construction activities (Impacts 6.7-1, 6.7-2), and exposure of people to flood risks (Impacts 6.7-3, 6.7-4). Policies included in the 2035 General Plan, including a directive for regional cooperation (Policies ER 1.1.2, EC 2.1.1, EC 2.1.1), comprehensive flood management (Policy EC 2.1.14), and construction of adequate drainage facilities with new development (Policy U 4.1.1) were identified that reduced all impacts to a less-than-significant level.

MITIGATION MEASURES FROM 2035 GENERAL PLAN MASTER EIR THAT APPLY TO PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

Question A

The proposed project has the potential to effect water quality during both construction and operations.

Construction

Construction grading and excavation, as well as implementation of new structures associated with the proposed project, would create the potential to degrade water quality from increased sedimentation and increased discharge (increased flow and volume of runoff) associated with storm water runoff. Disturbance of site soils would increase the potential for erosion from stormwater. The State Water Resources Control Board (SWRCB) adopted a statewide general National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharges associated with construction activity. Dischargers whose projects disturb one or more acres of soil are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009- 0009-DWQ.

Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation.

The City's Stormwater Quality Partnership (SQIP) contains a Construction Element that guides in implementation of the NPDES Permit for Storm Water Discharges Associated with Construction Activity. This General Construction Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP should contain a site map(s) which shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the project. The SWPPP must list best management practices (BMPs) the discharger would use to protect storm water runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutant 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. Section A of the Construction General Permit describes the elements that must be contained in a SWPPP. Compliance with City requirements to protect storm water inlets would require the developer to implement BMPs such as the use of straw bales, sandbags, gravel traps, and filters; erosion control measures such as vegetation and physical stabilization; and sediment control measure such as fences, dams, barriers, berms, traps, and basins. City staff inspects and enforces the erosion, sediment and pollution control requirements in accordance with City codes (Grading, Erosion and Sediment Control Ordinance).

Conformance with City regulations and permit requirements along with implementation of BMPs would ensure that construction activities of the proposed project would result in a less-than-significant impact related to water quality.

Operational Impacts

The development of the proposed project would introduce impervious surfaces to the project site. Surrounding stormwater drainage systems are designed to accommodate storm water from the project site and connect to the City of Sacramento's drainage system. Stormwater from the proposed project would be collected by the surrounding roadways stormwater drainages and in the proposed cul-de-sacs. Multiple storm drains are located on Fairgrounds Drive, just south of the project site. Drain inlets in Fairgrounds Drive collect and convey water north of the site to a line in 2nd Avenue. In addition, there is an approximately 15 foot storm drainage easement located just north of the project site between 2nd Avenue and the project site.

Conclusion

The addition of impervious surfaces to the project site would be expected to alter the existing drainage pattern of the project area. However, drainage from the proposed project would be collected by the surrounding roadways stormwater drainages and in the proposed cul-de-sacs. Multiple storm drainages surround the project site, as well as a stormwater drainage easement located just north of the project site. Furthermore, the proposed project would result in less population and development than originally anticipated in the 2035 General Plan. The City of Sacramento would be able to serve the project site. As such, the proposed project would not substantially degrade water quality and violate any water quality objectives set by the State Water Resources Control Board resulting in a ***less-than-significant*** impact

Questions B

In general, the area adjacent to a stream river or other water channel is called the floodplain. The floodplain is the area that is inundated during a flood event and is often physically discernable as a broad, flat area created by historical floods. In addition to FEMA, the Sacramento Area Flood Control Agency (SAFCA) was formed to address the Sacramento area's vulnerability to catastrophic flooding. According to FEMA's Flood Insurance Rate Map, the project site is not located within a 100-year flood hazard area. As such, the proposed project would not place housing or structures within a 100-year flood hazard area and would not expose people or structures to risks associated with flooding. Therefore, impacts related to flooding would be ***less than significant***.

MITIGATION MEASURES

None required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Hydrology and Water Quality.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
8. NOISE Would the project: A) Result in exterior noise levels in the project area that are above the upper value of the normally acceptable category for various land uses due to the project's noise level increases?			X
B) Result in residential interior noise levels of 45 dBA L_{dn} or greater caused by noise level increases due to the project?			X
C) Result in construction noise levels that exceed the standards in the City of Sacramento Noise Ordinance?			X
D) Permit existing and/or planned residential and commercial areas to be exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction?			X
E) Permit adjacent residential and commercial areas to be exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations?			X
F) Permit historic buildings and archaeological sites to be exposed to vibration-peak-particle velocities greater than 0.2 inches per second due to project construction and highway traffic?			X

ENVIRONMENTAL SETTING

Proposed Project

The proposed project is located on the north side of Fairgrounds Drive off of Broadway in the City of Sacramento. The site is relatively vacant with surrounding land uses that include; includes single-family residential to the north, east and west, and open space to the south. The proposed project includes the construction of a 44 single-family housing units. Existing sensitive receptors in the vicinity of the project site include the residential uses located on each side of the project site..

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policies would avoid or lessen environmental impacts as identified in the Master EIR and are considered mitigation measures for the following project-level and cumulative impacts.

Impact 6.8-4: Implementation of the 2035 General Plan could permit existing and/or planned residential and commercial areas to be exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction.

and

Impact 6.8-9: Implementation of the 2035 General Plan could result in cumulative construction vibration levels that exceed the vibration-peak-particle velocities greater than 0.5 inches per second.

General Plan Policy EC 3.1.5 – Interior Vibration Standards: The City shall require construction projects anticipated to generate a significant amount of vibration to ensure acceptable interior vibration levels at nearby residential and commercial uses based on the current City or Federal Transit Administration (FTA) criteria.

Impact 6.8-5: Implementation of the 2035 General Plan could permit adjacent residential and commercial areas to be exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations.

and

Impact 6.8-10: Implementation of the 2035 General Plan could result in cumulative impacts on adjacent residential and commercial areas being exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations.

General Plan Policy EC 3.1.6 – Vibration Screening Distances: The City shall require new residential and commercial projects located adjacent to major freeways, hard rail lines, or light rail lines to follow the Federal Transit Administration (FTA) screening distance criteria.

Impact 6.8-6: Implementation of the 2035 General Plan could permit historic buildings and archeological sites to be exposed to vibration-peak-particle velocities greater than 0.25 inches per second due to project construction, highway traffic, and rail operations.

General Plan Policy EC 3.1.7 – Vibration: The City shall require an assessment of the damage potential of vibration-induced construction activities, highways, and rail lines in close proximity to historic buildings and archeological sites and require all feasible mitigation measures be implemented to ensure no damage would occur.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts due to noise may be considered significant if construction and/or implementation of the Proposed Project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan Master EIR:

- result in exterior noise levels in the project area that are above the upper value of the normally acceptable category for various land uses due to the project's noise level increases;
- result in residential interior noise levels of 45 dBA L_{dn} or greater caused by noise level increases due to the project;
- result in construction noise levels that exceed the standards in the City of Sacramento Noise Ordinance;
- permit existing and/or planned residential and commercial areas to be exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction;

- permit adjacent residential and commercial areas to be exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations; or
- permit historic buildings and archaeological sites to be exposed to vibration-peak-particle velocities greater than 0.2 inches per second due to project construction and highway traffic.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR evaluated the potential for development under the 2035 General Plan to increase noise levels in the community. New noise sources include vehicular traffic, aircraft, railways, light rail and stationary sources. The general plan policies establish exterior (Policy EC 3.1.1) and interior (EC 3.1.3) noise standards. A variety of policies provide standards for the types of development envisioned in the general plan. See Policy EC 3.1.8, which requires new mixed-use, commercial and industrial development to mitigate the effects of noise from operations on adjoining sensitive land use, and Policy 3.1.9, which calls for the City to limit hours of operations for parks and active recreation areas to minimize disturbance to nearby residences. Notwithstanding application of the general plan policies, noise impacts for exterior noise levels (Impact 6.8-1) and interior noise levels (Impact 6.8-2), and vibration impacts (Impact 6.8-4) were found to be significant and unavoidable.

MITIGATION MEASURES FROM 2035 GENERAL PLAN MASTER EIR THAT APPLY TO PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

Questions A through C

Surrounding land use zoning designations include R-1A the north and east, R-1 to the west, and R-3 to the south. Therefore, the proposed project would be consistent with the surrounding existing and planned uses. In addition, according to the Master EIR, the existing noise contours surrounding the project site are 60 to 65 dBA. The Highway 50 65 dBA noise contour is located in the northeastern corner of the project site; however, existing housing and foliage obscures the line-of-site between Highway 50 the project. Thus, the proposed project would not be exposed to roadway and ambient noise levels that would exceed the City's thresholds.

Construction at the project site would include demolition of cul-de-sacs and carports, site grading, clearing and excavation work associated with site preparation. The on-site equipment required for construction activities are expected to include excavators, graders, haul trucks, and a crane, among other construction equipment. According to the United States Environmental Protection Agency (U.S. EPA), the noise levels of primary concern are often associated with the site preparation phase because of the on-site equipment used for clearing, grading, and excavation. Typical equipment noise levels can range from 79 to 91 dBA at 50 feet, as shown in Table 6. Sensitive receptors surrounding the project site could be exposed to increased levels of noise during project construction. The sensitive receptors within the project vicinity include residential housing on the north and east sides of the project site and a park to the south.

Table 6
Typical Equipment Noise Levels

Type of Equipment	Noise Level in dBA at 50 feet	
	Without Feasible Noise control	With Feasible Noise Control[1]
Dozer or Tractor	80	75
Excavator	88	80
Compactor	82	75
Front-end Loader	79	75
Backhoe	85	75
Grader	85	75
Crane	83	75
Generator	78	75
Truck	91	75

[1] Feasible noise control includes the use of intake mufflers, exhaust mufflers, and engine shrouds in accordance with manufacturer' specifications.

Source: U.S. Environmental Protection Agency 1971, Federal Transit Administration 1995

The City's Noise Ordinance exempts construction operations that occur between 7:00 a.m. and 6:00 p.m., Monday through Saturday, and between 9:00 a.m. and 6:00 p.m. on Sundays, from the applicable noise standards. However, if construction operations were to occur during the noise-sensitive hours of 6:00 p.m. to 7:00 a.m., Monday through Saturday, or from 6:00 p.m. to 9:00 a.m. on Sunday, the applicable noise standards could potentially be exceeded at the aforementioned sensitive receptors surrounding the project site. However, because the City has determined that all construction within the City limits must comply with the City's Noise Ordinance, nighttime construction activities would not occur and construction noise associated with use of on-site equipment during the project construction phases would be insignificant.

The applicant shall adhere to City's regulations for construction schedule timing. In addition, noise levels associated with construction of the proposed project are exempt. Furthermore, roadway and ambient noise levels would not increase with development of the proposed project because the proposed project would be consistent with the surrounding existing and planned uses. Therefore, a ***less-than-significant*** impact would occur to operational and construction-related noise.

Question D through F

Construction operations have the potential to result in varying degrees of temporary ground vibration, depending on the specific construction equipment used and operations involved. The ground vibration levels associated with various types of construction equipment are summarized in Table 7. Ground vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. The effects of ground vibration may be imperceptible at the lowest levels, low rumbling sounds and detectable vibrations at moderate levels, and slight damage to nearby structures at the highest levels.

At the highest levels of vibration, damage to structures is primarily architectural (e.g., loosening and cracking of plaster or stucco coatings) and rarely results in structural damage. For most structures, a peak particle velocity (ppv) threshold of 0.5 inch per second is sufficient to avoid structural damage, with the exception of fragile historic structures or ruins. At the request of the U.S. EPA, the Committee of Hearing, Bio-Acousitcs, and Bio-Mechanics (CHABA) has developed guidelines for safe vibration limits for ruins and ancient and/or historic buildings. For fragile structures, the CHABA recommends a maximum limit of 0.25 inch per second ppv. For

the protection of fragile, historic, and residential structures, the California Department of Transportation (Caltrans) recommends a more conservative threshold of 0.2 inch per second ppv.

Table 7
Representative Vibration Source Levels for Construction Equipment

Equipment		Peak Particle Velocity at 25 feet (in/sec)
Pile Driver (impact)	upper range	1.518
	typical	0.644
Pile Driver (sonic)	upper range	0.734
	typical	0.170
Large Bulldozer		0.089
Caisson Drilling		0.089
Loaded Trucks		0.076
Jackhammer		0.035
Small Bulldozer		0.003

Source: Federal Transit Administration

The proposed project would not require the use of pile drivers. Therefore, the proposed project would not involve the use of any equipment or processes that would result in potentially significant levels of groundbourne vibration. Temporary construction vibration associated with on-site equipment would not be anticipated to expose sensitive receptors to or generate excessive groundborne vibration or groundborne vibration levels. Long-term groundborne vibration would not occur because long-term groundborne vibration is not associated with residential development. Thus, development of the proposed project would not involve exposing planned residential areas to vibration-peak-particle velocities greater than 0.5 inches per second due to highway traffic, rail operations, or project construction. Therefore, a ***less-than-significant*** impact would occur.

MITIGATION MEASURES

None required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Noise and Vibration.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
9. PUBLIC SERVICES Would the project: A) Would the project result in the need for new or altered services related to fire protection, police protection, school facilities, or other governmental services beyond what was anticipated in the 2035 General Plan?			X

ENVIRONMENTAL SETTING

The project site is located in the southeastern area of Sacramento, approximately three miles from the downtown core of the City, and is served with fire protection, and police protection by the City of Sacramento.

The Sacramento Fire Department (SFD) provides fire protection services to the entire City and some small areas just outside the City boundaries within the County limits. Police protection services are provided by the Sacramento Police Department (SPD) for areas within the City. The nearest fire station, the Sacramento Fire Department Station 12, is located approximately 2.5 miles southwest of the project site.

The project site is within the Sacramento City Unified School District. Sacramento City Unified School District is the 11th largest school district in California and serves 47,900 students on 81 campuses. The nearest school, Tahoe Elementary School, is located approximately 0.5 miles southeast of the project site.

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact would be considered significant if the project resulted in the need for new or altered services related to fire protection, police protection, school facilities, or other governmental services beyond what was anticipated in the 2035 General Plan.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR evaluated the potential effects of the 2035 General Plan on various public services. These include parks (Chapter 6.9) and police, fire protection, schools, libraries and emergency services (Chapter 6.10).

The general plan provides that adequate staffing levels for police and fire are important for the long-term health, safety and well-being of the community (Goal PHS 1.1, PHS 2.1). The Master EIR concluded that effects would be less than significant.

General plan policies that call for the City to consider impacts of new development on schools (see, for example, Policy ERC 1.1.2 setting forth locational criteria, and Policy ERC 1.1.5 that encourages joint-use development of facilities) reduced impacts on schools to a less-than-

significant level. Impacts on library facilities were also considered less than significant (Impact 6.10-8).

MITIGATION MEASURES FROM 2035 GENERAL PLAN MASTER EIR THAT APPLY TO PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

The proposed project involves the development of 44 single-family residential lots on approximately 6.9 acres and is consistent with the site's surrounding land uses. The development of the proposed project would introduce new residents to the area. As such, the proposed project would result in any increases in demand for fire or police protection services. Schools and other public facilities or services would be affected by the development of the proposed project.

Question A

Fire Protection

As mentioned above, the SFD currently serves the project site and the nearest fire station to the project site is Station 12, located approximately 2.5 miles southwest of the project site. The added population to the SFD services for the project area would be expected to increase as a result of the proposed project. According to the General Plan Master EIR, the SFD requires a ratio of one fire station per 16,000 residents. The General Plan Master EIR concluded that at full buildout of the General Plan, including the project site, the City would be required to provide approximately 12 new fire stations and additional fire personnel to accommodate the increase in population. However, the proposed project would result in less population at the project site than what is anticipated in the 2035 General Plan. Therefore, impacts to fire service from the proposed project would have less demand than originally anticipated in the Master EIR, and as a result, a ***less-than-significant*** impact would occur.

Police Protection

Similar to the SFD, the added population from the proposed project would create an increased demand in police services to the project area; however, as mentioned above, implementation of the project site would result in less population at the project site than what is anticipated in the 2035 General Plan. In addition, although the proposed project would increase the service population for the SPD in the project area, the SPD does not have an adopted officer-to-resident ratio. The Department uses a variety of data that includes GIS based data, call and crime frequency information, and available personnel to rebalance the deployment of resources on an annual basis to meet the changing demands of the City. Furthermore, the location of the project would be consistent with established service areas in the Sacramento General Plan. Therefore, the proposed project would have a less-than-significant impact.

Schools

Development of the proposed project would generate additional students in the area. Based on the student generation rates from the General Plan Master EIR, the proposed 44 single-family units would generate approximately 49 K-12 students that would require accommodation in local SCUSD schools (see Table 8).

Table 8 Students Generation Projections for Greenfair Project			
Grade Levels	**SCUSD Student Generation Factor per Household**	**# of Units**	**New Students**
Single-Family Generation Rate			
Elementary	0.42	44	18
Middle	0.30	44	13
High School	0.30	44	13
Total			**44**
Source: Sacramento 2035 General Plan Master EIR, 2008.			

The proposed project would be required to pay statutory developer fees under California SB 50. Therefore, because the project would pay the required SB 50 developer fees, a less-than-significant impact would occur regarding school facilities and services.

Conclusion

The applicant would be required to pay all of the required development fees to the appropriate public services departments. Based on the information above, development of the proposed project would not result in the need for new or altered services related to fire protection, police protection, school facilities, or other governmental services beyond what was anticipated in the 2035 General Plan. Therefore, a ***less-than-significant*** impact would occur.

MITIGATION MEASURES

None required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Public Services.

Issues:	Potentially Significant Impact	Less-Than-Significant Impact With Mitigation Incorporated	Less-Than-Significant Impact
10. RECREATION Would the project: A) Cause or accelerate substantial physical deterioration of existing area parks or recreational facilities?			X
B) Create a need for construction or expansion of recreational facilities beyond what was anticipated in the 2035 General Plan?			X

ENVIRONMENTAL SETTING

Natural resources and parks provide a wide range of recreational opportunities for residents in the vicinity of the project site. As of 2011, the Sacramento region contains approximately 921,655 acres of parks, recreation, and open space. Open space is located immediately south of the project site. In addition, the project site is within 1.5 miles of the American River and American River Parkway.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts to recreational resources are considered significant if the proposed project would do either of the following:

- Cause or accelerate substantial physical deterioration of existing area parks or recreational facilities; or
- Create a need for construction or expansion of recreational facilities beyond what was anticipated in the 2035 General Plan.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Chapter 6.9 of the Master EIR considered the effects of the 2035 General Plan on the City's existing parkland, urban forest, recreational facilities and recreational services. The General Plan identified a goal of providing an integrated park and recreation system in the City (Goal ERC 2.1). New residential development will be required to dedicate land, pay in-lieu fees or otherwise contribute a fair share to the acquisition and development of parks and recreation facilities. (Policy ERC 2.2.4) Impacts were considered less than significant after application of the applicable policies. (Impacts 6.9-1 and 6.9-2)

MITIGATION MEASURES FROM 2035 GENERAL PLAN MASTER EIR THAT APPLY TO PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

Questions A and B

The proposed project includes the development of 44 single single-family homes north of Fairgrounds Drive. The project does not include construction or expansion of recreational facilities; therefore adverse physical affects would not occur as a result of development of the project site. The project residents would likely utilize the existing parks in the vicinity. In addition, based on the current persons per household of 2.7, the proposed project is expected to approximately increase the total population by up to 119 persons (44 units x 2.7 persons per household = 119); however, because the proposed project would include less units than anticipated in the General Plan, the proposed project's demand would be less than anticipated in the 2035 General Plan Master EIR. General Plan policies have been adopted to ensure adequate parks and recreational facilities are provided to accommodate the increase in new residents. For example, Policy ERC 2.1.1, Policy ERC 2.4.2, and Policy ERC 2.5.4, as previously mentioned in the Public Services section of this Initial Study. It should be noted that according to the City's Parks and Recreation Master Plan (PRMP), the City-wide/Regionally serving park service goal is to provide 8.0 acres per 1,000 persons by 2010. In addition, because development of the project site would add a projected 119 persons to the area, the project would require approximately 0.95 acres of parkland. Because the project site is not providing on-site park acreage, the project applicant shall pay in lieu fees. Furthermore, the proposed project would be required to pay development impact fees for park facilities. Therefore, less-than-significant impact would occur related to park facilities. Thus, degrading of existing recreational facilities would be less than anticipated. Therefore, impacts related to recreational facilities and parks would be considered ***less than significant*.**

MITIGATION MEASURES

None required.

FINDINGS

The proposed project would have no additional project-specific environmental effects relating to Recreation.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
11. TRANSPORTATION AND CIRCULATION Would the project: A) Roadway segments: degrade peak period Level of Service (LOS) from A,B,C or D (without the project) to E or F (with project) or the LOS (without project) is E or F, and project generated traffic increases the Volume to Capacity Ratio (V/C ratio) by 0.02 or more.			X
B) Intersections: degrade peak period level of service from A, B, C or D (without project) to E or F (with project) or the LOS (without project) is E or F, and project generated traffic increases the peak period average vehicle delay by five seconds or more?			X
C) Freeway facilities: off-ramps with vehicle queues that extend into the ramp's deceleration area or onto the freeway; project traffic increases that cause any ramp's merge/diverge level of service to be worse than the freeway's level of service; project traffic increases that cause the freeway level of service to deteriorate beyond level of service threshold defined in the Caltrans Route Concept Report for the facility; or the expected ramp queue is greater than the storage capacity?			X
D) Transit: adversely affect public transit operations or fail to adequately provide for access to public?			X
E) Bicycle facilities: adversely affect bicycle travel, bicycle paths or fail to adequately provide for access by bicycle?			X
F) Pedestrian: adversely affect pedestrian travel, pedestrian paths or fail to adequately provide for access by pedestrians?			X

ENVIRONMENTAL SETTING

The transportation and circulation assessment is based on information from the City of Sacramento General Plan and the General Plan Master EIR. The surrounding roadway network of the project site consists of Fairgrounds Drive to the south, 57th Street to the east, 2nd Avenue to the north, and 50th Street to the west. All of the above are local two lane streets. Access to the project site is provided via Fairgrounds Drive off of Broadway.

Broadway is an east-west roadway which extends to the Central City and ends at the Sacramento River to the west. To the east, it extends to 65th Street.

Highway 50 is located less than a half mile north of the project site and State Route 99 is located approximately 1.75 miles west of the project site. The Fairgrounds Drive and Broadway intersections are the closest intersections to the project site.

In the vicinity of the project site, continuous sidewalks exist along one or both sides of Fairgrounds Drive providing pedestrian access to transit on Broadway. Broadway has Class II bike lines striped west of Fairgrounds Drive.

Public transit service within the study area is provided by bus, which is operated by the Sacramento Regional Transit (RT). The following routes provide services in the vicinity of the project site:

- **Route 38** provides service on Stockton Boulevard and continues on Broadway. The route features a bus stop in each direction of Broadway. The route begins in Land Park and terminates at 65th Street and Folsom Boulevard. Monday through Friday, Route 38 operates on 60-minute headways from about 6:30 AM to 8:30 PM. On Saturdays, Route 38 operates on 60-minute headways from about 8:00 AM to 8:00 PM. On Sundays and Holidays, Route 38 operates on 60-minute headways from about 8:00 AM to 6:00 PM.
- **Route 212** provides service to Kit Carson Middle School in East Sacramento. Route 212 begins at 21st Avenue and 65th Street. Monday through Friday, the route operates one morning trip from about 7:00 AM to 8:00 AM and one afternoon trip from about 2:00 PM to 3:00 PM. Route 212 does not operate on Saturdays, Sundays, or Holidays.

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policy would avoid or lessen environmental impacts as identified in the Master EIR and is considered a mitigation measure for the following project-level and cumulative impacts.

Impact 6.12-1: Implementation of the 2035 General Plan could result in roadway segments located within the Policy Area that do not meet the City's current Level of Service (LOS) standard or the LOS D – E goal.

and

Impact 6.12-8: Implementation of the 2035 General Plan could result in a cumulative increase in traffic that would adversely impact the existing LOS for City roadways.

Mitigation Measure 6.12-1 - General Plan Policy M 1.2.2 - LOS Standard: The City shall allow for flexible Level of Service (LOS) standards, which will permit increased densities and mix of uses to increase transit ridership, biking, and walking, which decreases auto travel, thereby reducing air pollution, energy consumption, and greenhouse gas emissions.

> **a. Core Area Level of Service Exemption-**LOS F conditions are acceptable during peak hours in the Core Area bounded by C Street, the Sacramento River, 30th Street, and X Street. If a Traffic Study is prepared and identifies a LOS impact that would otherwise be considered significant to a roadway or intersection that is in the Core Area as described above, the project would not be required in that particular instance to widen roadways in order for the City to find project conformance with the General Plan. Instead, General Plan conformance could still be found if the project provides

improvements to other parts of the citywide transportation system in order to improve transportation-system-wide roadway capacity, to make intersection improvements, or to enhance non-auto travel modes in furtherance of the General Plan goals. The improvements would be required within the project site vicinity or within the area affected by the project's vehicular traffic impacts. With the provision of such other transportation infrastructure improvements, the project would not be required to provide any mitigation for vehicular traffic impacts to road segments in order to conform to the General Plan. This exemption does not affect the implementation of previously approved roadway and intersection improvements identified for the Railyards or River District planning areas.

b. Level of Service Standard for Multi-Modal Districts-The City shall seek to maintain the following standards in the Central Business District, in areas within 1/2 mile walking distance of light rail stations, and in areas designated for urban scale development (Urban Centers, Urban Corridors, and Urban Neighborhoods as designated in the Land Use and Urban Form Diagram). These areas are characterized by frequent transit service, enhanced pedestrian and bicycle systems, a mix of uses, and higher-density development.

- Maintain operations on all roadways and intersections at LOS A-E at all times, including peak travel times, unless maintaining this LOS would, in the City's judgment, be infeasible and/or conflict with the achievement of other goals. LOS F conditions may be acceptable, provided that provisions are made to improve the overall system and/or promote non-vehicular transportation and transit as part of a development project or a City-initiated project.

c. Base Level of Service Standard-the City shall seek to maintain the following standards for all areas outside of multi-modal districts.

- Maintain operations on all roadways and intersections at LOS A-D at all times, including peak travel times, unless maintaining this LOS would, in the City's judgment, be infeasible and/or conflict with the achievement of other goals. LOS E or F conditions may be accepted, provided that provisions are made to improve the overall system and/or promote non-vehicular transportation as part of a development project or a City-initiated project.

d. Roadways Exempt from Level of Service Standard-The above LOS standards shall apply to all roads, intersections or interchanges within the City except as specified below. If a Traffic Study is prepared and identifies a significant LOS impact to a roadway or intersection that is located within one of the roadway corridors described below, the project would not be required in that particular instance to widen roadways in order for the City to find project conformance with the General Plan. Instead, General Plan conformance could still be found if the project provides improvements to other parts of the city wide transportation system in order to improve transportation-system-wide roadway capacity to make intersection improvements, or to enhance non-auto travel modes in furtherance of the General Plan goals. The improvements would be required within the project site vicinity or within the area affected by the project's vehicular traffic impacts. With the provision of such other transportation infrastructure improvements, the project would not be required to provide any mitigation for vehicular traffic impacts to the listed road segment in order to conform to the General Plan.

- 12th/14th Avenue: State Route 99 to 36th Street
- 24th Street: Meadowview Road to Delta Shores Circle
- 65th Street: Folsom Boulevard to 14th Avenue
- Alhambra Boulevard: Folsom Boulevard to P Street
- Arcade Boulevard: Marysville Boulevard to Del Paso Boulevard
- Arden Way: Capital City Freeway to Ethan Way
- Blair Avenue/47th Avenue: S. Land Park Drive to Freeport Boulevard
- Broadway: 15th Street to Franklin Boulevard
- Broadway: 58th to 65th Streets
- El Camino Avenue: Stonecreek Drive to Marysville Boulevard
- El Camino Avenue: Capitol City Freeway to Howe Avenue
- Elder Creek Road: 65th Street to Power Inn Road
- Florin Perkins Road: 14th Avenue to Elder Creek Road
- Florin Road: Greenhaven Drive to 1-5; 24th Street to Franklin Boulevard
- Folsom Boulevard: 34th Street to Watt Avenue
- Freeport Boulevard: Broadway to Seamas Avenue
- Fruitridge Road: Franklin Boulevard to SR 99
- Garden Highway: Truxel Road to Northgate Boulevard
- Howe Avenue: American River Drive to Folsom Boulevard
- J Street: 43rd Street to 56th Street
- Mack Road: Meadowview Road to Stockton Boulevard
- Martin Luther King Boulevard: Broadway to 12th Avenue
- Marysville Boulevard., 1-80 to Arcade Boulevard
- Northgate Boulevard: Del Paso Road to SR 160
- Raley Boulevard: Bell Avenue to 1-80
- Roseville Road: Marconi Avenue to 1-80
- Royal Oaks Drive: SR 160 to Arden Way
- Truxel Road: 1-80 to Gateway Park

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts resulting from changes in transportation or circulation may be considered significant if construction and/or implementation of the proposed project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan Master EIR:

Roadway Segments

- the traffic generated by a project degrades peak period Level of Service (LOS) from A,B,C or D (without the project) to E or F (with project) or
- the LOS (without project) is E or F, and project generated traffic increases the Volume to Capacity Ratio (V/C ratio) by 0.02 or more.

Intersections

- the traffic generated by a project degrades peak period level of service from A, B, C or D (without project) to E or F (with project) or
- the LOS (without project) is E or F, and project generated traffic increases the peak period average vehicle delay by five seconds or more.

Freeway Facilities

Caltrans considers the following to be significant impacts.

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

Transit

- adversely affect public transit operations or
- fail to adequately provide for access to public transit.

Bicycle Facilities

- adversely affect bicycle travel, bicycle paths or
- fail to adequately provide for access by bicycle.

Pedestrian Circulation

- adversely affect pedestrian travel, pedestrian paths or
- fail to adequately provide for access by pedestrians.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Transportation and circulation were discussed in the Master EIR in Chapter 6.12. Various modes of travel were included in the analysis, including vehicular, transit, bicycle, pedestrian and aviation components. The analysis included consideration of roadway capacity and identification of levels of service, and effects of the 2035 General Plan on the public transportation system. Provisions of the 2035 General Plan that provide substantial guidance include Goal Mobility 1.1, calling for a transportation system that is effectively planned, managed, operated and maintained, promotion of multimodal choices (Policy M 1.2.1), identification of level of service standards (Policy M 1.2.2), development of a fair share funding system for Caltrans facilities (Policy M 1.5.6) and development of complete streets (Goal M 4.2).

While the General Plan includes numerous policies that direct the development of the City's transportation system, the Master EIR concluded that the General Plan development would result in significant and unavoidable effects. See Impacts 6.12-1, 6.12-8 (roadway segments in the City), Impacts 6.12-2, 6.12-9 (roadway segments in neighboring jurisdictions), and Impacts 6.12-3, 6.12-10 (freeway segments).

MITIGATION MEASURES FROM 2035 GENERAL PLAN MASTER EIR THAT APPLY TO PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

Questions A through C

The project site is designated as Traditional Neighborhood High in the General Plan; however, the proposed project a General Plan Amendment to Traditional Neighborhood Low and consists of the development of 44 single-family units. Trip generation for the proposed project is based on information published in the Institute of Transportation Engineers (ITE) Trip Generation Manual (9th Edition). The proposed project would generate 493 daily trips, and 41 and 50 during the AM peak hour and PM peak hour respectively. Given the low number of new trips generated by the proposed project it is not expected to impact the intersections and roadway facilities. Therefore, the proposed project impacts would be considered ***less than significant.***

Questions D through F

The project site is located north of an open space area and Fairgrounds Drive. Fairgrounds Drive, located off of Broadway, is a two lane road in a residential area. Designated bike paths do not directly access the project site; however, according to the City of Sacramento's Existing and Proposed Bikeways Map, existing and proposed bike paths surround the project site. South and east of the project site are existing on-street (Class II) bike paths that run along Broadway and 49th Street. To the east of the project site is a proposed off-street bike path that is anticipated to exist on 59th Street. The bike paths around the project site connect to numerous bike paths that lead to recreational sites and main roads. Two bus routes (#38 and #212) along Broadway and 59th Street would serve the project site. The closest bus stops are approximately one quarter mile from the project site. Development of the project site would not adversely affect any bicycle, pedestrian, or public transit's paths or access. Therefore, impacts would be considered ***less than significant.***

MITIGATION MEASURES

None required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Transportation and Circulation.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
12. UTILITIES AND SERVICE SYSTEMS Would the project: A) Result in the determination that adequate capacity is not available to serve the project's demand in addition to existing commitments?		X	
B) Require or result in either the construction of new utilities or the expansion of existing utilities, the construction of which could cause significant environmental impacts?		X	

ENVIRONMENTAL SETTING

The project site's existing utilities and service systems are discussed below.

Wastewater

Wastewater service would be provided by the Sacramento Regional County Sanitation District (SRCSD).The City's DOU is responsible for providing and maintaining water, sewer collection, storm drainage, and flood control services for residents and businesses within the city limits. Six-inch sewer and 21-inch drainage lines existing within Fairgrounds Drive along the project frontage.

Water Supply

As mentioned above, the project site is vacant and is not currently serviced by a water facility; however, water service for the project would be provided by the City of Sacramento. The City of Sacramento uses surface water from the Sacramento and American Rivers to meet the majority of its water demands. The City uses surface water from the Sacramento and American Rivers, and groundwater pumped from the North American and South American Subbasins to meet its water demands. A six-inch private water line exists within Fairgrounds Drive along the project frontage.

Solid Waste Disposal

The City assumes responsibility for solid waste removal and disposal. The Sacramento General Plan Master EIR indicates that the City landfills have sufficient capacity for full build out.

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact would be considered significant if the project resulted in the need for new or altered services related to fire protection, police protection, or school facilities beyond what was anticipated in the 2035 General Plan:

- Result in the determination that adequate capacity is not available to serve the project's demand in addition to existing commitments; or

- Require or result in either the construction of new utilities or the expansion of existing utilities, the construction of which could cause significant environmental impacts.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR evaluated the effects of development under the 2035 General Plan on water supply, sewer and storm drainage, solid waste, electricity, natural gas and telecommunications. See Chapter 6.11.

The Master EIR evaluated the impacts of increased demand for water that would occur with development under the 2035 General Plan. Policies in the general plan would reduce the impact generally to a less-than-significant level (see Impact 6.11-1) but the need for new water supply facilities results in a significant and unavoidable effect (Impact 6.11-2). The potential need for expansion of wastewater treatment facilities was identified as having a significant and unavoidable effect (Impacts 6.11-4, 6.11-5Impacts on solid waste facilities were less than significant (Impacts 6.11-7, 6.11-8). Implementation of energy efficient standards as set forth in Titles 20 and 24 of the California Code of Regulations for residential and non-residential buildings, would reduce effects for energy to a less-than-significant level.

MITIGATION MEASURES FROM 2035 GENERAL PLAN MASTER EIR THAT APPLY TO PROJECT

None available.

ANSWERS TO CHECKLIST QUESTIONS

Questions A and B

The project site is not currently connected to the City's wastewater service; however the site is surrounded by residential development and a park. The surrounding developments are connected to the City's wastewater services. The City's DOU is responsible for providing and maintaining water, sewer collection, storm drainage, and flood control services for residents and businesses within the city limits. According to the General Plan EIR, the SRCSD and SSS is able to provide sufficient wastewater services and conveyance to serve full buildout of the city, including the project area. It should be noted that the project site would result in less demand than originally anticipated in the General Plan EIR.

The project would be required to construct a sewer main extension to serve lots 33 to 44. In addition, a water main extension may be required to service lots one through 44 since the existing water system on-site is a private system that is owned by the Greenfair Association. The aforementioned detail is yet to be worked out with Sacramento DOU and the Greenfair Association. Unless otherwise agreed upon by the DOU and the developer, the applicant may need to contribute to the fair share of the construction of the new public water system.

Furthermore, residual wastes are currently being transferred to Kiefer Landfill, located approximately 13.5 miles east of the project site, for disposal. With the approval of the General Plan Amendment, the project development would have a lower demand for waste disposal than originally anticipated in General Plan EIR, based on the current average acceptance of solid waste and the permitted maximum acceptance of solid waste at Kiefer Landfill, the landfill would be sufficient to accommodate the project's disposal needs. It should be noted that the proposed

project would allow for further processing of materials accepted at the site, avoiding the need for hauling and processing of such materials at an off-site location or potentially disposing of materials at the local landfill. In addition, the nature of the proposed project would result in an overall positive effect related to solid waste services, as the project consists of processing materials for reuse. Thus, the project would be contributing to an overall reduction in the potential amount of waste going to a landfill. Because waste generated by the proposed project would be nominal, the local landfill has sufficient capacity, and the project would positively affect solid waste services, a less-than-significant impact related to solid waste services would occur.

Because the proposed project would result in less population and development at the project site than what was originally anticipated in the 2035 General Plan, adequate capacity is available to serve the project's demand in addition to existing commitments. However, the project would require construction a sewer main extension and a water main extension may also be required for the project. Therefore, without a funding mechanism to ensure the project contributes the fair share fee towards construction of the aforementioned improvements, the proposed project would result in a ***potentially significant*** impact.

MITIGATION MEASURES

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

12-1 *Unless otherwise agreed upon by the Sacramento Department of Utilities and the developer, the project applicant shall submit the fair share fee towards the construction of the water main extension from the six-inch private water line within Fairgrounds Drive. Payment of the fair share fee shall be submitted to the Sacramento Department of Utilities prior to issuance of a grading permit.*

FINDINGS

All additional significant environmental effects of the project relating to Utilities and Service Systems can be mitigated to a less-than-significant level.

MANDATORY FINDINGS OF SIGNIFICANCE

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
14. MANDATORY FINDINGS OF SIGNIFICANCE A.) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X
B.) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)			X
C.) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X

ANSWERS TO CHECKLIST QUESTIONS

Question A

As described in Section 3, Biological Resources, and Section 4, Cultural Resources, of this Initial Study, the proposed project, with implementation of the identified mitigation measures, would not have a significant impact to special bird populations or eliminate important examples of the major periods of California's history or prehistory. Therefore, the proposed project's impact would be ***less than significant***.

Question B

As presented throughout this Initial Study, all potential impacts associated with the project would be reduced to less-than-significant levels with implementation of the identified mitigation measures. Thus, the project would not be expected to result in a considerable cumulative contribution to impacts on the environment. Therefore, the proposed project would also result in a ***less-than-significant*** cumulative impact.

Question C

The only potentially significant impacts associated with the proposed project's effects on human beings are related to air quality and recreation. However, as discussed in Section 2, Air Quality of this Initial Study, with implementation of the identified mitigation measures, all impacts would be reduced to less-than-significant levels. Therefore, the proposed project's impacts associated with effects on human beings would be ***less than significant***.

SECTION IV - ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

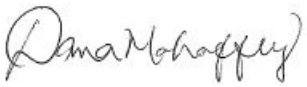
The environmental factors checked below would potentially be affected by this project.

	Aesthetics		Hazards
	Air Quality		Noise
X	Biological Resources		Public Services
X	Cultural Resources		Recreation
	Energy and Mineral Resources		Transportation/Circulation
	Geology and Soils	X	Utilities and Service Systems
	Hydrology and Water Quality		None Identified

SECTION V - DETERMINATION

On the basis of the initial study:

I find that (a) the proposed project is an anticipated subsequent project identified and described in the 2035 General Plan Master EIR; (b) the proposed project is consistent with the 2035 General Plan land use designation and the permissible densities and intensities of use for the project site; (c) that the discussions of cumulative impacts, growth inducing impacts, and irreversible significant effects in the Master EIR are adequate for the proposed project; and (d) the proposed project will have additional significant environmental effects not previously examined in the Master EIR. A Mitigated Negative Declaration will be prepared. Mitigation measures from the Master EIR will be applied to the project as appropriate, and additional feasible mitigation measures and alternatives will be incorporated to revise the proposed project before the negative declaration is circulated for public review, to avoid or mitigate the identified effects to a level of insignificance. (CEQA Guidelines Section 15178(b))



Signature

May 11, 2015
Date

Dana Mahaffey
Printed Name

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APPENDIX A

Greenfair Project

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	44.00	Dwelling Unit	6.90	79,200.00	117

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2005
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Acreage

Construction Phase - Construction emissions not modeled

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblLandUse	LotAcreage	14.29	6.90
tblProjectCharacteristics	OperationalYear	2014	2005

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	0.7412	0.7412	1.1900e-003	0.0000	0.7661
Energy											0.0000	163.1147	163.1147	5.7500e-003	2.2700e-003	163.9407
Mobile											0.0000	544.1717	544.1717	0.0493	0.0000	545.2060
Waste											8.5500	0.0000	8.5500	0.5053	0.0000	19.1611
Water											1.0143	5.5184	6.5327	3.7600e-003	2.2600e-003	7.3129
Total											**9.5643**	**713.5461**	**723.1103**	**0.5652**	**4.5300e-003**	**736.3867**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	0.7412	0.7412	1.1900e-003	0.0000	0.7661
Energy											0.0000	163.1147	163.1147	5.7500e-003	2.2700e-003	163.9407
Mobile											0.0000	544.1717	544.1717	0.0493	0.0000	545.2060
Waste											8.5500	0.0000	8.5500	0.5053	0.0000	19.1611
Water											1.0143	5.5184	6.5327	3.7800e-003	2.2600e-003	7.3140
Total											**9.5643**	**713.5461**	**723.1103**	**0.5653**	**4.5300e-003**	**736.3878**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	1/1/2004	12/31/2003	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 160,380; Residential Outdoor: 53,460; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	3.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	544.1717	544.1717	0.0493	0.0000	545.2060
Unmitigated											0.0000	544.1717	544.1717	0.0493	0.0000	545.2060

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	421.08	443.52	385.88	1,075,860	1,075,860
Total	421.08	443.52	385.88	1,075,860	1,075,860

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.00	5.00	6.50	46.50	12.50	41.00	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.465089	0.102664	0.228707	0.111728	0.024974	0.009164	0.021256	0.022696	0.001486	0.001192	0.007402	0.000925	0.002717

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
NaturalGas Mitigated											0.0000	75.4926	75.4926	1.4500e-003	1.3800e-003	75.9520
NaturalGas Unmitigated											0.0000	75.4926	75.4926	1.4500e-003	1.3800e-003	75.9520
Electricity Mitigated											0.0000	87.6221	87.6221	4.3000e-003	8.9000e-004	87.9886
Electricity Unmitigated											0.0000	87.6221	87.6221	4.3000e-003	8.9000e-004	87.9886

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	1.41468e+006											0.0000	75.4926	75.4926	1.4500e-003	1.3800e-003	75.9520
Total												**0.0000**	**75.4926**	**75.4926**	**1.4500e-003**	**1.3800e-003**	**75.9520**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	1.41468e+006											0.0000	75.4926	75.4926	1.4500e-003	1.3800e-003	75.9520
Total												**0.0000**	**75.4926**	**75.4926**	**1.4500e-003**	**1.3800e-003**	**75.9520**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	327241	87.6221	4.3000e-003	8.9000e-004	87.9886
Total		**87.6221**	**4.3000e-003**	**8.9000e-004**	**87.9886**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	327241	87.6221	4.3000e-003	8.9000e-004	87.9886
Total		**87.6221**	**4.3000e-003**	**8.9000e-004**	**87.9886**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	0.7412	0.7412	1.1900e-003	0.0000	0.7661
Unmitigated											0.0000	0.7412	0.7412	1.1900e-003	0.0000	0.7661

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	0.7412	0.7412	1.1900e-003	0.0000	0.7661
Total											**0.0000**	**0.7412**	**0.7412**	**1.1900e-003**	**0.0000**	**0.7661**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	0.7412	0.7412	1.1900e-003	0.0000	0.7661
Total											**0.0000**	**0.7412**	**0.7412**	**1.1900e-003**	**0.0000**	**0.7661**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	6.5327	3.7600e-003	2.2600e-003	7.3129
Mitigated	6.5327	3.7800e-003	2.2600e-003	7.3140

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	2.86678 / 1.80732	6.5327	3.7600e-003	2.2600e-003	7.3129
Total		**6.5327**	**3.7600e-003**	**2.2600e-003**	**7.3129**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	2.86678 / 1.80732	6.5327	3.7800e-003	2.2600e-003	7.3140
Total		**6.5327**	**3.7800e-003**	**2.2600e-003**	**7.3140**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	8.5500	0.5053	0.0000	19.1611
Unmitigated	8.5500	0.5053	0.0000	19.1611

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	42.12	8.5500	0.5053	0.0000	19.1611
Total		**8.5500**	**0.5053**	**0.0000**	**19.1611**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	42.12	8.5500	0.5053	0.0000	19.1611
Total		**8.5500**	**0.5053**	**0.0000**	**19.1611**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Greenfair Project

Sacramento County, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input

No	Soil Stabilizer for unpaved Roads	PM10 Reduction		PM2.5 Reduction			
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction			
No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction		Frequency (per day)	
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)			
No	Clean Paved Road	% PM Reduction	0.00				

		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5

Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.53	0.00	-0.02
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	-0.01	0.13		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			
No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			

		Land Use and Site Enhancement Subtotal	0.00			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"				
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00		2.00	
No	Commute	Provide Ride Sharing Program				
	Commute	Commute Subtotal	0.00			
No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	150.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	% Electric Lawnmower	

No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	

No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

Solid Waste Mitigation

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

Greenfair Project

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	44.00	Dwelling Unit	6.90	79,200.00	117

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2020
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	449.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Modified co2 intensity factor to reflectt smud's rps goal by 2020

Land Use - Acreage

Construction Phase - Construction emissions not modeled

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblLandUse	LotAcreage	14.29	6.90
tblProjectCharacteristics	CO2IntensityFactor	590.31	449.44
tblProjectCharacteristics	OperationalYear	2014	2020

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	0.7412	0.7412	7.2000e-004	0.0000	0.7564
Energy											0.0000	142.2048	142.2048	5.7500e-003	2.2700e-003	143.0308
Mobile											0.0000	395.0720	395.0720	0.0150	0.0000	395.3874
Waste											8.5500	0.0000	8.5500	0.5053	0.0000	19.1611
Water											1.0143	4.2015	5.2158	3.7600e-003	2.2600e-003	5.9960
Total											**9.5643**	**542.2195**	**551.7838**	**0.5305**	**4.5300e-003**	**564.3315**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	0.7412	0.7412	7.2000e-004	0.0000	0.7564
Energy											0.0000	125.1786	125.1786	5.3500e-003	1.9700e-003	125.9019
Mobile											0.0000	395.0720	395.0720	0.0150	0.0000	395.3874
Waste											8.5500	0.0000	8.5500	0.5053	0.0000	19.1611
Water											1.0143	4.2015	5.2158	3.7800e-003	2.2600e-003	5.9971
Total											**9.5643**	**525.1934**	**534.7576**	**0.5302**	**4.2300e-003**	**547.2038**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3.14**	**3.09**	**0.07**	**6.62**	**3.04**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	1/1/2004	12/31/2003	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 160,380; Residential Outdoor: 53,460; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	3.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	395.0720	395.0720	0.0150	0.0000	395.3874
Unmitigated											0.0000	395.0720	395.0720	0.0150	0.0000	395.3874

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	421.08	443.52	385.88	1,075,860	1,075,860
Total	421.08	443.52	385.88	1,075,860	1,075,860

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.00	5.00	6.50	46.50	12.50	41.00	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.503605	0.067800	0.178973	0.146934	0.044621	0.006359	0.021238	0.016884	0.002315	0.002275	0.006260	0.000554	0.002182

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
NaturalGas Mitigated											0.0000	60.1026	60.1026	1.1500e-003	1.1000e-003	60.4684
NaturalGas Unmitigated											0.0000	75.4926	75.4926	1.4500e-003	1.3800e-003	75.9520
Electricity Mitigated											0.0000	65.0761	65.0761	4.2000e-003	8.7000e-004	65.4336
Electricity Unmitigated											0.0000	66.7122	66.7122	4.3000e-003	8.9000e-004	67.0787

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	1.41468e+006											0.0000	75.4926	75.4926	1.4500e-003	1.3800e-003	75.9520
Total												**0.0000**	**75.4926**	**75.4926**	**1.4500e-003**	**1.3800e-003**	**75.9520**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	1.12628e+006											0.0000	60.1026	60.1026	1.1500e-003	1.1000e-003	60.4684
Total												**0.0000**	**60.1026**	**60.1026**	**1.1500e-003**	**1.1000e-003**	**60.4684**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	327241	66.7122	4.3000e-003	8.9000e-004	67.0787
Total		**66.7122**	**4.3000e-003**	**8.9000e-004**	**67.0787**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	319215	65.0761	4.2000e-003	8.7000e-004	65.4336
Total		**65.0761**	**4.2000e-003**	**8.7000e-004**	**65.4336**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	0.7412	0.7412	7.2000e-004	0.0000	0.7564
Unmitigated											0.0000	0.7412	0.7412	7.2000e-004	0.0000	0.7564

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	0.7412	0.7412	7.2000e-004	0.0000	0.7564
Total											**0.0000**	**0.7412**	**0.7412**	**7.2000e-004**	**0.0000**	**0.7564**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	0.7412	0.7412	7.2000e-004	0.0000	0.7564
Total											**0.0000**	**0.7412**	**0.7412**	**7.2000e-004**	**0.0000**	**0.7564**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	5.2158	3.7600e-003	2.2600e-003	5.9960
Mitigated	5.2158	3.7800e-003	2.2600e-003	5.9971

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	2.86678 / 1.80732	5.2158	3.7600e-003	2.2600e-003	5.9960
Total		**5.2158**	**3.7600e-003**	**2.2600e-003**	**5.9960**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	2.86678 / 1.80732	5.2158	3.7800e-003	2.2600e-003	5.9971
Total		**5.2158**	**3.7800e-003**	**2.2600e-003**	**5.9971**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	8.5500	0.5053	0.0000	19.1611
Unmitigated	8.5500	0.5053	0.0000	19.1611

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	42.12	8.5500	0.5053	0.0000	19.1611
Total		**8.5500**	**0.5053**	**0.0000**	**19.1611**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	42.12	8.5500	0.5053	0.0000	19.1611
Total		**8.5500**	**0.5053**	**0.0000**	**19.1611**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Greenfair Project

Sacramento County, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input

No	Soil Stabilizer for unpaved Roads	PM10 Reduction		PM2.5 Reduction			
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction			
No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction		Frequency (per day)	
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)			
No	Clean Paved Road	% PM Reduction	0.00				

		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5

Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.45	2.45	2.33	2.25	2.45
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.39	20.39	20.69	20.29	20.39
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.53	0.00	-0.02
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	-0.01	0.13		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			
No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			

		Land Use and Site Enhancement Subtotal	0.00			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"				
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00		2.00	
No	Commute	Provide Ride Sharing Program				
	Commute	Commute Subtotal	0.00			
No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	150.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	% Electric Lawnmower	

No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	25.00	
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	

No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

Solid Waste Mitigation

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

APPENDIX B

ARBORIST REPORT
AND
TREE INVENTORY SUMMARY

CALEPS DEVELOPMENT
GREENFAIR PROJECT SITE
City of Sacramento, California

Prepared for:

Chris Stevens
CALEPS DEVELOPMENT
3001 I Street
Sacramento, California 95816

Prepared by:

Edwin E. Stirtz
ISA Certified Arborist WE-0510A
Member, American Society of Consulting Arborists

SIERRA NEVADA ARBORISTS
7425 W 4th Street
Rio Linda, California 95673

November 19, 2014

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COPYRIGHT STATEMENT

QUALIFICATION STATEMENT

Sierra Nevada Arborists is a fully insured, Rio Linda-based arboriculture consulting firm founded in January of 1998 by its Principal, Edwin E. Stirtz. Mr. Stirtz is an ISA Certified Arborist and a member of the American Society of Consulting Arborists and International Society of Arboriculture. Mr. Stirtz possesses in excess of 30 years experience in horticulture and arboriculture, both maintenance and construction, and has spent the last 23 years as a consulting and preservation specialist in the Sacramento and surrounding regions.

INTRODUCTION

Sierra Nevada Arborists is pleased to present this Arborist Report and Tree Inventory Summary for the trees located within and/or overhanging the property located at the Greenfair project site in the City of Sacramento, California. This Arborist Report and Tree Inventory Summary memorializes tree data obtained by Edwin E. Stirtz, ISA Certified Arborist WE-0510A, at the time of field reconnaissance and inventory efforts on November 10 and November 14, 2014.

SCOPE OF INVENTORY EFFORT

The City of Sacramento Tree Preservation Ordinance (Sacramento City Code Title 12, Chapter 12.56.060 and following) regulates the pruning and/or removal of both Street Trees and Heritage trees and the encroachment of construction activities within their driplines. The City of Sacramento Tree Protection Ordinance defines a "Heritage Tree" as:

1. Any tree of any species with a trunk circumference of 100" or more (i.e., 31.82" DBH)[1], which is of good quality in terms of health, vigor of growth and conformity to generally accepted horticultural standards of shape and location for its species;

2. Any native *Quercus* species, *Aesculus california* (California Buckeye), or *Platanus racemosa* (California Sycamore) having a circumference of 36" or greater (i.e., 11.45" DBH) when a single trunk, or a cumulative circumference of 36" or greater when a multi-trunk;

3. Any tree 36" in circumference or greater in a riparian zone. The riparian zone is measured from the center line of the water course to 30' beyond the high water line; or

4. Any tree, grove of trees or woodland trees designated by resolution of the City Council to be of special historical or environmental value or of significant community benefit.

(Sacramento Municipal Code, Title 12, Chapter 12.64: Heritage Trees.)

[1] "Diameter at breast height" has been calculated by use of the following formula: circumference measured 4½' above ground level divided by 3.142.

At the request of CALEPS Development, on November 10 and November 14, 2014, Edwin E. Stirtz of Sierra Nevada Arborists visited the Greenfair project site located in the City of Sacramento, California. The purpose of this field reconnaissance effort was to identify, inventory and comment upon the current structure and vigor of any heritage trees found on site and any street trees found around the site perimeter.

This Arborist Report and Tree Inventory Summary presents information concerning the species, size, and current condition of the trees meeting the criteria detailed above within the proposed project area, along with initial pre-development recommendations on a tree-by-tree basis which logically follow the characteristics noted within the trees at the time of field inventory efforts. Information concerning the nature and extent of root system and canopy impacts which will be sustained by the trees from proposed development activities, along with specific tree-by-tree mitigation recommendations for the trees which will sustain encroachment into their protected root zones can be provided in a Supplemental Arborist Report and Construction Impact Assessment once development plans have been refined and finalized for the proposed project area.

METHODOLOGY

During field reconnaissance and inventory efforts Edwin E. Stirtz of Sierra Nevada Arborists conducted a visual review from ground level of the trees within and/or overhanging the proposed project area as depicted on the Boundary & Topo Exhibit provided by Wood Rodgers Engineers. The trees which met the defined criteria were identified in the field by affixing to the tree's trunk a round numbered tag with blue flagging. The tree numbers utilized in this report and accompanying Tree Inventory Summary correspond to the tree tag which is affixed to the tree in the field, and those tree numbers or grouping of numbers have been rough-plotted on the enclosed Boundary & Topo Exhibit so that the precise vertical and horizontal location of the trees may be surveyed in the field by a licensed land surveyor and data for the trees (i.e. tree number, diameter, dripline and protected root zone radii) may be properly depicted on future development plans and Tree Location Exhibit.

At the time of field identification and inventory efforts specific data was gathered for each tagged tree including the tree's species, diameter measured at breast height ("DBH") and dripline radius ("DLR"). Utilizing this data the tree's overall structural condition and vigor were separately assessed ranging from "excellent"[1] to "poor" based upon the observed characteristics noted within the tree and the Arborist's best professional judgment. Ratings are subjective and are dependent upon both the structure and vigor of the tree. The vigor rating considers factors such as the size, color and density of the foliage; the amount of deadwood within the canopy; bud viability; evidence of wound closure; and the presence or

[1] It is rare that a tree qualifies in an "excellent" category, and it should be noted that there were no trees observed within the project area which fell within the criteria of an "excellent" or "good" rating. A complete description of the terms and ratings utilized in this report and accompany inventory summary are found on pages 10-11.

evidence of stress, disease, nutrient deficiency and insect infestation. The structural rating reflects the root crown/collar, trunk and branch configurations; canopy balance; the presence of included bark, weak crotches and other structural defects and decay and the potential for structural failure. Finally, notable characteristics were documented and recommendations on a tree-by-tree basis were made which logically followed the observed characteristics noted within the trees at the time of the field inventory effort. The recommendations are based on the assumption that the tree would be introduced into a developed environment and may require maintenance and/or may not be suitable for retention within a post-development setting.

SUMMARY OF INVENTORY EFFORT

Field reconnaissance and inventory efforts found 102 trees measuring four inches in diameter and larger measured at breast height within and/or overhanging the proposed project area. Composition of the 102 inventoried trees includes the following species and accompanying aggregate diameter inches:

SPECIES DIVERSIFICATION			
Almond	=	1 tree	(14 aggregate diameter inches)
American Elm	=	26 trees	(494 aggregate diameter inches)
Arizona Cypress	=	1 tree	(16 aggregate diameter inches)
Ash	=	5 trees	(92 aggregate diameter inches)
Black Locust	=	2 trees	(21 aggregate diameter inches)
California Black Walnut	=	2 trees	(20 aggregate diameter inches)
Canary Island Pine	=	3 tree	(55 aggregate diameter inches)
Chinese Elm	=	20 trees	(273 aggregate diameter inches)
Chinese Hackberry	=	6 trees	(73 aggregate diameter inches)
Chinese Pistache	=	4 trees	(47 aggregate diameter inches)
Chinese Tallow	=	1 tree	(8 aggregate diameter inches)
Coast Live Oak	=	2 trees	(35 aggregate diameter inches)
Crabapple	=	3 trees	(33 aggregate diameter inches)
Eucalyptus	=	1 tree	(20 aggregate diameter inches)
Fig	=	1 tree	(11 aggregate diameter inches)
Fruitless Mulberry	=	3 trees	(42 aggregate diameter inches)
Italian Stone Pine	=	1 tree	(29 aggregate diameter inches)
Liquidambar	=	6 trees	(77 aggregate diameter inches)
Lumbar Poplar	=	1 trees	(22 aggregate diameter inches)
Pecan	=	1 tree	(26 aggregate diameter inches)
Plane Tree	=	2 trees	(23 aggregate diameter inches)
Privet	=	1 tree	(9 aggregate diameter inches)
Silk	=	2 trees	(23 aggregate diameter inches)
Zelcova	=	7 trees	(117 aggregate diameter inches)

Recommended Removals

At this time 6 trees have been recommended for removal from the proposed project area due to the nature and extent of defects, compromised health and/or structural instability noted at the time of field inventory efforts. If these trees were retained within the proposed project area it is our opinion that it may be hazardous depending upon their proximity to planned development activities. For reference, the trees which have been recommended for removal due to the severity of noted defects, compromised health and/or structural instability are highlighted in green within the accompanying inventory summaries and are briefly summarized as follows:

TREE #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH (inches)	DLR (feet)	CONDITIONAL ASSESSMENT	
						STRUCTURE	VIGOR
902	Coast Live Oak	*(Quercus agrifolia)*	3,5	8	10	Poor	Fair
907	American Elm	*(Ulmus spp.)*	3,3,4	10	15	Poor	Fair
930	Fruitless Mulberry	*(Morus alba)*		9	20	Poor	Poor to fair
940	Liquidambar	*(Liquidambar styraciflua)*		16	24	Poor	Poor to fair
973	American Elm	*(Ulmus spp.)*	10,18,19,22	69	32	Poor	Fair
980	Fruitless Mulberry	*(Morus alba)*		19	22	Poor	Poor

It should also be noted that some of the trees within the proposed project area are trees which may be undesirable on residential lots, or are trees which will require periodic/seasonal monitoring to assess the trees' ongoing structural integrity. At this early stage of the project Sierra Nevada Arborists has not recommended the removal of these trees since development plans, including proposed home sites and building footprints, have not yet been finalized and the precise location of these trees in proximity to planned improvement activities is not known. At this time it is recommended that these trees be monitored and thoroughly inspected by a qualified ISA Certified Arborist on at least an annual basis to keep abreast of the trees' changing condition(s) and to assess the trees' ongoing structural integrity and potential for hazard in a developed environment.

CONSTRUCTION IMPACT ASSESSMENT

This Arborist Report and Tree Inventory Summary is intended to provide to CALEPS Development, the City of Sacramento, and other members of the development team a detailed *pre-development review* of the species, size, and current structure and vigor of the trees within and/or overhanging the proposed project area. It is not an exhaustive review of the impacts which will be sustained from project implementation. At this early stage of the project specific root system and canopy impacts on a tree-by-tree basis cannot be definitively assessed until the site development, grading, and other improvement plans have been refined and finalized and data from the accompanying inventory summary (i.e., tree numbers, dripline radius, and root protection zones) is properly depicted on the plans.

Since trees are living organisms whose condition may change at any time a complete assessment of construction impacts and specific recommendations to help mitigate for the adverse impacts which may be sustained by the trees from contemplated construction activities cannot be made until the development plans have been refined and finalized. Once final plans have been developed for the site a qualified ISA Certified Arborist with special expertise and demonstrated experience with construction projects in and among native and non-native trees should review those plans and provide a more detailed assessment of impacts, including identification of trees which may require removal to facilitate home construction and other contemplated site development activities. This review will be particularly important if structures and/or residential activities will fall within or near the fall zone of a tree which has been noted as exhibiting structural defects, questionable long-term longevity and/or a conditional rating which is less than “fair”, and for trees which measure 16 inches and greater in diameter which will be retained within close proximity to development as trees of this size may pose a more significant hazard if a sudden limb shed and/or catastrophic failure should occur. In addition, the review should include an assessment of root system and canopy impacts which will be sustained by the trees which will be retained within the proposed development area, along with specific recommendations on a tree-by-tree basis to help reduce adverse impacts of construction on the retained trees. In the meantime, this report provides some pre-development recommendations which logically follow the observed characteristics noted in the trees at the time of the field inventory efforts, as well as General Protection Measures which should be utilized as a guideline for the protection of trees which may be retained within the development area. These recommendations will require modification and/or augmentation as development plans are refined and finalized.

GENERAL COMMENTS AND ARBORISTS’ DISCLAIMER

The City of Sacramento regulates both the removal of “protected trees” and the encroachment of construction activities within their driplines. Therefore, a tree permit and/or additional development authorization should be obtained from the City of Sacramento prior to the removal of any trees within the proposed project area. All terms and conditions of the tree permit and/or other Conditions of Approval are the sole and exclusive responsibility of

the project applicant. It should be noted that prior to final inspection written verification from an ISA Certified Arborist may be required certifying the approved removal activities and/or implementation of other Conditions of Approval outlined for the retained trees on the site. ***Sierra Nevada Arborists will not provide written Certification of Compliance unless we have been provided with a copy of the approved site development plans, applicable permits and/or Conditions of Approval, and are on site to monitor and observe regulated activities during the course of construction.*** Therefore, it will be necessary for the project applicant to notify Sierra Nevada Arborists well in advance (at least 72 hours prior notice) of any regulated activities which are scheduled to occur on site so that those activities can be properly monitored and documented for compliance certification.

Please bear in mind that implementation of the recommendations provided within this report will help to reduce adverse impacts of construction on the retained trees; however, implementation of any recommendations should not be viewed as a guarantee or warranty against the trees' ultimate demise and/or failure in the future. Arborists are tree specialists who use their education, knowledge, training and experience to examine trees, recommend measures to enhance the beauty and health of the trees and ***attempt to reduce the risk of living near trees***. Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. There are some inherent risks with trees that cannot be predicted with any degree of certainty, even by a skilled and experienced arborist. Entities who choose to construct homes on wooded property are accepting a certain level of risk from unpredictable tree related hazards such as toppling in storms, limbs falling and fires that may damage property at some time in the future. Since trees are living organisms their structure and vigor constantly change over time, and they are not immune to changes in site conditions or seasonal variations in the weather. Further, conditions are often hidden within the tree and/or below ground. Arborists and other tree care professionals cannot guarantee that a tree will be healthy and/or safe under all circumstances or for a specific period of time. Likewise remedial treatments cannot be guaranteed. Trees can be managed but they cannot be controlled. To develop land and live near trees is to accept some degree of risk and the only way to eliminate all risk associated with trees would be to eliminate all of the trees. ***An entity who develops land and builds a home with a tree in the vicinity should be aware of and inform their future residents of this Arborists' Disclaimer, and be further advised that the developer and the future residents assume the risk that a tree could at any time suffer a branch and/or limb failure, blow over in a storm and/or fail for no apparent reason which may cause bodily injury or property damage***. Sierra Nevada Arborists cannot predict acts of nature including, without limitation, storms of sufficient strength which can even take down a tree with a structurally sound and vigorous appearance.

Finally, the trees preserved within and/or overhanging the proposed project area will experience a physical environment different from the pre-development environment. As a result, tree health and structural stability should be regularly monitored. Occasional pruning, fertilization, mulch, pest management, replanting and/or irrigation may be required. In addition, ***provisions for monitoring both tree health and structural stability following construction must be made a priority***. As trees age, the likelihood of failure of branches or entire trees increases. Therefore, ***the future management plan must include an annual***

inspection by a qualified ISA Certified Arborist to keep abreast of the trees' changing condition(s) and to assess the trees' ongoing structural integrity and potential for hazard in a developed environment.

Thank you for allowing Sierra Nevada Arborists to assist you with this review. Please feel free to give me a call if you have any questions or require additional information and/or clarification.

Sincerely,

Edwin E. Stirtz
ISA Certified Arborist WE-0510A
Member, American Society of Consulting Arborists

ASSUMPTIONS AND LIMITING CONDITIONS

1. Any legal description provided to the consultant is assumed to be correct. Any titles and ownership to any property are assumed to be good and marketable. No responsibility is assumed for matters legal in character. Any and all property is appraised or evaluated as though free and clear, under responsible ownership and competent management.

2. It is assumed that any property is not in violation of any applicable codes, ordinances, statutes, or other governmental regulations.

3. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant can neither guarantee nor be responsible for the accuracy of information provided by others.

4. The consultant shall not be required to give a deposition and/or attend court by reason of this report unless subsequent contractual arrangements are made for in advance, including payment of an additional fee for such services according to our standard fee schedule, adjusted yearly, and terms of the subsequent contract of engagement.

5. Loss or alteration of any part of this report invalidates the entire report. Ownership of any documents produced passes to the Client only when all fess have been paid.

6. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person to whom it is addressed, without the prior expressed written or verbal consent of the consultant.

7. Neither all nor any part of the contents of this report, nor copy thereof, shall be conveyed by anyone, including the client, to the public through advertising, public relations, news, sales, or other media, without the prior expressed written or verbal consent of the consultant, particularly as to value conclusions, identity of the consultant, or any reference to any professional society or institute or to any initialed designation conferred upon the consultant as stated in his qualifications.

8. This report and any values expressed herein represent the opinion of the consultant and the consultant's fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.

9. Sketches, diagrams, graphs, drawings and photographs within this report are intended as visual aids and are not necessarily to scale and should not be construed as engineering or architectural reports or surveys. The reproduction of

information generated by other consultants is for coordination and ease of reference. Inclusion of such information does not constitute a representation by the consultant as to the sufficiency or accuracy of the information.

10. Unless expressed otherwise: 1) information contained in this report covers only those items that were examined and reflects the condition of those items at the time of inspection; and 2) the inspection is limited to visual examination of accessible items without laboratory analysis, dissection, excavation, probing or coring, unless otherwise stated.

11. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.

12. This report is based on the observations and opinions of Edwin E. Stirtz, and does not provide guarantees regarding the future performance, health, vigor, structural stability or safety of the plants described herein. Neither this author nor Sierra Nevada Arborists has assumed any responsibility for liability associated with the trees on or adjacent to this project site, their future demise and/or any damage which may result therefrom.

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13. The information contained within this report is true to the best of the author's knowledge and experience as of the date it was prepared; however, certain conditions may exist which only a comprehensive, scientific, investigation might reveal which should be performed by other consulting professionals.

14. The legal description, dimensions, and areas herein are assumed to be correct. No responsibility is assumed for matters that are legal in nature.

15. Any changes to an established tree's environment can cause its decline, death and/or structural failure.

DEFINITIONS AND RATINGS

Tree Number:	Corresponds to aluminum tag attached to the tree.
Species Identification:	Scientific and common species name.
Diameter ("DBH"):	This is the trunk diameter measured at breast height (industry standard 4.5 feet above ground level).
Dripline radius ("DLR"):	A radius equal to the horizontal distance from the trunk of the tree to the end of the farthest most branch tip prior to any cutting. When depicted on a map, the dripline will appear as an irregularly shaped circle that follows the contour of the tree's branches as seen from overhead.
Protected Zone:	A circle equal to the largest radius of a protected tree's dripline plus 1 foot.
Root Crown:	Assessment of the root crown/collar area located at the base of the trunk of the tree at soil level.
Trunk:	Assessment of the tree's main trunk from ground level generally to the point of the primary crotch structure.
Limbs:	Assessment of both smaller and larger branching, generally from primary crotch structure to branch tips.
Foliage:	Tree's leaves.
Overall Condition:	Describes overall condition of the tree in terms of structure and vigor.
Recommendation:	Pre-development recommendations based upon observed characteristics noted at the time of the field inventory effort.
Obscured:	Occasionally some portion of the tree may be obscured from visual inspection due to the presence of dense vegetation which, during the course of inspection for the arborist report, prevented a complete evaluation of the tree. In these cases, if the tree is to be retained on site the vegetation should be removed to allow for a complete assessment of the tree prior to making final decisions regarding the suitability for retention.

TREE CONDITION RATING CRITERIA

RATING TERM	ROOT CROWN	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR
Good	No apparent injuries, decay, cavities or evidence of hollowing; no anchoring roots exposed; no indications of infestation or disease	No apparent injuries, decay, cavities or evidence of hollowing; no codominant attachments or multiple trunk attachments are observed; no indications of infestation or disease	No apparent injuries, decay, cavities or evidence of hollowing; below average amount of dead limbs or twigs; no major limb failures or included bark; callus growth is vigorous	Leaf size, color and density are typical for the species; buds are normal in size, viable, abundant and uniform throughout the canopy; annual seasonal growth increments are average or above average; no insect or disease infestations/ infections evident	No apparent structural defects; no weak crotches; no excessively weighted branches and no significant cavities or decay	Tree appears healthy and has little or no significant deadwood; foliage is normal and healthy
Fair	Small to moderate injuries, decay, cavities or hollowing may be evident but are not currently affecting the overall structure; some evidence of infestation or disease may be present but is not currently affecting the tree's structure	Small to moderate injuries, decay, cavities or hollowing may be evident; codominant branching or multiple trunk attachments or minor bark inclusion may be observed; some infestation or disease may be present but not currently affecting the tree's structure	Small to moderate injuries, decay or cavities may be present; average or above average dead limbs or twigs may be present; some limb failures or bark inclusion observed; callus growth is average	Leaf size, color and density are typical or slightly below typical for the species; buds are normal or slightly sparse with potentially varied viability, abundance and distribution throughout the canopy; annual seasonal growth increments are average or slightly below average; minor insect or disease infestation/infection may be present	Minor structural problems such as weak crotches, minor wounds and/or cavities or moderate amount of excessive weight; non-critical structural defects which can be mitigated through pruning, cabling or bracing	Tree appears stressed or partially damaged; minimal vegetative growth since previous season; moderate amount of deadwood, abnormal foliage and minor lesions or cambium dieback
Poor	Moderate to severe injuries, decay, cavities or hollowing may be evident and are affecting the overall structure; presence of infestation or disease may be significant and affecting the tree's structure	Moderate to severe injuries, decay, cavities or hollowing may be evident and are affecting the tree's structure; presence of infestation or disease may be significant and affecting the tree's structure	Severe injuries, decay or cavities may be present; major deadwood, twig dieback, limb failures or bark inclusion observed; callus growth is below average	Leaf size, color and density are obviously abnormal; buds are obviously abnormal or absent; annual seasonal growth is well below average for the species; insect or disease problems may be severe	Obvious major structural problems which cannot be corrected with mitigation; potential for major limb, trunk or root system failure is high; significant decay or dieback may be present	Tree health is declining; no new vegetative growth; large amounts of deadwood; foliage is severely abnormal

The ratings "good to fair" and "fair to poor" are used to describe trees that fall between the described major categories and have elements of both

GENERAL PROTECTION GUIDELINES
FOR TREES PLANNED FOR PRESERVATION

Great care must be exercised when work is conducted upon or around protected trees. The purpose of these General Protection Measures is to provide guidelines to protect the health of the affected protected trees. These guidelines apply to all encroachments into the protected zone of a protected tree, and may be incorporated into tree permits and/or other Conditions of Approval as deemed appropriate by the applicable governing body.

- A circle with a radius measurement from the trunk of the tree to the tip of its longest limb, plus one foot, shall constitute the critical root zone protection area of each protected 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 each protected tree. Removing limbs that make up the dripline does not change the protected area.

- Any protected trees on site which require pruning shall be pruned by an ISA Certified Arborist prior to the start of construction work. All pruning shall be in accordance with the American National Standards Institute (ANSI) A300 pruning standards, ANSI Standard 2133.1-2000 regarding safety practices, and the International Society of Arboriculture (ISA) “Tree Pruning Guidelines” and Best Management Practices.

- Prior to initiating construction, temporary protective fencing shall be installed at least one foot outside the root protection zone of the protected trees in order to avoid damage to the tree canopies and root systems. Fencing shall be installed in accordance with the approved fencing plan prior to the commencement of any grading operations or such other time as determined by the review body. The developer shall contact the Project Arborist and the Planning Department for an inspection of the fencing prior to commencing construction activities on site.

- Signs shall be installed on the protective fence in four (4) equidistant locations around each individual protected tree. The size of each sign must be a minimum of two (2) feet by two (2) feet and must contain the following language:

  WARNING: THIS FENCE SHALL NOT BE REMOVED OR RELOCATED WITHOUT WRITTEN AUTHORIZATION FROM THE CITY OF SACRAMENTO MUNICIPAL SERVICES AGENCY

  Once approval has been obtained by the City of Sacramento Municipal Services Agency protective fencing shall remain in place throughout the entire construction period and shall not be removed, relocated, taken down or otherwise modified in whole or in part without prior written authorization from the Agency, or as deemed necessary by the Project Arborist to facilitate approved activities within the root protection zone.

- Any removal of paving or structures (i.e. demolition) that occurs within the dripline of a protected tree shall be done under the direct supervision of the Project Arborist. To the maximum extent feasible, demolition work within the dripline protection area of the protected tree shall be performed by hand. If the Project Arborist determines that it is not feasible to perform some portion(s) of this work by hand, then the smallest/lightest weight equipment that will adequately perform the demolition work shall be used.

- No signs, ropes, cables (except those which may be installed by an ISA Certified Arborist to provide limb support) or any other items shall be attached to the protected trees. Small metallic numbering tags for the purpose of identification in preparing tree reports and inventories shall be allowed.

- No vehicles, construction equipment, mobile homes/office, supplies, materials or facilities shall be driven, parked, stockpiled or located within the driplines of protected trees.

- Drainage patterns on the site shall not be modified so that water collects, stands or is diverted across the dripline of any protected tree.

- No trenching shall be allowed within the driplines of protected trees, except as specifically approved by the Planning Department as set forth in the project's Conditions of Approval and/or approved tree permit. If it is absolutely necessary to install underground utilities within the dripline of a protected tree the utility line within the protected zone shall be "bored and jacked" or performed utilizing hand tools to avoid root injury under the direct supervision of the Project Arborist.

- Grading within the protected zone of a protected tree shall be minimized. Cuts within the protected zone shall be maintained at less than 20% of the critical root zone area. Grade cuts shall be monitored by the Project Arborist. Any damaged roots encountered shall be root pruned and properly treated as deemed necessary by the Project Arborist.

- Minor roots less than one (1) inch in diameter encountered during approved excavation and/or grading activities may be cut, but damaged roots shall be traced back and cleanly cut behind any split, cracked or damaged area as deemed necessary by the Project Arborist.

- Major roots greater than one (1) inch in diameter encountered during approved excavation and/or grading activities may not be cut without approval of the Project Arborist. Depending upon the type of improvement being proposed, bridging techniques or a new site design may need to be employed to protect the roots and the tree.

- Cut faces, which will be exposed for more than 2-3 days, shall be covered with dense burlap fabric and watered to maintain soil moisture at least on a daily basis (or possibly more frequently during summer months). If any native ground surface fabric within the protected zone must be removed for any reason, it shall be replaced within forty-eight (48) hours.

- If fills exceed 1 foot in depth up to 20% of the critical root zone area, aeration systems may serve to mitigate the presence of the fill materials as determined by the Project Arborist.

- When fill materials are deemed necessary on two or three sides of a tree it is critical to provide for drainage away from the critical root zone area of the tree (particularly when considering heavy winter rainfalls). Overland releases and subterranean drains dug outside the critical root zone area and tied directly to the main storm drain system are two options.

- In cases where a permit has been approved for construction of a retaining wall(s) within the protected zone of a protected tree the applicant will be required to provide for immediate protection of exposed roots from moisture loss during the time prior to completion of the wall. The retaining wall within the protected zone of the protected tree shall be constructed within seventy-two (72) hours after completion of grading within the root protection zone.

- The construction of impervious surfaces within the dripline of a protected tree shall be minimized. When necessary, a piped aeration system shall be installed under the direct supervision of the Project Arborist.

- Preservation devices such as aeration systems, tree wells, drains, special paving and cabling systems must be installed in conformance with approved plans and certified by the Project Arborist.

- No sprinkler or irrigation system shall be installed in such a manner that sprays water or requires trenching within the dripline of a protected tree. An above ground drip irrigation system is recommended. An independent low-flow drip irrigation system may be used for establishing drought-tolerant plants within the protected zone of a protected tree. Irrigation shall be gradually reduced and discontinued after a two (2) year period.

- All portions of permanent fencing that will encroach into the protected zone of a protected tree shall be constructed using posts set no closer than ten (10) feet on center. Posts shall be spaced in such a manner as to maximize the separation between the tree trunks and the posts in order to reduce impacts to the tree(s).

- Landscaping beneath native oak trees may include non-plant materials such as bark mulch, wood chips, boulders, etc. Planting live material under protected native oak trees is generally discouraged, and is not recommended within six (6) feet of the trunk of a native oak tree with a diameter a breast height (DBH) of eighteen (18) inches or less, or within ten (10) feet of the trunk of a native oak tree with a DBH of more than eighteen (18) inches. The only plant species which shall be planted within the dripline of native oak trees are those which are tolerant of the natural, semi-arid environs of the tree(s).