CITY OF ROSEVILLE CALIFORNIA

DEVELOPMENT SERVICES DEPARTMENT – PLANNING DIVISION
311 Vernon Street, Roseville, CA 95678 (916) 774-5276

MITIGATED NEGATIVE DECLARATION

Project Title/File Number:	NCRSP Parcel 95 and 98A; Creekside C6 Retail; File #PL18-0060
Project Location:	1001 Creekside Ridge, Roseville CA, Placer County
Project Applicant:	Tiffany Wilson, RSC Engineering, Inc.
Property Owner:	Trey Gundlach, Allegiant Development Co., Inc. For: Evergreen Britannia 026 LLC
Lead Agency Contact Person:	Charity Gold, Associate Planner - City of Roseville; (916) 774-5247
Date:	January 9, 2019

Project Description:

The applicant requests a General Plan Amendment and a Specific Plan Amendment to change the land use designation on Parcel 2 from Open Space to Regional Commercial, a Rezone to change the zoning designation on Parcel 2 from General Industrial (M2) to Regional Commercial (RC), a Major Project Permit Modification to add two retail buildings and an office building to the approved Creekside Center site plan, a Major Project Permit Stage 2 to approve the design of the three buildings, a Tree Permit to encroach into the protected zones of native oak trees, and a Lot Line Adjustment to reconfigure the existing parcels.

DECLARATION

The Planning Manager has determined that the above project will not have significant effects on the environment and therefore does not require preparation of an Environmental Impact Report. The determination is based on the attached initial study and the following findings:

A. *The project will not have the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare or threatened species, reduce the number or restrict the range of rare or endangered plants or animals or eliminate important examples of the major periods of California history or prehistory.*
B. *The project will not have the potential to achieve short-term, to the disadvantage of long-term, environmental goals.*
C. *The project will not have impacts, which are individually limited, but cumulatively considerable.*
D. *The project will not have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly.*
E. *No substantial evidence exists that the project may have a significant effect on the environment.*
F. *The project incorporates all applicable mitigation measures identified in the attached initial study.*
G. *This Mitigated Negative Declaration reflects the independent judgment of the lead agency.*

CITY OF ROSEVILLE CALIFORNIA

DEVELOPMENT SERVICES DEPARTMENT–PLANNING DIVISION

311 Vernon St, Roseville, CA 95678 (916) 774-5276

INITIAL STUDY AND ENVIRONMENTAL CHECKLIST

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This initial study has been prepared to identify and assess the anticipated environmental impacts of the above described project. The document relies on previous environmental documents and site-specific studies prepared to address in detail the effects or impacts associated with the project. Where documents were submitted by consultants working for the applicant, City staff reviewed such documents in order to determine whether, based on their own professional judgment and expertise, staff found such documents to be credible and persuasive. Staff has only relied on documents that reflect their independent judgment, and has not accepted at face value representations made by consultants for the applicant.

This document has been prepared to satisfy the California Environmental Quality Act (CEQA), (Public Resources Code, Section 21000 et seq.) and the State CEQA Guidelines (14 CCR 15000 et seq.). CEQA requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects.

The initial study is a public document used by the decision-making lead agency to determine whether a project may have a significant effect on the environment. If the lead agency finds substantial evidence that any aspect of the project, either individually or cumulatively, may have a significant effect on the environment, regardless of whether the overall effect of the project is adverse or beneficial, the lead agency is required to prepare an Environmental Impact Report (EIR). If the agency finds no substantial evidence that the project or any of its aspects may cause a significant effect on the environment, a negative declaration shall be prepared. If in the course of analysis, the agency recognizes that the project may have a significant impact on the environment, but that by incorporating specific mitigation measures to which the applicant agrees, the impact will be reduced to a less than significant effect, a mitigated negative declaration shall be prepared.

Table of Contents

Project Description **3**

City of Roseville Mitigation Ordinances, Guidelines, and Standards **5**

Other Environmental Documents Relied Upon **5**

Explanation of Initial Study Checklist **6**

Initial Study Checklist

I. Aesthetics **7**
II. Agricultural & Forestry Resources **8**
III. Air Quality **10**
IV. Biological Resources **12**
V. Cultural Resources **17**
VI. Geology and Soils **19**
VII. Greenhouse Gases **21**
VIII. Hazards and Hazardous Materials **23**
IX. Hydrology and Water Quality **25**
X. Land Use and Planning **28**
XI. Mineral Resources **29**
XII. Noise **30**
XIII. Population and Housing **32**
XIV. Public Services **33**
XV. Recreation **34**
XVI. Transportation / Traffic **35**
XVII. Tribal Cultural Resources **37**
XVIII. Utilities and Service Systems **43**
XIX. Mandatory Findings of Significance **45**

Environmental Determination **47**

Attachments **47**

PROJECT DESCRIPTION

Project Location

The project site is located at 1001 Creekside Ridge Drive, on the east side of the intersection of Roseville Parkway and Creekside Ridge Drive (Figure 1). The subject property is within the Creekside Center and the North Central Roseville Specific Plan. The site is zoned RC/SA-NC and M2 and is currently vacant except for some frontage and landscape improvements along Roseville Parkway and Creekside Ridge Drive. The site is surrounded by a regional retail center and office park to the northeast and northwest and open space, including Antelope Creek and the Antelope Creek trail to the southeast and southwest. See Table 1 for the land use designations and uses of the subject and surrounding properties.

Figure 1: Project Location

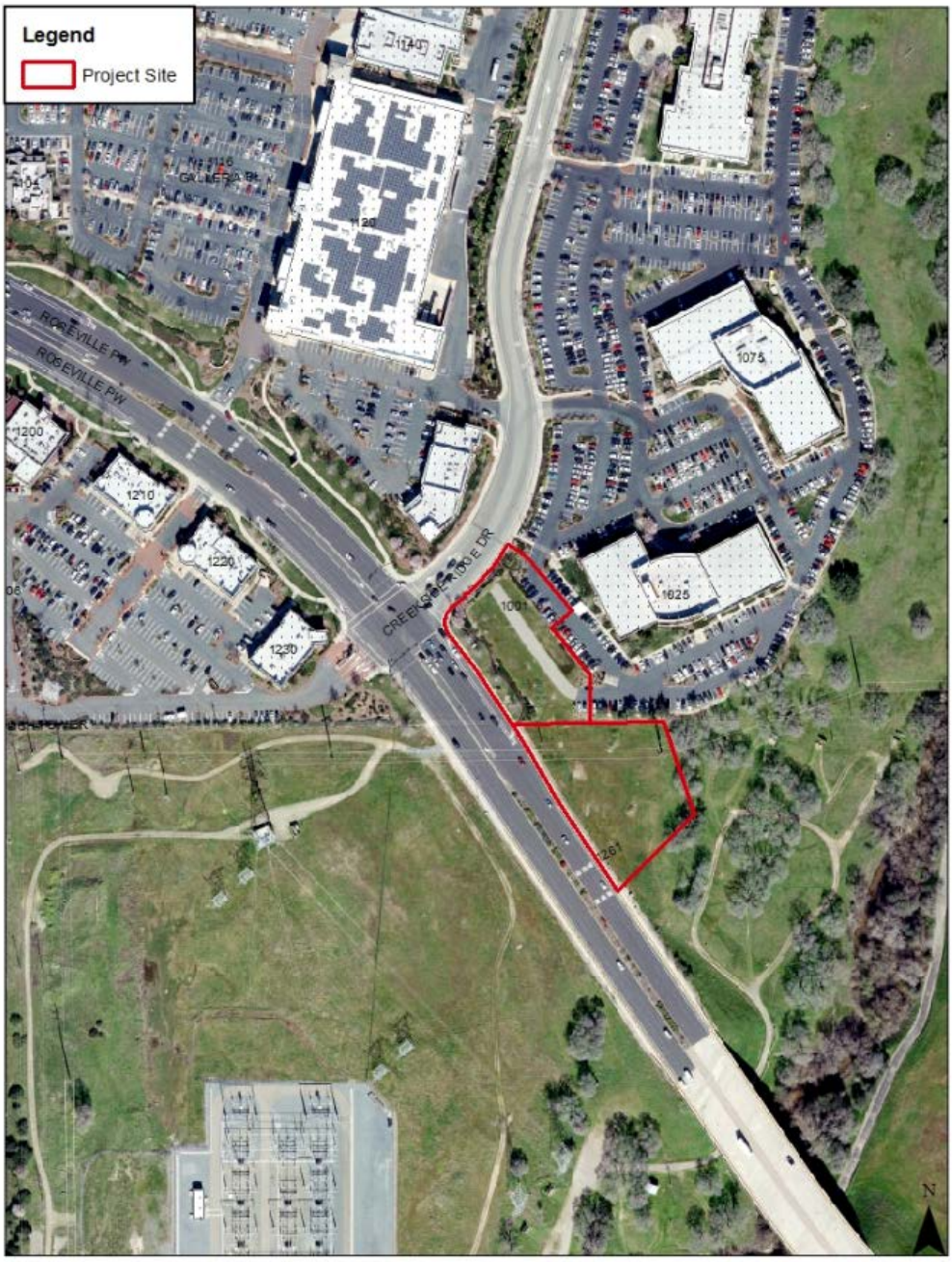


Table 1: Site and Vicinity Land Use Designations

Location	Zoning	General Plan Land Use	Actual Use of Property
Site	Regional Commercial (RC/SA-NC) and General Industrial (M2)	RC and OS	Vacant
North	RC/SA-NC	RC	Business Park
South	M2	OS	Open Space
East	Open Space (OS/SA-NC)	OS	Open Space
West	Community Commercial (CC/SA-NC)	CC	Retail

Background

The project is located within the North Central Roseville Specific Plan (NCRSP), for which an EIR was prepared. The site is also part of the Creekside Center Major Project Permit, as amended (MPP 98-01; MPPMOD 98-01A; MPPMOD 98-01B). Except for the subject property, all of the parcels within the Creekside Center have been developed and the center is almost entirely builtout. The proposed project will add one new parcel to the Creekside Center project, and develop an office building where retail was anticipated on a parcel that is currently part of the Creekside Center project. The existing structures within the Creekside Center were not builtout to the square footages assumed in the EIR; therefore, the proposed project will not add square footage beyond that which was anticipated and analyzed in the NCRSP EIR. The proposed project requires a General Plan Amendment and Rezone to develop on the new parcel, the physical impacts associated with development on that parcel were not analyzed in the NCRSP EIR; because that development was not included in the EIR impacts related to development of that parcel are discussed in the analyses that follow.

Environmental Setting

The project site is undeveloped except for some frontage and landscape improvements along Roseville Parkway and Creekside Ridge Drive, as well as parking and an access road constructed as part of a previous development. Vegetation on the site consists of native and non-native grasses. Excluding the landscaped area, there are no trees on the site; however, there are protected oak trees immediately adjacent to and overhanging the site within the adjacent Antelope Creek open space corridor. The site is bisected by PG&E electric transmission lines and an associated 100-foot easement, which includes development restrictions. The site is surrounded by existing retail and office uses developed as part of the Creekside Center project, as well as open space uses. The site has frontage on both Roseville Parkway and Creekside Ridge Drive.

Proposed Project

The project includes construction of three buildings on two parcels within the Creekside Center and the NCRSP. One of the parcels will include a 4,500 square-foot building for Sharif Jewelers and a 2,000 square-foot office for the Sharif business, and the other parcels will include a 5,700 square-foot multitenant retail building. The site will be improved with 63 parking spaces and landscaping. An additional access point off Roseville Parkway will be constructed approximately 100 feet east of the intersection of Creekside Ridge Drive and Roseville Parkway. Construction of the new driveway will require demolition and construction along the frontage of Roseville Parkway.

The site is currently zoned for regional commercial and light industrial uses. Retail and office uses are permitted on the parcel zoned for regional commercial uses; however, those uses are not permitted on the parcel zoned for light industrial uses. The project includes a General Plan Amendment, Specific Plan Amendment, and Rezone to allow development of the multi-tenant retail building on the parcel zoned light industrial. The Sharif retail and office uses are consistent with the land use designation and zoning for the corner parcel. Although the project includes a change to the land use designations for one of the parcels, the proposed square footage does not exceed the overall square footage previously evaluated in the FEIR for the plan area.

CITY OF ROSEVILLE MITIGATION ORDINANCES, GUIDELINES, AND STANDARDS

For projects that are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified, CEQA Guidelines section 15183(f) allows a lead agency to rely on previously adopted development policies or standards as mitigation for the environmental effects, when the standards have been adopted by the City, with findings based on substantial evidence, that the policies or standards will substantially mitigate environmental effects, unless substantial new information shows otherwise (CEQA Guidelines §15183(f)). The City of Roseville adopted CEQA Implementing Procedures (Implementing Procedures) which are consistent with this CEQA Guidelines section. The current version of the Implementing Procedures were adopted in April 2008, along with Findings of Fact, as Resolution 08-172. The below regulations and ordinances were found to provide uniform mitigating policies and standards, and are applicable to development projects. The City's Mitigating Policies and Standards are referenced, where applicable, in the Initial Study Checklist.

- City of Roseville 2035 General Plan
- City of Roseville Zoning Ordinance (RMC Title 19)
- City of Roseville Design and Construction Standards (Resolution 16-75)
- Subdivision Ordinance (RMC Title 18)
- Noise Regulation (RMC Ch.9.24)
- Flood Damage Prevention Ordinance (RMC Ch.9.80)
- Drainage Fees (Dry Creek [RMC Ch.4.49] and Pleasant Grove Creek [RMC Ch.4.48])
- West Placer Stormwater Quality Design Manual (Resolution 16-152)
- Urban Stormwater Quality Management and Discharge Control Ordinance (RMC Ch. 14.20)
- Traffic Mitigation Fee (RMC Ch.4.44)
- Highway 65 Joint Powers Authority Improvement Fee (Resolution 2008-02)
- South Placer Regional Transportation Authority Transportation and Air Quality Mitigation Fee (Resolution 09-05)
- Tree Preservation Ordinance (RMC Ch.19.66)
- Community Design Guidelines (Resolution 95-347)
- Specific Plan Design Guidelines:
    - Development Guidelines Del Webb Specific Plan (Resolution 96-330)
    - Landscape Design Guidelines for North Central Roseville Specific Plan (Resolution 90-170)
    - North Roseville Specific Plan and Design Guidelines (Resolution 00-432)
    - Northeast Roseville Specific Plan (Olympus Pointe) Signage Guidelines (Resolution 89-42)
    - North Roseville Area Design Guidelines (Resolution 92-226)
    - Northeast Roseville Specific Plan Landscape Design Guidelines (Resolution 87-31)
    - Southeast Roseville Specific Plan Landscape Design Guidelines (Resolution 88-51)
    - Stoneridge Specific Plan and Design Guidelines (Resolution 98-53)
    - Highland Reserve North Specific Plan and Design Guidelines (Resolution 97-128)
    - West Roseville Specific Plan and Design Guidelines (Resolution 04-40)
    - Sierra Vista Specific Plan and Design Guidelines (Resolution 12-217)
    - Creekview Specific Plan and Design Guidelines (Resolution 12-320)
    - Amoruso Ranch Specific Plan and Design Guidelines (Resolution 16-273)

OTHER ENVIRONMENTAL DOCUMENTS RELIED UPON

- Amoruso Ranch Specific Plan Final Environmental Impact Report

(https://www.roseville.ca.us/cms/One.aspx?portalId=7964922&pageId=8774579)
- NCRSP Final Environmental Impact Report
https://www.roseville.ca.us/cms/One.aspx?portalId=7964922&pageId=8775118

Pursuant to CEQA Guidelines Section 15183, any project which is consistent with the development densities established by zoning, a Community Plan, or a General Plan for which an EIR was certified shall not require additional environmental review, except as may be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. The Amoruso Ranch Specific Plan EIR updated the City's General Plan to 2035, and updated Citywide analyses of traffic, water supply, water treatment, wastewater treatment, and waste disposal. This Initial Study focuses on effects particular to the specific project site, impacts which were not analyzed within the EIR, and impacts which may require revisiting due to substantial new information. When applicable, the topical sections within the Initial Study summarize the findings within the environmental documents listed above. The analysis, supporting technical materials, and findings of the environmental document are incorporated by reference, and are available for review at the Civic Center, 311 Vernon Street, Roseville, CA.

EXPLANATION OF INITIAL STUDY CHECKLIST

The CEQA Guidelines recommend that lead agencies use an Initial Study Checklist to determine potential impacts of the proposed project on the physical environment. The Initial Study Checklist provides a list of questions concerning a comprehensive array of environmental issue areas potentially affected by this project. This section of the Initial Study incorporates a portion of Appendix G Environmental Checklist Form, contained in the CEQA Guidelines. Within each topical section (e.g. Air Quality) a description of the setting is provided, followed by the checklist responses, thresholds used, and finally a discussion of each checklist answer.

There are four (4) possible answers to the Environmental Impacts Checklist on the following pages. Each possible answer is explained below:

1) A "Potentially Significant Impact" is appropriate if there is enough relevant information and reasonable inferences from the information that a fair argument based on substantial evidence can be made to support a conclusion that a substantial, or potentially substantial, adverse change may occur to any of the physical conditions within the area affected by the project. When one or more "Potentially significant Impact" entries are made, an EIR is required.

2) A "Less Than Significant With Mitigation" answer is appropriate when the lead agency incorporates mitigation measures to reduce an impact from "Potentially Significant" to "Less than Significant." For example, floodwater impacts could be reduced from a potentially-significant level to a less-than-significant level by relocating a building to an area outside of the floodway. The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level. Mitigation measures are identified as MM followed by a number.

3) A "Less Than significant Impact" answer is appropriate if there is evidence that one or more environmental impacts may occur, but the impacts are determined to be less than significant, or the application of development policies and standards to the project will reduce the impact(s) to a less-than-significant level. For instance, the application of the City's Improvement Standards reduces potential erosion impacts to a less-than-significant level.

4) A "No Impact" answer is appropriate where it can be demonstrated that the impact does not have the potential to adversely affect the environment. For instance, a project in the center of an urbanized area with no agricultural lands on or adjacent to the project area clearly would not have an adverse effect on agricultural resources or operations. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources cited in the Initial Study. Where a "No Impact" answer is adequately supported by the information sources cited in the Initial Study, further

narrative explanation is not required. A "No Impact" answer is explained when it is based on project-specific factors as well as generous standards.

All answers must take account of the whole action involved, including off- and on-site, indirect, direct, construction, and operation impacts, except as provided for under State CEQA Guidelines.

INITIAL STUDY CHECKLIST

I. Aesthetics

The subject property is located in an area developed with retail and office uses adjacent to an open space corridor. The site is located adjacent to Roseville Parkway to the south, the Creekside Center to the north and west, and open space to the east. Development of the subject property will complete the Creekside Center development plan while adding an additional 1.16 acre parcel to the developable area contemplated in that plan. The additional parcel is located adjacent to the open space corridor and is currently designated as open space in the City's General Plan and the NCRSP.

The open space was created to preserve the habitat within and adjacent to the Antelope Creek drainage corridor. The corridor is developed with a bicycle and pedestrian trail. The subject property is located on a hill on the western side of the open space corridor separated from the creek by oak woodland. The bicycle and pedestrian trail is located on the eastern side of the creek. The development will be visible from the trail system, or points thereon; however, due to the distance, vegetation, and grade difference between the trail and the development, the view of the project site is obstructed.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?			X	

Thresholds of Significance and Regulatory Setting:

The significance of an environmental impact cannot always be determined through the use of a specific, quantifiable threshold. CEQA Guidelines Section 15064(b) affirms this by the statement "an ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting." This

is particularly true of aesthetic impacts. As an example, a proposed parking lot in a dense urban center would have markedly different visual effects than a parking lot in an open space area. For the purpose of this study, the significance thresholds are as stated in CEQA Guidelines Appendix G, as shown in a–d of the checklist below. The Findings of the Implementing Procedures indicate that compliance with the Zoning Ordinance (e.g. building height, setbacks, etc), Subdivision Ordinance (RMC Ch. 18), Community Design Guidelines (Resolution 95-347), and applicable Specific Plan Policies and/or Specific Plan Design Guidelines will prevent significant impacts in urban settings as it relates to items a, b, and c, below.

Discussion of Checklist Answers:

a–b) There are no designated or eligible scenic vistas or scenic highways within or adjacent to the City of Roseville.

c) The project site is in an urban setting adjacent to active open space. The site itself lacks any prominent or high-quality natural features which could be negatively impacted by development; however, there are oaks trees adjacent to the site which will be affected by onsite construction. The impacts to these oak trees are discussed in Section IV. Although the root zone of the trees will be affected, the visual character of the trees will be unchanged. The City of Roseville has adopted Community Design Guidelines (CDG) for the purpose of creating building and community designs which are a visual asset to the community. The CDG includes guidelines for building design, site design, and landscape design, which will result in a project that enhances the existing urban visual environment. Therefore, the project will not degrade the visual character or quality of the site or its surroundings, impacts are less than significant.

d) The project involves nighttime lighting to provide for the security and safety of project users. However, the project is already located within an urbanized setting with many existing lighting sources. Lighting is conditioned to comply with City standards (i.e. CDG) to limit the height of light standards and to require cut-off lenses and glare shields to minimize light and glare impacts. The project will not create a new source of substantial light. None of the project elements are highly reflective, and thus the project will not contribute to an increased source of glare. Impacts are less than significant.

II. Agricultural & Forestry Resources

The State Department of Conservation oversees the Farmland Mapping and Monitoring Program, which was established to document the location, quality, and quantity of agricultural lands, and the conversion of those lands over time. The primary land use classifications on the maps generated through this program are: Urban and Built Up Land, Grazing Land, Farmland of Local Importance, Unique Farmland, Farmland of Statewide Importance, and Prime Farmland. According to the current California Department of Conservation Placer County Important Farmland Map (2012), the majority of the City of Roseville is designated as Urban and Built Up Land and most of the open space areas of the City are designated as Grazing Land. There are a few areas designated as Farmland of Local Importance and two small areas designated as Unique Farmland located on the western side of the City along Baseline Road. The current Williamson Act Contract map (2013/2014) produced by the Department of Conservation shows that there are no Williamson Act contracts within the City, and only one (on PFE Road) that is adjacent to the City. None of the land within the City is considered forest land by the Board of Forestry and Fire Protection.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Thresholds of Significance and Regulatory Setting:

Unique Farmland, Farmland of Statewide Importance, and Prime Farmland are called out as protected farmland categories within CEQA Guidelines Appendix G. Neither the City nor the State has adopted quantified significance thresholds related to impacts to protected farmland categories or to agricultural and forestry resources. For the purpose of this study, the significance thresholds are as stated in CEQA Guidelines Appendix G, as shown in a–e of the checklist above.

Discussion of Checklist Answers:

a–e) The project site is not used for agricultural purposes, does not include agricultural zoning, is not within or adjacent to one of the areas of the City designated as a protected farmland category on the Placer County Important Farmland map, is not within or adjacent to land within a Williamson Act Contract, and is not considered forest land. Given the foregoing, the proposed project will have no impact on agricultural resources.

III. Air Quality

The City of Roseville, along with the south Placer County area, is located in the Sacramento Valley Air Basin (SVAB). The SVAB is within the Sacramento Federal Ozone Non-Attainment Area. Under the Clean Air Act, Placer County has been designated a "serious non-attainment" area for the federal 8-hour ozone standard, "non-attainment" for the state ozone standard, and a "non-attainment" area for the federal and state PM_{10} standard (particulate matter less than 10 microns in diameter). Within Placer County, the Placer County Air Pollution Control District (PCAPCD) is responsible for ensuring that emission standards are not violated.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	
c) Result in a cumulatively considerable net increase of any criteria for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?			X	
d) Expose sensitive receptors to substantial pollutant concentrations?				X
e) Create objectionable odors affecting a substantial number of people?				X

Thresholds of Significance and Regulatory Setting:

In responding to checklist items a, b, and d, project-related air emissions would have a significant effect if they would result in concentrations that either violate an ambient air quality standard or contribute to an existing air quality violation. To assist in making this determination, the PCAPCD adopted thresholds of significance, which were developed by considering both the health-based ambient air quality standards and the attainment strategies outlined in the State Implementation Plan. The PCAPCD-recommended significance threshold for reactive

organic gases (ROG) and nitrogen oxides (NO_x) is 82 pounds daily during construction and 55 pounds daily during operation, and for particulate matter (PM) is 82 pounds per day during both construction and operation. For all other constituents, significance is determined based on the concentration-based limits in the Federal and State Ambient Air Quality Standards. Toxic Air Contaminants (TAC) are also of public health concern, but no thresholds or standards are provided because they are considered to have no safe level of exposure. Analysis of TAC is based on the *Air Quality and Land Use Handbook – A Community Health Perspective (*April 2005, California Air Resources Board), which lists TAC sources and recommended buffer distances from sensitive uses. For checklist item c, the PCAPCD's *CEQA Air Quality Handbook* (*Handbook*) recommends that the same thresholds used for the project analysis be used for the cumulative impact analysis.

With regard to checklist item e, there are no quantified significance thresholds for exposure to objectionable odors. Significance is determined after taking into account multiple factors, including screening distances from odor sources (as found in the PCAPCD CEQA Handbook), the direction and frequency of prevailing winds, the time of day when odors are present, and the nature and intensity of the odor source.

Discussion of Checklist Answers:

a–b) Analyses are not included for sulfur dioxide, lead, and other constituents because there are no mass emission thresholds; these are concentration-based limits in the Federal and State Ambient Air Quality Standards which require substantial, point-source emissions (e.g. refineries, concrete plants, etc) before exceedance will occur, and the SVAB is in attainment for these constituents. Likewise, carbon monoxide is not analyzed because the SVAB is in attainment for this constituent, and it requires high localized concentrations (called carbon monoxide "hot spots") before the ambient air quality standard would be exceeded. "Hot spots" are typically associated with heavy traffic congestion occurring at high-volume roadway intersections. The Amoruso Ranch EIR analysis of Citywide traffic indicated that 198 out of 226 signalized intersections would operate at Level of Service C or better—that is, they will not experience heavy traffic congestion. It further indicated that analyses of existing CO concentrations at the most congested intersections in Roseville show that CO levels are well below federal and state ambient air quality standards. The discussions below focus on emissions of ROG**,** NO_x, or PM**.** A project-level analysis has been prepared to determine whether the project will, on a singular level, exceed the established thresholds.

Clearing, grading, and construction activities on the 2.21 acre site will result in emissions of criteria pollutants for which the area is in non-attainment. The PCAPCD recommends that lead agencies use the California Emissions Estimator Model (CalEEMod) to quantify a project's construction and operational emissions for criterial air pollutants (NO_X, ROG, and PM). The results are then compared to the significance thresholds established by the district, as detailed above. According to PCAPCD's published screening table, general commercial projects smaller than 249,099 square feet will not result in NO_X emissions that exceed 55 lbs/day. Typically, NO_X emissions are substantially higher than ROG and PM_{10}; therefore, it can be assumed that projects that do not exceed the NO_X threshold will not exceed the ROG and PM_{10} thresholds, and will not result in a significant impact related to operational emissions.

The project proposes the construction of two retail buildings totaling 10,500 square feet and a 2,000 square foot office building. The project's combined square footage is well below PCAPCD's modeled example. Given its small size, the project is not expected to result in construction or operational emissions that would exceed the district's thresholds for significance. To substantiate this assumption, the proposed project's emissions were modeled using the default construction and operational assumptions in CalEEMod (version 2016.3.1). The modeled emissions for the project do not exceed the construction and operational thresholds of significance (Table 2).

Table 2: CalEEMod Results

Pollutant	Project Emissions (lbs/day)	Significance Threshold (lbs/day)	Exceeds Threshold?
Construction Emissions			
ROG	5.28	82	No
NO_x	10.08	82	No
PM_{10}	1.37	82	No
Operational Emissions			
ROG	1.40	55	No
NO_x	5.84	55	No
PM_{10}	0.04	82	No

The proposed project would not exceed the applicable thresholds of significance for air pollutant emissions during construction or operation. The project would not conflict with or obstruct implementation of the *Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (which is the SIP) or contribute substantially to the PCAPCD's nonattainment status for ozone. In addition, because the proposed project would not produce substantial emissions of criteria air pollutants, CO, or TACs, adjacent residents would not be exposed to significant levels of pollutant concentrations during construction or operation. Impacts are less than significant.

c) As described in section a–b, the project will not contribute significant project-level criteria air pollutant emissions. Consistent with the analysis methodology outlined in the Significance Thresholds and Regulatory Setting section, cumulative impacts are less than significant.

d) As described in section a–b, the project will not result in any new significant impacts related to criteria pollutants. With regard to TAC, there are hundreds of constituents which are considered toxic, but they are typically generated by stationary sources like gas stations, facilities using solvents, and heavy industrial operations. The proposed project is not a TAC-generating use, nor is it within the specified buffer area of a TAC-generating use, as established in the *Air Quality and Land Use Handbook – A Community Health Perspective*.

e) Diesel fumes from construction equipment and delivery trucks are often found to be objectionable; however, construction is temporary and diesel emissions are minimal and regulated. Typical urban projects such as retail businesses generally do not result in substantial objectionable odors when operated in compliance with City Ordinances (e.g. proper trash disposal and storage). The Project is a typical urban development that lacks any characteristics that would cause the generation of substantial unpleasant odors. Thus, construction and operation of the proposed project would not result in the creation of objectionable odors affecting a substantial number of people. A review of the project surroundings indicates that there are no substantial odor-generating uses near the project site. The project location meets the recommended screening distances from odor-generators provided by the PCAPCD.

IV. Biological Resources

The majority of the project site is undeveloped except for landscaping adjacent to Roseville Parkway and Creekside Ridge Drive, an access road through the center of the site, and parking for the adjacent business

complex along the northernmost parcel's northeastern property line. These improvements were constructed as a condition of previous development projects. The southernmost parcel has not been developed, but is heavily disturbed from being used as a staging area for the adjacent development.

Vegetation on the site consists of native and non-native grasses. Excluding the landscaped area, there are no trees on the site; however, there are protected oak trees immediately adjacent to, and overhanging the site within the adjacent open space corridor. There are no existing wetland features on the site. The project site is the last undeveloped site within the Creekside Center. The surrounding uses include retail, office, and open space.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			X	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				X
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts to biological resources is defined by the use of expert judgment supported by facts, and relies on the policies, codes, and regulations adopted by the City and by regulatory agencies which relate to biological resources (as cited and described in the Discussion of Checklist Answers section). Thresholds for assessing the significance of environmental impacts are based on the CEQA Guidelines checklist items a–f, above. Consistent with CEQA Guidelines Section 15065, a project may have a significant effect on the environment if:

> The project has the potential to substantially 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; [or] substantially reduce the number or restrict the range of an endangered, rare or threatened species *. . .*

Various agencies regulate impacts to the habitats and animals addressed by the CEQA Guidelines checklist. These include the United States Fish and Wildlife Service, National Oceanic and Atmospheric Administration–Fisheries, United States Army Corps of Engineers, Central Valley Regional Water Quality Control Board, and California Department of Fish and Wildlife. The primary regulations affecting biological resources are described in the sections below.

Checklist item a addresses impacts to special status species. A “special status” species is one which has been identified as having relative scarcity and/or declining populations. Special status species include those formally listed as threatened or endangered, those proposed for formal listing, candidates for federal listing, and those classified as species of special concern. Also included are those species considered to be “fully protected” by the California Department of Fish and Wildlife (California Fish and Wildlife), those granted “special animal” status for tracking and monitoring purposes, and those plant species considered to be rare, threatened, or endangered in California by the California Native Plant Society (CNPS). The primary regulatory protections for special status

species are within the Federal Endangered Species Act, California Endangered Species Act, California Fish and Game Code, and the Federal Migratory Bird Treaty Act.

Checklist item b addresses all "sensitive natural communities" that may be affected by local, state, or federal regulations/policies while checklist item c focuses specifically on one type of such a community: federally-protected wetlands. Focusing first on wetlands, there are two questions to be posed in examining wet habitats: the first is whether the wetted area meets the technical definition of a wetland, making it subject to checklist item b, and the second is whether the wetland is subject to federal jurisdiction, making it subject to checklist item c. The 1987 Army Corps Wetlands Delineation Manual is used to determine whether an area meets the technical criteria for a wetland. A delineation verification by the Army Corps verifies the size and condition of the wetlands and other waters in question, and determines the extent of government jurisdiction as it relates to Section 404 of the Federal Clean Water Act and Section 401 of the State Clean Water Act.

The Clean Water Act protects all "navigable waters", which are defined as traditional navigable waters that are or were used for commerce, or may be used for interstate commerce; tributaries of covered waters; and wetlands adjacent to covered waters, including tributaries. Non-navigable waters are called isolated wetlands, and are not subject to either the Federal or State Clean Water Act. Thus, isolated wetlands are not subject to federal wetland protection regulations. However, in addition to the Clean Water Act, the State also has jurisdiction over impacts to surface waters through the Porter-Cologne Water Quality Control Act (Porter-Cologne), which <u>does not</u> require that waters be "navigable". For this reason, isolated wetlands are regulated by the State of California pursuant to Porter-Cologne. The City of Roseville General Plan also provides protection for wetlands, including isolated wetlands, pursuant to the General Plan Open Space and Conservation Element. Federal, State and City regulations/policies all seek to achieve no net loss of wetland acreage, values, or function.

Aside from wetlands, checklist item b also addresses other "sensitive natural communities," which includes any habitats protected by local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. The City of Roseville General Plan Open Space and Conservation Element includes policies for the protection of riparian areas (streamside habitat) and floodplain areas; these are Vegetation and Wildlife section Policies 2 and 3. Policy 4 also directs preservation of additional area around stream corridors and floodplain if there is sensitive woodland, grassland, or other habitat which could be made part of a contiguous open space area. Other than wetlands, which were already discussed, US Fish and Wildlife and California Department of Fish and Wildlife habitat protections generally result from species protections, and are thus addressed via checklist item a.

For checklist item d, there are no regulations specific to the protection of migratory corridors. This item is addressed by an analysis of the habitats present in the vicinity and analyzing the probable effects on access to those habitats which will result from a project.

The City of Roseville Tree Preservation ordinance (RMC Ch.19.66) requires protection of native oak trees, and compensation for oak tree removal. The Findings of the Implementing Procedures indicate that compliance with the City of Roseville Tree Preservation ordinance (RMC Ch.19.66) will prevent significant impacts related to loss of native oak trees, referenced by item e, above.

Regarding checklist item f, there are no adopted Habitat Conservation Plans within the City of Roseville.

Discussion of Checklist Answers:

a) The project site is located within the Roseville, CA United States Geological society (USGS) 7.5 minute quadrangle. There are nine special status plant species and 22 special status wildlife species known to occur within the quadrangle. All of the identified special status species are associated with habitat types that are not present on the site. Although the site lacks habitat, there are trees adjacent to the site that provide suitable habitat for nesting raptors. Impacts to special status plant and animal species were evaluated in the NCRSP EIR and mitigation measures for potential impacts to nesting raptors were incorporated into the plan (NCRSP

Chapter 8, MIT# 3.04-06 and 3.04-34). Consistent with the required measures in the NCRSP, a spring raptor nest survey will be required prior to commencement of construction activity. As this is a requirement of the specific plan, no mitigation is required. Compliance with these measures will ensure that impacts to special status species remain less than significant.

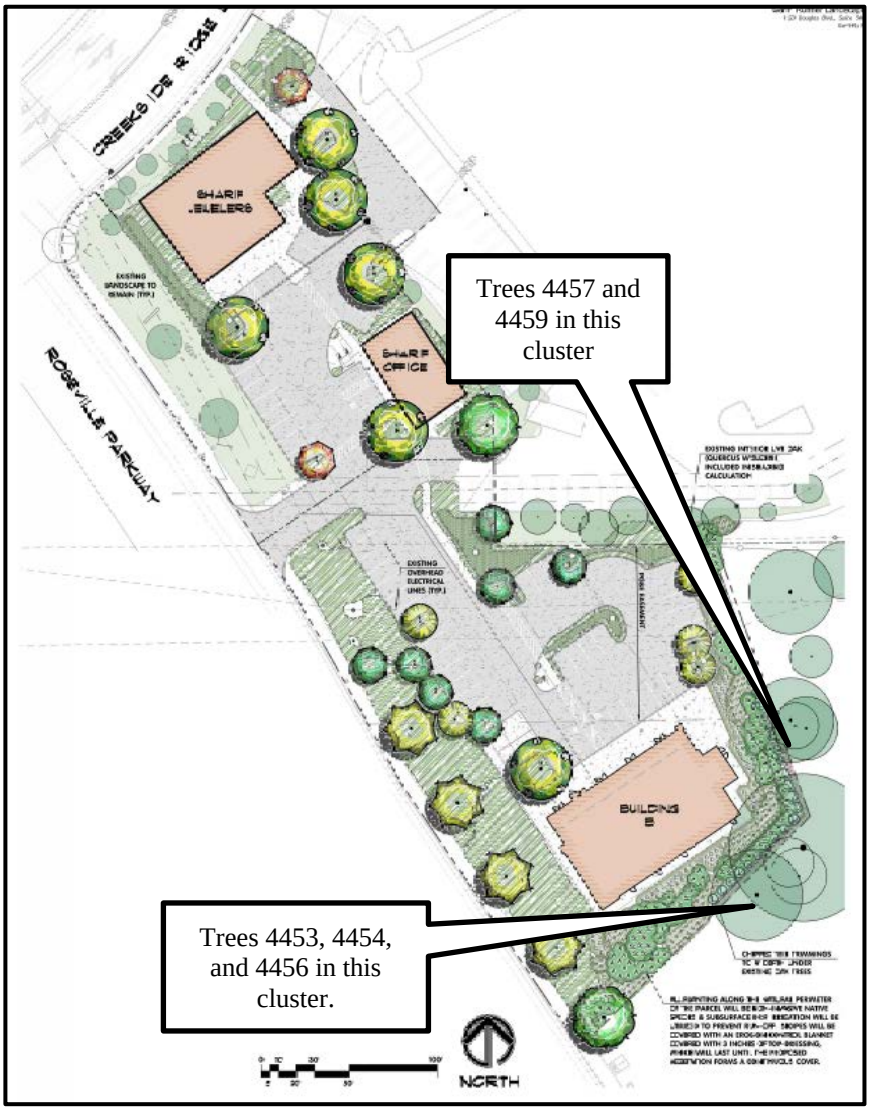
b) No riparian habitat or other sensitive communities are located on the subject property. The property is adjacent to an open space corridor, which contains oak woodland habitat adjacent to Antelope Creek; however, upslope from the creek, and nearer to the project site, the oak trees become less dense and lack oak woodland characteristics. No impacts to riparian habitat or sensitive communities will occur.

c) Wetland habitats within the NCRSP area, including the subject property, were delineated as part of the EIR prepared for that plan. NCRSP wetland preservation measures (Chapter 6.1.1, as amended) were adopted as mitigation for impacts to wetlands in the NCRSP area, and state and federal permits have been issued for impacts to wetlands, including vernal pools, consistent with these policies. Development of the subject property is consistent with the permitting, mitigation requirements, and policies of the NCRSP. Furthermore, there are no indications of wetland features on the subject property. Impacts are less than significant.

d) The City includes an interconnected network of open space corridors and preserves located throughout the City to ensure that the movement of wildlife is not substantially impeded as the City develops. The development of the project site will not negatively impact these existing and planned open space corridors, nor is the project site located in an area that has been designated by the City, United States Fish and Wildlife, or California Department of Fish and Wildlife as vital or important for the movement of wildlife or the use of native wildlife nursery sites. No impact will occur.

e) Impacts to the native oak trees were evaluated in the NCRSP EIR and a mitigation measures was incorporated into the plan (NCRSP MIT# 03.04-04) that requires consistency with the City's Tree Preservation Ordinance.

Figure 2: Protected Tree Locations



An Arborist Report and Tree Inventory was prepared for the project by Abacus Consulting Arborists, June 11, 2018 (Attachment 1). The report documented 11 offsite protected oak trees adjacent to the project's southeastern property boundary. The identified trees include two interior live oak trees (*Quercus wislizenii*) and nine blue oak trees (*Quercus douglasii*). Four of the trees identified in the report are well outside the project's area of impact, while two have root zones that are immediately adjacent to the project site. No impact is anticipated to these six trees. The remaining five trees identified in the arborist report (4453, 4454, 4456, 4457, and 4459), will be impacted by trenching for installation of the retaining system along the project boundary. The impact to these trees is detailed in Table 3, and illustrated in Figure 2 below.

Table 3: Trees Impacted by Project Development

Tree Number	Common Name	DBH*	Canopy Radius	Impact
4453	blue oak	26 @ 3 feet	25 feet	Moderate to Severe: 35% encroachment into protected root zone.
4454	blue oak	16	23 feet	Moderate: 25% encroachment into protected root zone.
4456	live oak	40 @ 1 foot	30 feet	Moderate: 26% encroachment into protected root zone.
4457	blue oak	18	20 feet	Moderate: 18% encroachment into protected root zone.
4459	blue oak	21 @ 3 feet	23 feet	Severe: 43 % encroachment into protected root zone.
*Note: DBH is measured at the standard 4' 5" unless otherwise noted above. Some trees were measured at a location other than the standard due to defects in trunk morphology.				

In order to evaluate the project's impacts on these trees, the arborist reviewed the site plans and estimated the amount of root zone encroachment that is expected to occur. The anticipated percent of encroachment on each tree is detailed in Table 3 along with a statement as to the level of impact. Given that the exact location of the cut and fill required for construction of the retaining system along the project's southeastern property line is not known at this time, it is acknowledged that a tree could be impacted beyond what the applicant currently anticipates. Furthermore, given the amount of encroachment anticipated to trees 4453 and 4459 their survival may be limited and ultimately removal may be necessary.

Consistent with the NCRSP mitigation requirement, the applicant is requesting a Tree Permit, as required by the Tree Preservation Ordinance, to allow encroachment into the protected zone of these trees and to allow unanticipated removal with restrictions. If approved, the Tree Permit would contain measures to compensate for oak tree encroachment and removal. Any deviation from the approved permit would require a Tree Permit Modification, which would require approval by the City. Consistency with the requirements of the Tree Permit will ensure that impacts are less than significant.

f) There are no Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans that apply to the project site. No Impact will occur.

V. Cultural Resources

As described within the Open Space and Conservation Element of the City of Roseville General Plan, the Roseville region was within the territory of the Nisenan (also Southern Maidu or Valley Maidu). Two large permanent Nisenan habitation sites have been identified and protected within the City's open space (in Maidu Park). Numerous smaller cultural resources, such as midden deposits and bedrock mortars, have also been recorded in the City. The gold rush, which began in 1848, marked another settlement period. And, evidence of Roseville's ranching and mining past are still found today. Historic features include rock walls, ditches, low terraces, and other remnants of settlement and activity. A majority of documented sites within the City are located in areas designated for open space uses.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of an historic resource as defined in Section 15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?			X	
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	
d) Disturb any human remains, including those interred outside of dedicated cemeteries?			X	

Thresholds of Significance and Regulatory Setting:

The significance of impacts to cultural resources is based directly on the CEQA Guidelines checklist items a–e listed above. The Archaeological, Historic, and Cultural Resources section of the City of Roseville General Plan also directs the proper evaluation of and, when feasible, protection of significant resources (Policies 1 and 2). There are also various federal and State regulations regarding the treatment and protection of cultural resources, including the National Historic Preservation Act and the Antiquities Act (which regulate items of significance in history), Section 7050.5 of the California Health and Safety Code, Section 5097.9 of the California Public Resources Code (which regulates the treatment of human remains) and Section 21073 et seq. of the California Public Resources Code (regarding Tribal Cultural Resources). The CEQA Guidelines also contains specific sections, other than the checklist items, related to the treatment of effects on historic resources.

Pursuant to the CEQA Guidelines, if it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (Section 21083.2 (a), (b), and (c)). A *historical resource* is a resource listed, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR) (Section 21084.1); a resource included in a local register of historical resources (Section 15064.5(a)(2)); or any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant (Section 15064.5 (a)(3)). Public Resources Code Section 5024.1 requires evaluation of historical resources to determine their eligibility for listing on the CRHR.

Discussion of Checklist Answers:

a–d) A Cultural Resources Assessment was prepared for the project by Cogstone Paleontology – Archaeology – History (July 2018). The report documented the findings of the pedestrian survey, record search, and sacred lands search that was done for the site. The report states that no extant historic, archaeological, paleontological, nor human remains were identified on the site; however, standard mitigation measures were recommended to

ensure cultural resources are not impacted should they be uncovered during ground disturbing activities. The site was also evaluated as part of the NCRSP EIR. As mitigation for the NCRSP, Policy 6.6.1.4 (MIT# 3.11.03) was incorporated in to the plan to require that work cease immediately and that the appropriate agencies be contacted before work can resume should any resources be found on site. The project will not result in any new impacts beyond those already discussed and disclosed in the NCRSP EIR. Compliance with policies intended to protect cultural resources will ensure that project-specific impacts are less than significant.

VI. Geology and Soils

As described in the Safety Element of the City of Roseville General Plan, there are three inactive faults (Volcano Hill, Linda Creek, and an unnamed fault) in the vicinity of the project site, but there are no known active seismic faults within Placer County. The last seismic event recorded in the South Placer area occurred in 1908, and is estimated to have been at least a 4.0 on the Richter scale. Due to the geographic location and soil characteristics within the City, the General Plan indicates that soil liquefaction, landslides, and subsidence are not a significant risk in the area.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:			X	
i) Ruptures of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c) Be located in a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?			X	

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to geology and soils is based directly on the CEQA Guidelines checklist items a–e listed above. Regulations applicable to this topic include the Alquist-Priolo Act, which addresses earthquake safety in building permits, and the Seismic Hazards Mapping Act, which requires the state to gather and publish data on the location and risk of seismic faults.

The Findings of the Implementing Procedures indicate that compliance with the Flood Damage Prevention Ordinance (RMC Ch.9.80) and Design/Construction Standards (Resolution 07-107) will prevent significant impacts related to checklist item b. The Ordinance and standards include permit requirements for construction and development in erosion-prone areas and ensure that grading activities will not result in significant soil erosion or loss of topsoil. The use of septic tanks or alternative waste systems is not permitted in the City of Roseville, and therefore no analysis of criterion e is necessary.

Discussion of Checklist Answers:

a) The project will not expose people or structures to potential substantial adverse effects involving seismic shaking, ground failure or landslides.

i–iii) According to United States Geological Service mapping and literature, active faults are largely considered to be those which have had movement within the last 10,000 years (within the Holocene or Historic time periods)[1] and there are no major active faults in Placer County. The California Geological Survey has prepared a map of the state which shows the earthquake shaking potential of areas throughout California based primarily on an area's distance from known active faults. The map shows that the City lies in a relatively low-intensity ground-shaking zone. Commercial, institutional, and residential buildings as well as all related infrastructure are required, in conformance with Chapter 16, *Structural Design Requirements*, Division IV, *Earthquake Design* of the California Building Code, to lessen the exposure to potentially damaging vibrations

[1] United States Geological Survey, http://earthquake.usgs.gov/learn/glossary/?term=active%20fault, Accessed January 2016

through seismic-resistant design. In compliance with the Code, all structures in the Project area would be well-built to withstand ground shaking from possible earthquakes in the region; impacts are less than significant.

iv) Landslides typically occur where soils on steep slopes become saturated or where natural or manmade conditions have taken away supporting structures and vegetation. The existing and proposed slopes of the project site are not steep enough to present a hazard during development or upon completion of the project. In addition, measures would be incorporated during construction to shore minor slopes and prevent potential earth movement. Therefore, impacts associated with landslides are less than significant.

b) Grading activities will result in the disruption, displacement, compaction and over-covering of soils associated with site preparation (grading and trenching for utilities). Grading activities for the project will be limited to the project site. Grading activities require a grading permit from the Engineering Division. The grading permit is reviewed for compliance with the City's Improvement Standards, including the provision of proper drainage, appropriate dust control, and erosion control measures. Grading and erosion control measures will be incorporated into the required grading plans and improvement plans. Therefore, the impacts associated with disruption, displacement, and compaction of soils associated with the project are less than significant.

c, d) A review of the Natural Resources Conservation Service Soil Survey for Placer County, accessed via the Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/), indicates that the soil on the site is Exchequer very stony loam which is not listed as geologically unstable or sensitive.

VII. Greenhouse Gases

Greenhouse gases trap heat in the earth's atmosphere. The principal greenhouse gases (GHGs) that enter the atmosphere because of human activities are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated gases. As explained by the United States Environmental Protection Agency[2], global average temperature has increased by more than 1.5 degrees Fahrenheit since the late 1800s, and most of the warming of the past half century has been caused by human emissions. The City has taken proactive steps to reduce greenhouse gas emissions, which include the introduction of General Plan policies to reduce emissions, changes to City operations, and climate action initiatives.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Thresholds of Significance and Regulatory Setting:

In Assembly Bill 32 (the California Global Warming Solutions Act), signed by Governor Schwarzenegger of California in September 2006, the legislature found that climate change resulting from global warming was a threat to California, and directed that "the State Air Resources Board design emissions reduction measures to

[2] http://www3.epa.gov/climatechange/science/overview.html, Accessed January 2016

meet the statewide emissions limits for greenhouse gases . . .". The target established in AB 32 was to reduce emissions to 1990 levels by the year 2020. CARB subsequently 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. CARB's updated August 2011 Scoping Plan calculated a reduction needed of 21.7% from future "Business As Usual" (BAU) conditions in the year 2020. The current Scoping Plan (adopted May 2014) indicates that statewide emissions of GHG in 1990 amounted to 431 million metric tons, and that the 2020 "Business As Usual" (BAU) scenario is estimated as 509[3] million metric tons, which would require a reduction of 15.3% from 2020 BAU. In addition to this, Senate Bill 32 was signed by the Governor on September 8, 2016, to establish a reduction target of 40 percent below 1990 levels by 2030. The Air Resources Board is currently updating the Scoping Plan to reflect this target.

The Placer County Air Pollution Control District (PCAPCD) recommends that thresholds of significance for GHG be related to AB 32 reduction goals, and has adopted thresholds of significance which take into account the 2030 reduction target. The thresholds include a de minimis and a bright-line maximum threshold. Any project emitting less than 1,100 metric tons of carbon dioxide equivalents per year (MT CO_2e/yr) during construction or operation results in less than significant impacts. The PCAPCD considers any project with emissions greater than the bright-line cap of 10,000 MT CO_2e/yr to have significant impacts. For projects exceeding the de minimum threshold but below the bright-line threshold, comparison to the appropriate efficiency threshold is recommended. The significance thresholds are shown in Table 4 below.

Table 4: GHG Significance Thresholds

Bright-line Threshold 10,000 MT CO_2e/yr			
Residential Efficiency (MT CO_2e/capita[1])		**Non-Residential Efficiency (MT CO_2e/ksf[2])**	
Urban	**Rural**	**Urban**	**Rural**
4.5	5.5	26.5	27.3
De Minimis Threshold 1,100 MT CO_2e/yr			

1. Per Capita = per person
2. Per ksf = per 1,000 square feet of building

Discussion of Checklist Answers:

a–b) CalEEMod (version 2016.3.1) was used to model the project's construction related and operations related GHG emissions (CO_2e) (Attachment 2). Construction related GHG emissions occur at one point in time and are, therefore, not typically expected to significantly contribute to climate change. Climate change is a cumulative effect that occurs over time, and emissions increase on a year-to-year basis due to increases in developed area and other factors. However, the proposed project's construction related GHG has been estimated and compared to the PCAPCD thresholds. The project's maximum construction related emissions is 119.48 MT CO_2e in the most active construction year. The project will result in a total of 194.81 MT CO_2e of construction related emissions over a two year period. The project's construction related emissions are below the de minimis threshold of 1,100 MT CO_2e.

The results of the CalEEMod model run for the project's operational emission are shown in Table 5, below. As shown, the project's total operational emissions are below the 1,100 MT CO_2e threshold. The project will not exceed the PCAPCD thresholds for construction related or operation related GHG emissions; thus, project-generated GHG emissions would not conflict with, and are consistent with, the State goals listed in AB32 and policies and regulation adopted by the California Air Resources Board pursuant to AB32. Impacts are less than significant.

[3] Includes Pavely and Renewables Portfolio Standard reduction

Table 5: Operational GHG Emissions

Emission Source	Annual GHG (MT CO_2e)
Area	0.00024
Energy Usage	60.30
Mobile	402.60
Solid Waste	6.48
Water	4.63
Total	**474.03**

VIII. Hazards and Hazardous Materials

There are no listed hazardous sites within the project vicinity and the proposed use does not involve the use of hazardous materials, beyond those that are typically found with commercial uses, as discussed below. Asbestos and lead, which can be present in older buildings, are not onsite as there are no buildings on the site.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment though reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to hazardous materials is based directly on the CEQA Guidelines checklist items a–h listed above. A material is defined as hazardous if it appears on a list of hazardous materials prepared by a federal, state or local regulatory agency, or if it has characteristics defined as hazardous by such an agency. The determination of significance based on the above criteria depends on the probable frequency and severity of consequences to people who might be exposed to the health hazard, and the degree to which Project design or existing regulations would reduce the frequency of or severity of exposure. As an example, products commonly used for household cleaning are classified as hazardous when transported in large quantities, but one would not conclude that the presence of small quantities of household cleaners at a home would pose a risk to a school located within ¼-mile.

Many federal and State agencies regulate hazards and hazardous substances, including the United States Environmental Protection Agency (US EPA), California Department of Toxic Substances Control (DTSC), Central Valley Regional Water Quality Control Board (Regional Water Board), and the California Occupational Safety and Health Administration (CalOSHA). The state has been granted primacy (primary responsibility for oversight) by the US EPA to administer and enforce hazardous waste management programs. State regulations also have detailed planning and management requirements to ensure that hazardous materials are handled, stored, and disposed of properly to reduce human health risks. California regulations pertaining to hazardous waste management are published in the California Code of Regulations (see 8 CCR, 22 CCR, and 23 CCR).

The project is not within an airport land use plan, within two miles of a public or public use airport and there are also no private airstrips in the vicinity of the project areas. Therefore, no further discussion is provided for items e and f.

Discussion of Checklist Answers:

a, b) Standard construction activities would require the use of hazardous materials such as fuels, oils, lubricants, glues, paints and paint thinners, soaps, bleach, and solvents. These are common household and commercial materials routinely used by both businesses and average members of the public. The materials only pose a hazard if they are improperly used, stored, or transported either through upset conditions (e.g. a vehicle accident) or mishandling. In addition to construction use, the operational project would result in the use of common hazardous materials as well, including bleach, solvents, and herbicides. Regulations pertaining to the transport of materials are codified in 49 Code of Federal Regulations 171–180, and transport regulations are enforced and monitored by the California Department of Transportation and by the California Highway Patrol. Specifications for storage on a construction site are contained in various regulations and codes, including the California Code of Regulations, the Uniform Fire Code, and the California Health and Safety Code. These same codes require that all hazardous materials be used and stored in the manner specified on the material packaging. Existing regulations and programs are sufficient to ensure that potential impacts as a result of the use or storage of hazardous materials are reduced to less than significant levels.

c) See response to Items (a) and (b) above. While development of the site will result in the use, handling, and transport of materials deemed to be hazardous, the materials in question are commonly used in both residential and commercial applications, and include materials such as bleach and herbicides. The project will not result in the use of any acutely hazardous materials, substances, or waste.

d) The project is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5[4]; therefore, no impact will occur.

g) This project is located within an area currently receiving City emergency services and development of the site has been anticipated and incorporated into emergency response plans and will not impact the City's Emergency Response or Management Plans. Furthermore, the project will be required to comply with all local, State and federal requirements for the handling of hazardous materials, which will ensure that impacts are less than significant. These will require the following programs:

- A Risk Management and Prevention Program (RMPP) is required of uses that handle toxic and/or hazardous materials in quantities regulated by the California Health and Safety Code and/or the City.

- Businesses that handle toxic or hazardous materials are required to complete a Hazardous Materials Management Program (HMMP) pursuant to local, State, or federal requirements.

h) The California Department of Forestry and Fire Protection (CAL FIRE) is the state agency responsible for wildland fire protection and management. As part of that task, CAL FIRE maintains maps designating Wildland Fire Hazard Severity zones. The City is not located within a Very High Fire Hazard Severity Zone, and is not in a CAL FIRE responsibility area; fire suppression is entirely within local responsibility. The project site is in an urban area, and therefore would not expose people to any risk from wildland fire. There would be no impact with regard to this criterion.

IX. Hydrology and Water Quality

As described in the Open Space and Conservation Element of the City of Roseville General Plan, the City is located within the Pleasant Grove Creek Basin and the Dry Creek Basin. Pleasant Grove Creek and its

[4] http://www.calepa.ca.gov/SiteCleanup/CorteseList/SectionA.htm

tributaries drain most of the western and central areas of the City and Dry Creek and its tributaries drain the remainder of the City. Most major stream areas in the City are located within designated open space.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off-site?			X	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site?			X	
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted water?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
f) Otherwise substantially degrade water quality?			X	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?				X
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
j) Inundation by seiches, tsunami, or mudflow?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to hydrology and water quality is based directly on the CEQA Guidelines checklist items a–j listed above. For checklist item a, the Findings of the Implementing Procedures indicate that compliance with the City of Roseville Design/Construction Standards (Resolution 07-107), Urban Stormwater Quality Management and Discharge Control Ordinance (RMC Ch. 14.20), and Stormwater Quality Design Manual (Resolution 16-152) will prevent significant impacts. The standards require preparation of an erosion and sediment control plan for construction activities and includes designs to control pollutants within post-construction urban water runoff. Likewise, it is indicated that the Drainage Fees for the Dry Creek and Pleasant Grove Watersheds (RMC Ch.4.48) and City of Roseville Design/Construction Standards (Resolution 07-107) will prevent significant impacts related to item e. The ordinance and standards require the collection of drainage fees to fund improvements that mitigate potential flooding impacts, and require the design of a water drainage system that will adequately convey anticipated stormwater flows. Finally, it is indicated that compliance with the Flood Damage Prevention Ordinance (RMC Ch. 9.80) will prevent significant impacts related to items g, h, and i. The Ordinance includes standard requirements for all new construction, including regulation of development with the potential to impede or redirect flood flows, and prohibits development within flood hazard areas. Impacts from tsunamis and seiches were screened out of the analysis (item j) given the fact that the project is not located near a water body or other feature that would pose a risk of such an event.

Discussion of Checklist Answers:

a,c,d, f) The project will involve the disturbance of on-site soils and the construction of impervious surfaces, such as asphalt paving and buildings. Disturbing the soil can allow sediment to be mobilized by rain or wind, and cause displacement into waterways. To address this and other issues, the developer is required to receive approval of a grading permit and/or improvement plants prior to the start of construction. The permit or plans are required to incorporate mitigation measures for dust and erosion control. In addition, the City has a National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit issued by the Central Valley

Regional Water Quality Control Board which requires the City to reduce pollutants in stormwater to the maximum extent practicable. The City does this, in part, by means of the City's 2016 Design/Construction Standards, which require preparation and implementation of a Stormwater Pollution Prevention Plan. All permanent stormwater quality control measures must be designed to comply with the City's Manual for Stormwater Quality Control Standards for New Development, the City's 2016 Design/Construction Standards, Urban Stormwater Quality Management and Discharge Control Ordinance, and Stormwater Quality Design Manual. For these reasons, impacts related to water quality are less than significant.

b) The project does not involve the installation of groundwater wells. The City maintains wells to supplement surface water supplies during multiple dry years. The effect of groundwater extraction on the aquifer was addressed in the Water Supply Assessment (WSA) prepared for the Amoruso Ranch Specific Plan EIR, which included a citywide water analysis. Although the project includes a change to the land use designation for one of the parcels, the proposed square footage does not exceed the overall square footage evaluated for the Creekside Center; therefore, the project is consistent with the citywide WSA. Project impacts related to groundwater extraction are less than significant.

g, h) According to the City's floodplain data, the project is not located within the City's Regulatory Floodplain. As a result, implementation of the proposed project would not place housing or any structures within an area at risk of flood flows. There would be no impact with regard to these criteria.

i) Folsom Dam, which is located approximately 10 miles southeast of the project site, is the closet dam to the project site. While portions of the City could be subject to flooding in the event of failure or damage of Folsom Dam, the project site is not located in an area that would be subject to inundation due to dam failure. Therefore, there would be no impact anticipated.

j) Because the proposed project is not within a floodplain there is no risk of debris flow or mudflow. There would be no impact with regard to this criterion.

X. Land Use and Planning

The project site has a General Plan Land Use designation of OS (Open Space) and RC (Regional Commercial) and is zoned M2 (General Industrial) and RC/SA-NC (Regional Commercial – Special Area/North Central Roseville Specific Plan). The site is surrounded by retail and office uses to the north of the project site and industrial and open space uses to the south of the site.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to land use is based directly on the CEQA Guidelines checklist items a–c listed above. Consistency with applicable City General Plan policies, Improvement Standards, and design standards is already required and part of the City's processing of permits and plans, so these requirements do not appear as mitigation measures.

Discussion of Checklist Answers:

a) The project area has been master planned for development, including adequate roads, pedestrian paths, and bicycle paths to provide connections within the community. The project will not physically divide an established community.

b) The project includes an amendment to the General Plan to change the land use of one of the parcels from open space to allow retail use. One of the stated goals of the City's General Plan is to establish a connected open space corridor. Although the project will redesignate a site designated for open space use, the resulting development will not negatively affect the function of the adjacent open space corridor. Furthermore, the subject parcel is located on a ridge adjacent to a slope and is functionally separate from the open space corridor. The project is consistent with the environmental policies of the City's General Plan, the NCRSP, and the City's Zoning Ordinance. Impacts are less than significant.

c) There are no Habitat Conservation Plans or Natural Community Conservation Plans covering the project site; therefore, no impact would occur.

XI. Mineral Resources

The Surface Mining and Reclamation Act (SMARA) of 1975 requires the State Geologist to classify land into Mineral Resource Zones (MRZ's) based on the known or inferred mineral resource potential of that land. The California Division of Mines and Geology (CDMG) was historically responsible for the classification and designation of areas containing—or potentially containing—significant mineral resources, though that responsibility now lies with the California Geological Survey (CGS). CDMG published Open File Report 95-10, which provides the mineral classification map for Placer County. A detailed evaluation of mineral resources has not been conducted within the City limits, but MRZ's have been identified. There are four broad MRZ categories (MRZ-1 through MRZ-4), and only MRZ-2 represents an area of known significant mineral resources. The City of Roseville General Plan EIR included Exhibit 4.1-3, depicting the location of MRZ's in the City limits. There is only one small MRZ-2 designation area, located at the far eastern edge of the City.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to mineral resources is based directly on the CEQA Guidelines checklist items a and b listed above.

Discussion of Checklist Answers:

a–b) The project site is not in the area of the City known to include any mineral resources that would be of local, regional, or statewide importance; therefore, the project has no impacts on mineral resources.

XII. Noise

The project site is located adjacent to Roseville Parkway and is approximately 1,200 feet west of Highway 80. Both of these roadways are identified as transportation noise sources in the City's General Plan Noise Element. In the existing condition, the 60 dB L_{dn} contour line for both of these roadways covers portions of the project site and in the cumulative (2035) condition, the entire site is within the 60 dB L_{dn} contour line (City of Roseville 2015, Figure IX-1 and Figure IX-2). Other uses with the vicinity of the site include retail and office, which generate low outdoor noise.

Would the project result in:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Exposer of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Exposure of persons to or generation of excessive ground borne vibration of ground borne noise levels?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

Thresholds of Significance and Regulatory Setting:

Standards for transportation noise and non-transportation noise affecting existing or proposed land uses are established within the City of Roseville General Plan Noise Element Table IX-1 and IX-3, and these standards are used as the thresholds to determine the significance of impacts related to items a and c. The significance of other noise impacts is based directly on the CEQA Guidelines checklist items b, and d–f listed above. The Findings of the Implementing Procedures indicate that compliance with the City Noise Regulation (RMC Ch. 9.24) will prevent significant non-transportation noise as it relates to items a, b, and c. The Ordinance establishes noise exposure standards that protect noise-sensitive receptors from a variety of noise sources, including non-transportation/fixed noise, amplified sound, industrial noise, and events on public property. The project is not within an airport land use plan, within two miles of a public or public use airport and there are also no private airstrips in the vicinity of the project area. Therefore, items e and f have been ruled out from further analysis.

Discussion of Checklist Answers:

a,b) The project site is within the 60 L_{dn} noise contour in the cumulative condition. The retail uses on the site are not subject to the maximum noise exposure limits because the General Plan considers those uses less sensitive to noise exposure; however, Table IX-1 identifies 65 L_{dn} as the maximum outdoor exposure level and 45 L_{dn} as the maximum indoor exposure level for office buildings. As presented in the General Plan, the maximum noise level on the site is 60 L_{dn}, which is below the applicable outdoor standard. Furthermore, the proposed office building does not include an outdoor activity area that would be subject to this requirement. Typical construction practices result in an exterior-to-interior noise reduction of approximately 25 dB. With an exterior noise environment of 60 dB, the interior noise level would be 35 dB. Interior and exterior noise levels are below the General Plan standards; therefore, impacts are less than significant.

c,d) Surrounding uses may experience short-term increases in groundborne vibration, groundborne noise, and airborne noise levels during construction. However, these increases would only occur for a short period of time. When conducted during daytime hours, construction activities are exempt from Noise Ordinance standards, but the standards do apply to construction occurring during nighttime hours. While the noise generated may be a minor nuisance, the City Noise Regulation standards are designed to ensure that impacts are not unduly intrusive. Compliance with standards will ensure that this impact is less than significant.

XIII. Population and Housing

The project site is located within the NCRSP and has land use designations of RC and OS. The City of Roseville General Plan Table II-4 identifies the total number of residential units and population anticipated as a result of buildout of the City, and the Specific Plan likewise includes unit allocations and population projections for the Plan Area. Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, though extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to population and housing is based directly on the CEQA Guidelines checklist items a–c listed above.

Discussion of Checklist Answers:

a) The CEQA Guidelines identify several ways in which a project could have growth-inducing impacts (Public Resources Code Section 15126.2), either directly or indirectly. Growth-inducement may be the result of fostering economic growth, fostering population growth, providing new housing, or removing barriers to growth. Growth inducement may be detrimental, beneficial, or of no impact or significance under CEQA. An impact is only deemed to occur when it directly or indirectly affects the ability of agencies to provide needed public services, or if it can be shown that the growth will significantly affect the environment in some other way. Although the project includes a change to the land use designation for one of the parcels, the proposed square footage does not exceed the overall square footage evaluated for the Creekside Center, as anticipated in the NCRSP. Therefore,

while the project in question will induce some level of growth, this growth was already identified and its effects disclosed and mitigated within the NCRSP EIR. Therefore, the impact of the project is less than significant.

b, c) The project site is vacant. No housing exists on the project site, and there would be no impact with respect to these criteria.

XIV. Public Services

Fire protection, police protection, park services, and library services are provided by the City. The project is located within the Roseville Joint Union High School District and the Roseville Elementary School District. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?			X	
d) Parks?			X	
e) Other public facilities?			X	

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to public services is based directly on the CEQA Guidelines checklist items a–e listed above. The EIR for the Specific Plan addressed the level of public services which would need to be provided in order to serve planned growth in the community. Development Agreements and other conditions have been adopted in all proposed growth areas of the City which identify the physical facilities needed to serve growth, and the funding needed to provide for the construction and operation of those facilities and services; the project is consistent with the Specific Plan. In addition, the project has been routed to the various public service agencies, both internal and external, to ensure that the project meets the agencies' design standards (where applicable) and to provide an opportunity to recommend appropriate conditions of approval.

Discussion of Checklist Answers:

a) Existing City codes and regulations require adequate water pressure in the water lines, and construction must comply with the Uniform Fire and Building Codes used by the City of Roseville. Additionally, the applicant is required to pay a fire service construction tax, which is used for purchasing capital facilities for the Fire Department. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

b) Pursuant to the Development Agreement for the project area, the developer is required to pay fees into a Community Facilities District, which provides funding for police services. Sales taxes and property taxes resulting from the development will add revenue to the General Fund, which also serves to fund police services. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

c) The applicant for this project is required to pay school impact fees at a rate determined by the local school districts. School fees will be collected prior to the issuance of building permits, consistent with City requirements. School sites have already been designated as part of the Specific Plan process. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

d) Pursuant to the Development Agreement for the project area, the developer will be required to pay fees into a Community Facilities District, which provides funding for park services. Future park and recreation sites and facilities have already been identified as part of the Specific Plan process. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

e) Pursuant to the Development Agreement for the project area, the developer will be required to pay fees into a Community Facilities District, which provides funding for the library system and other such facilities and services. In addition, the City charges fees to end-users for other services, such as garbage and greenwaste collection, in order to fund those services. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

XV. Recreation

The project site is located immediately adjacent to the uppermost slope of the Antelope Creek open space corridor.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that physical deterioration of the facility would occur or be accelerated?			X	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to recreation services is based directly on the CEQA Guidelines checklist items a–b listed above.

Discussion of Checklist Answers:

a) The EIR for the NCRSP addressed the level of park services—including new construction, maintenance, and operations—which would need to be provided in order to serve planned growth in the community. Given that the project does not propose any additional development that was not assumed in the specific plan, the project would not cause any unforeseen or new impacts related to the use of existing or proposed parks and recreational facilities. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

b) Park sites and other recreational facilities were identified within the NCRSP, and the plan-level impacts of developing those facilities were addressed within the Final EIR for the Specific Plan. The project will not cause any unforeseen or new impacts related to the construction or expansion of recreational facilities.

XVI. Transportation/Traffic

The project is located within the Creekside Center on the last remaining undeveloped parcel in the center. The project has frontage on both Roseville Parkway and Creekside Ridge Drive. Both of these frontages have been constructed as part of earlier projects. Roseville Parkway is a six-lane arterial and Creekside Ridge Drive is a two-lane collector. The project is located on the southeast side of the intersection of these two roads. The project includes construction of an additional access driveway from Creekside Ridge Drive into the center. This access driveway will provide a more direct route to the new retail and office uses. The project will complete the planned development within that center as well as add an additional parcel and additional office use that was not assumed as part of the original development. The center will be fully built out once development of this project is completed.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			X	
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			X	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
d) Substantially increase hazards due to a design feature(s) (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
e) Result in inadequate emergency access?			X	
f) Conflict with adopted policies, plans, or programs supporting public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?			X	

Thresholds of Significance and Regulatory Setting:

The significance of checklist items c–f are based directly on the CEQA Guidelines checklist descriptions. For checklist items a and b, the Circulation Element of the General Plan establishes Level of Service C or better as an acceptable operating condition at all signalized intersections during a.m. and p.m. peak hours. Exceptions to this policy may be made by the City Council, but a minimum of 70% of all signalized intersections should maintain LOS C. The Findings of the Implementing Procedures indicate that compliance with the Traffic Mitigation Fee (RMC Ch. 4.44) will fund roadway projects and improvements necessary to maintain the City's Level of Service standards for projects consistent with the General Plan and related Specific Plan. An existing plus project conditions (short-term) traffic impact study may be required for projects with unique trip generation or distribution characteristics, in areas of local traffic constraints, or to study the proposed project access. A cumulative plus project conditions (long-term) study is required if a project is inconsistent with the General Plan or Specific Plan and would generate more than 50 p.m. peak-hour trips. The guidelines for traffic study preparation are found in the City of Roseville Design and Construction Standards–Section 4.

The project site is not located within an airport planning area or within any height restriction area established around an airport for the purpose of protecting navigable airspace. Consequently, impacts to changes in air traffic patterns (checklist item c) were screened out of the analysis.

Impacts with regard to items d and e are assessed based on the expert judgment of the City Engineer and City Fire Department, as based upon facts and consistency with the City's Design and Construction Standards.

Discussion of Checklist Answers:

a,b) The modeled p.m. peak hour trip generation for build out of the Creekside Center, consistent with the City's 2035 General Plan and the NCRSP, is 2,989 trips. The project would add 2,000 square feet of office space that was not assumed in the traffic modeling prepared for the General Plan or the NCRSP. A trip generation estimate was prepared by the City's Engineering Division in order to compare the project's anticipated p.m. peak hour trips to the City's modeled trips, the results are shown below in Table 6. The information in the table represents the anticipated trip generation for buildout of Transportation Analysis Zone 232 with and without implementation of the project.

Table 6: Project Trip Generation Estimate
Traffic Analysis Zone 232

Use	Units / Square Feet (sf)	Model Trip Rate	PM Peak Trips
2035 Build Out			
Retail	703,000 sf	2.46	1,729
Office	806,200 sf	1.44	1,161
Hotel	236 (rooms)	0.42	99
Existing			
Retail	628,600 sf	2.46	1,546
Office	806,200 sf	1.44	1,161
Hotel	200 (rooms)	0.42	84
Proposed			
Retail	10,500 sf	2.46	26
Office	2,000 sf	1.44	3
2035 Build Out			*2,989*
Existing Plus Project			*2,820*
Total			**-169**

The proposed project will result in 29 p.m. peak hour trips, which is less than the City's traffic study threshold of 50 trips. The cumulative p.m. peak hour traffic expected from build out of the Creekside Center, as assumed in the General Plan, is 2,989. Development of the proposed project will complete build out of the center. With the addition of the project's p.m. peak hour trips to the existing condition the resulting trip generation (2,820) is 169 trips less than the anticipated build out of the center. The project will not conflict with the transportation plans or policies within City's General Plan and the NCRSP. The additional trips that will result from the project are consistent with the trips anticipated in the General Plan. Impacts are less than significant.

d,e) The project has been reviewed by the City Engineering and City Fire Department staff, and has been found to be consistent with the City's Design Standards. Furthermore, standard conditions of approval added to all City project require compliance with Fire Codes and other design standards. Compliance with existing regulations ensure that impacts are less than significant.

f) The City of Roseville has adopted a Pedestrian Master Plan, Bicycle Master Plan, and Short-Range Transit Plan. The project was reviewed for consistency with these documents. The surrounding pedestrian, transit, and bicycle facilities have been already been constructed and the project will not decrease the performance or safety of those facilities. The project is consistent with these plans, impacts are less than significant.

XVII. Tribal Cultural Resources

As described within the Open Space and Conservation Element of the City of Roseville General Plan, the Roseville region was within the territory of the Nisenan (also Southern Maidu or Valley Maidu). Two large permanent Nisenan habitation sites have been identified and protected within the City's open space (in Maidu Park). Numerous smaller cultural resources, such as midden deposits and bedrock mortars, have also been recorded in the City. A majority of documented sites within the City are located in areas designated for open space uses.

Would the project cause a substantial adverse change in the significance of a Tribal Cultural Resource as defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically

defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?			X	
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1 the lead agency shall consider the significance of the resource to a California Native American tribe.		X		

Thresholds of Significance and Regulatory Setting:

In addition to archeological resources, tribal cultural resources are also given particular treatment. Tribal cultural resources are defined in Public Resources Code Section 21074, as either 1) a site, feature, place, geographically-defined cultural landscape, sacred place, or object with cultural value to a California Native American Tribe, that is listed or eligible for listing on the California Register or Historical Resources, or on a local register of historical resources or as 2) a resource determined by the lead agency, supported by substantial evidence, to be significant according to the historical register criteria in Public Resources Code section 5024.1(c), and considering the significance of the resource to a California Native American Tribe.

Discussion of Checklist Answers:

a) A Cultural Resources Assessment was prepared for the project by Cogstone Paleontology – Archaeology – History (July 2018). The report documented the findings of the pedestrian survey, record search, and sacred lands search that was done for the site. The report states that no extant historic, archaeological, paleontological, nor human remains were identified on the site; however, standard mitigation measures were recommended to ensure cultural resources are not impacted should they be uncovered during ground disturbing activities. The site was also evaluated as part of the NCRSP EIR. As mitigation for the NCRSP, Policy 6.6.1.4 (MIT# 3.11.03) was incorporated in to the plan to require that work cease immediately and that the appropriate agencies be contacted before work can resume should any resources be found on site. The project will not result in any new impacts beyond those already discussed and disclosed in the NCRSP EIR. Compliance with policies intended to protect cultural resources will ensure that project-specific impacts are less than significant.

b) On June 27, 2018, a Sacred Lands File (SLF) search was requested from the Native American Heritage Commission (NAHC) as part of the Cultural Resources Assessment prepared by Cogstone. On July 10, 2018, the NAHC replied that a sacred site is known to be present on the site and recommended that Cogstone contact a representative of the United Auburn Indian Community (UAIC) directly. Cogstone contacted the UAIC and the tribe recommended mitigation measures, which were forwarded to the City for their consideration as the lead agency.

On April 27, 2018, the City mailed notices of the proposed project pursuant to the requirements of SB-18 and AB-52 to tribes within the region and tribe who had requested notification under AB-52. On May 15, 2018, a request for consultation was received from a representative of the UAIC. No other responses were received. The UAIC representative stated that there were Tribal Cultural Resources within the vicinity of the project and requested a site visit. On June 13, 1018 City staff met on the site with the UAIC archeologist. Subsequent to the site visit, UAIC requested identification excavations due to the sensitivity and low visibility of the site. It is unknown at this time whether there are Tribal Cultural Resources on the site. The identification excavations are required to determine if such resources exist. Mitigation measures are recommended to require the excavations prior to ground disturbing activities related to project implementation. As described below, the results will determine how mitigation proceeds. The City will continue consultation with the UAIC throughout the mitigation process.

Mitigation Measure CR-1, below details the identification excavation requirements and measures CR-2 through CR-5 describe subsequent actions. Implementation of these measures will ensure that the project does not result in a substantial adverse change to a Tribal Cultural Resource. With these measures, impacts are less than significant.

MM-CR-1 – EXTENDED PHASE I IDENTIFICATION

Prior to issuance of improvement or grading permits, the applicant shall retain a qualified archaeologist, meeting the Secretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation (per 36 CFR 61), to conduct extended Phase I identification (XPI) excavations (presence/absence testing) within the sensitive portion of the project area. The applicant shall submit the qualifications to the City of Roseville (City) for review. The applicant shall provide pertinent documents such as design plans and sensitivity maps to the qualified archaeologist for review. The qualified archaeologist shall prepare and submit to the City for review an XPI plan describing the methods and decision thresholds to be used. A Native American monitor from the United Auburn Indian Community (UAIC) may be present during XPI excavations. Should the qualified archaeologist determine from the XPI excavations that resources potentially eligible for the California Register of Historical Resources (CRHR) and/or tribal cultural resources, occur on the site the resources shall be avoided in compliance with MM-CR-2. If the resources cannot be avoided, then MM-CR-3 shall apply.

MM-CR-2: AVOID AND PROTECT POTENTIALLY SIGNIFICANT RESOURCES

If potentially CRHR-eligible resources or tribal cultural resources are identified during the XPI testing implemented in accordance with MM-CR-1, then the resources shall be avoided from direct project impacts by project redesign, if feasible. If the potentially CRHR-eligible cultural resources and/or tribal cultural resources cannot be avoided from direct impacts by project redesign, the applicant shall undertake additional studies to evaluate the CRHR eligibility of the resource. Evaluations will be based on surface remains, subsurface testing, and archival and ethnographic resources and will be made within the framework of the historic context and important research questions of the project area. The City, in consultation the UAIC, shall decide the appropriate actions to mitigate impacts to tribal cultural resources.

Results of those evaluation studies, recommendations, and consultations for mitigation of project effects shall be incorporated into a Historical Resources Treatment Plan (HRTP) as described in MM-CR-3.

MM-CR-3: DEVELOP AND IMPLEMENT HISTORICAL RESOURCES TREATMENT PLAN

If CRHR-eligible resources or tribal cultural resources are identified during the XPI testing implemented in accordance with MM-CR-1 which cannot be avoided as per MM-CR- 2, then the applicant shall prepare and submit for City review a Historical Resources Treatment Plan (HRTP) for CRHR-eligible cultural resources and/or tribal cultural resources to mitigate or avoid identified impacts. Treatment of cultural resources and tribal cultural resources shall follow the procedures established by state and local regulations. Avoidance, recordation, and data recovery will be used as mitigation alternatives.

As part of the HRTP, the applicant shall prepare a research design and a scope of work for evaluation of cultural resources and for data recovery or additional treatment of CRHR- eligible sites or tribal cultural resources that cannot be avoided. Data recovery of most resources would consist of sample excavation and/or surface artifact collection, and site documentation (MM-CR-4). A possible exception would be a site or tribal cultural resource where burials, cremations, or sacred features are discovered that cannot be avoided. The HRTP shall define and map all known CRHR-eligible resources and tribal cultural resources within the project area and shall identify the cultural values that contribute to their CRHR eligibility and significance to the affiliated tribes.

A cultural resources protection plan shall be included in the HRTP that details how CRHR - eligible resources and tribal cultural resources will be avoided and protected during construction. Measures shall include, at a minimum, designation and marking of Environmentally Sensitive Areas (ESAs) within 100 feet of a CRHR-eligible or tribal cultural resource (MM-CR-4); archaeological and Native American monitoring (MM-CR-5); personnel training (MM-CR-6); and reporting. The plan shall detail what measures will be used; how, when, and where they will be implemented; and how protective measures and enforcement will be coordinated with construction personnel.

The HRTP shall also define any additional areas that are considered to be of high sensitivity for discovery of buried CRHR-eligible cultural resources, including burials, cremations, or sacred features. The HRTP shall detail provisions for monitoring construction in these high-sensitivity areas. It shall also detail procedures for halting construction; making appropriate notifications to agencies, officials, and Native Americans; and assessing CRHR eligibility in the event that unknown cultural resources are discovered during construction.

For all unanticipated cultural resource, tribal cultural resource and human remains discoveries, the HRTP shall detail the methods, consultation procedures, and timelines for assessing CRHR eligibility, formulating a mitigation plan, and implementing treatment (MM-CR-7 and MM-CR- 8). Mitigation and treatment plans for unanticipated discoveries shall be approved by the City, in consultation with the UAIC (for tribal cultural resources), prior to implementation. The HRTP shall include the dates that field studies were completed. It shall stipulate that the archaeologists and other discipline specialists conducting the studies must meet the Secretary of the Interior's Standards (per 36 CFR 61); that all artifacts and data (maps, field notes, archival materials, recordings, reports, photographs, and analysts' data) must be curated at a facility meeting 36 CFR 79 repository requirements; and that reports must be disseminated to local and state repositories, libraries, and interested professionals.

MM-CR-4: CONDUCT DATA RECOVERY TO REDUCE ADVERSE EFFECTS

If CRHR-eligible resources identified during implementation of MM-CR-2 cannot be protected from direct impacts as per MM-CR-2, the applicant shall conduct data recovery investigations to reduce adverse effects to the characteristics of each resource that contribute to its CRHR eligibility. For sites eligible under CRHR Criterion 4, significant data would be recovered through excavation and analysis. For historical resources eligible under CRHR Criteria 1, 2, or 3, data recovery may include historical

documentation, photography, collection of oral histories, architectural or engineering documentation, preparation of a scholarly work, or some form of public awareness or interpretation.

Sampling for data recovery excavations will follow standard statistical sampling methods, but sampling will be confined, as much as possible, to the direct impact area. Data-recovery methods, sample sizes, and procedures shall be detailed in the HRTP. Following any field investigations required for data recovery, the applicant shall document the field studies and findings, including an assessment of whether adequate data were recovered to reduce adverse project effects, in a data recovery report. The data recovery report shall be submitted to the City for review and approval, as well as to appropriate state repositories and local governments. Construction work within 100 feet of historical resources that require data- recovery fieldwork shall not begin until authorized by the City.

MM-CR-5 – CONSTRUCTION MONITORING

Should the City, as advised by a qualified archaeologist and in consultation with the UAIC, determine that the project could cause an adverse change in significant archaeological resources and/or tribal cultural resources, or that the sensitivity for intact subsurface cultural resources is high, full-time archaeological monitoring shall be conducted for ground disturbing activity which includes but not limited to grubbing, trenching, boring, and mechanical excavation within 100 feet of an eligible resource. Archaeological monitoring is not required outside the 100-foot resource boundary, during above-surface construction activities, or when excavating or re-excavating imported fill or previously disturbed soil.

The HRTP shall describe which areas have a high potential for significant archaeological resources and/or tribal cultural resources, areas to be monitored, methods of monitoring, and the protocol for inadvertent discoveries. If prehistoric cultural resources or tribal cultural resources are involved, a Native American monitor from the UAIC may be present continuously during ground disturbing activities. Within 3 months of the completion of ground disturbing activity, a monitoring compliance report shall be submitted to the City for review. The report will detail the results of the monitoring program and of analysis of finds, if any.

MM-CR-6 – WORKERS' AWARENESS TRAINING

The developer shall ensure that a Contractor Awareness Training Program is developed and delivered to train equipment operators about cultural resources and tribal cultural resources. The program shall be designed to inform construction personnel about: federal and state regulations pertaining to cultural resources and tribal cultural resources; the subsurface indicators of resources that shall require a work stoppage; procedures for notifying the City of any occurrences; and project-specific requirements; and enforcement of penalties and repercussions for non-compliance with the program.

The training shall be prepared by a qualified professional archaeologist and reviewed by City for approval, and may be provided in an audio-visual format, such as a DVD. The developer shall provide the UAIC with the option of attending the initial training in person and/or providing additional materials germane to the unanticipated discovery of tribal cultural resources for incorporation into the training.

The training program shall be required for all construction supervisors, forepersons, and operators of ground-disturbing equipment, and all personnel shall be required to sign a training roster and display a hard hat sticker that is visible to City inspectors. The construction manager is responsible for ensuring that all required personnel receive the training. The developer shall provide a copy of the signed training roster to the City as proof of compliance.

MM-CR-7 – POST-REVIEW DISCOVERY

If subsurface deposits believed to be cultural or human in origin, or tribal cultural resources, are discovered during construction, all work shall halt within a 50-foot radius of the discovery, and the

developer shall immediately notify the City of Roseville Development Services Director. The developer shall retain a qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology and subject to approval by the City, to evaluate the significance of the find and develop appropriate management recommendations. All management recommendations shall be provided to the City in writing for the City's review and approval. If recommended by the qualified professional and approved by the City, this may include modification of the no-work radius. The following notifications shall apply, depending on the nature of the find, subject to the review and approval of the City:

- If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required.

- If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, the City shall be notified immediately, to consult on a finding of eligibility and implementation of appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines. Work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the site either: 1) is not a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or 2) that the treatment measures have been completed to its satisfaction.

- If the find represents a Native American or potentially Native American resource (including a tribal cultural resource) that does not include human remains, the **UAIC** and City shall be notified. The City will consult with the tribe(s) on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be either a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines, or a Tribal Cultural Resource, as defined in Section 21074 of the Public Resources Code. Preservation in place is the preferred treatment, if feasible. Work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the site either: 1) is not a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or 2) not a Tribal Cultural Resource, as defined in Section 21074 of the Public Resources Code; or 3) that the treatment measures have been completed to its satisfaction.

- If the find includes human remains, or remains that are potentially human, the construction supervisor or on-site archaeologist shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641) and shall notify the City and Placer County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California Public Resources Code, and Assembly Bill 2641 shall be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the Native American Heritage Commission, which then will designate a Native American Most Likely Descendant (MLD) for the project (§ 5097.98 of the Public Resources Code). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the Public Resources Code). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the Public Resources Code). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the treatment measures have been completed to its satisfaction.

MM-CR-8 – HUMAN REMAINS

In compliance with Section 5097.98 of the Public Resources Code and Section 7050.5 of the California Health and Safety Code, if human remains are encountered, all ground disturbing activities shall be immediately suspended in that area and within 100 feet of the discovery, and the Placer County Coroner shall be notified immediately. If the Placer County Coroner determines the remains are Native American in origin, the Placer County Coroner must notify the Native American Heritage Commission within 24 hours of such identification so that the Native American Heritage Commission can contact the Most Likely Descendant (MLD). The MLD shall be provided access to the discovery and will provide recommendations or preferences for treatment of the remains within 48 hours of accessing the discovery site. Disposition of human remains and any associated grave goods, if encountered, shall be treated in accordance with procedures and requirements set forth in Sections 5097.94 and 5097.98 of the Public Resources Code; Section 7050.5 of the California Health and Safety Code; and CEQA Guidelines Section 15064.5.

XVIII. Utilities and Service Systems

The area surrounding the project is mostly built out and includes existing water, sewer, and drainage facilities within Roseville Parkway and Creekside Ridge Drive and there are existing water and sewer easements on the property, along with a monitoring well access easement, which will be relocated. A 100-foot east/west PG&E easement bisects the property east/west. The easement restricts development under existing electric transmission lines. The project will connect to existing storm drain inlets on the property.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
e) Result in a determination by the wastewater treatment provider which serves the project that it has adequate capacity to serve the project's projected demand in addition of the provider's existing commitments?			X	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			X	

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to utilities and service systems is based directly on the CEQA Guidelines checklist items a–g listed above.

Discussion of Checklist Answers:

a,e) The proposed project would be served by the Dry Creek Wastewater Treatment Plant (DCWWTP). The Central Valley Regional Water Quality Control Board (RWQCB) regulates water quality and quantity of effluent discharged from the City's wastewater treatment facilities. The DCWWTP has the capacity to treat 18 million gallons per day (mgd) and is currently treating 7.0[5] mgd OR 8.9 mgd. The volume of wastewater generated by the proposed project could be accommodated by the facility; the proposed project will not contribute to an exceedance of applicable wastewater treatment requirements. The impact is less than significant.

b,c) The project will be required to construct the onsite lines necessary to serve the project, as well as pay fees which fund the operation of the existing facilities. Minor additional infrastructure will be constructed within the project site to tie the project into the major systems offsite, including a connection to an existing water line located on the property line shared with the adjacent property owner. These improvements will be constructed in locations where site development is already occurring, or has occurred, as part of the overall Creekside Ridge project and within existing easements. There are no additional substantial impacts specific or particular to the minor infrastructure improvements.

In terms of overall treatment capacity, sewage treatment was discussed in section a, above. An expansion of sewage treatment facilities is not required. Domestic water in the City of Roseville is treated at the City's Water Treatment Plant on Barton Road. The City's water treatment plant currently has a treatment capacity of 100 mgd, though due to pipe sizes a slightly smaller total capacity of 96.1 mgd can be conveyed to the plant for treatment. The Amoruso Ranch Specific Plan Water Supply Assessment (AR WSA, Appendix E of the Amoruso Ranch FEIR), dated May 2016, analyzed water demand at City buildout and concluded that that peak treatment demand will be approximately 115 mgd at City buildout. The City's Water Treatment Plant has insufficient capacity to serve peak demand at City buildout; however, the additional water demand will be provided through existing interties with other water suppliers, such as the Placer County Water Agency and the San Juan Water District,

[5] Dave Samuelson, City of Roseville Environmental Utilities, Personal communication, July 6, 2016.

rather than through a treatment plant expansion. The project will not require an expansion of the existing water treatment facilities. Impacts are less than significant.

d) The City of Roseville 2015 Urban Water Management Plan (UWMP), adopted May 2016, estimates water demand and supply for the City through the year 2040, based on existing land use designations and population projections. In addition, the AR WSA estimates water demand and supply for ultimate General Plan buildout. The UWMP indicates that existing water supply sources are sufficient to meet all near term needs, estimating an annual water demand of 45,475 acre-feet per year (AFY) by the year 2020 and existing surface and recycled water supplies in the amount of 70,421 AFY. The AR WSA estimates a Citywide buildout demand of 64,370 AFY when including recycled water, and of 59,657 AFY of potable water. The AR WSA indicates that surface water supply is sufficient to meet demand during normal rainfall years, but is insufficient during single- and multiple-dry years. However, the City's UWMP establishes mandatory water conservation measures and the use of groundwater to offset reductions in surface water supplies. Both the UWMP and AR WSA indicate that these measures, in combination with additional purchased water sources, will ensure that supply meets projected demand. The project, which is consistent with existing land use designations, would not require new or expanded water supply entitlements.

f, g) The Western Placer Waste Management Authority is the regional agency handling recycling and waste disposal for Roseville and surrounding areas. The regional waste facilities include a Material Recovery Facility (MRF) and the Western Regional Sanitary Landfill (WRSL). Currently, the WRSL is permitted to accept up to 1,900 tons of municipal solid waste per day. According to the solid waste analysis of the Amoruso Ranch Specific Plan FEIR, under current projected development conditions the WRSL has a projected lifespan extending through 2058. There is sufficient existing capacity to serve the proposed project. Though the project will contribute incrementally to an eventual need to find other means of waste disposal, this impact of City buildout has already been disclosed and mitigation applied as part of each Specific Plan the City has approved, including the most recent Amoruso Ranch Specific Plan. All residences and business in the City pay fees for solid waste collection, a portion of which is collected to fund eventual solid waste disposal expansion. The project will not result in any new impacts associated with major infrastructure. Environmental Utilities staff has reviewed the project for consistency with policies, codes, and regulations related to waste disposal services and has found that the project design is in compliance.

XIX. Mandatory Findings of Significance

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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, substantially reduce the number or restrict the range of an endangered, threatened or rare species, or eliminate important examples of the major periods of California history or prehistory?			X	
b) Does the project have impacts which are			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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.)				
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

Significance Criteria and Regulatory Setting:

The significance of impacts related to mandatory findings of significance is based directly on the CEQA Guidelines checklist items a–c listed above.

Discussion of Checklist Answers:

a–c) Long term environmental goals are not impacted by the proposed project. The cumulative impacts do not deviate beyond what was contemplated in the NCRSP EIR. Where necessary, project specific mitigation measures are recommended which will ensure that impacts are less than significant. Additionally, mitigation measures have already been incorporated via the Specific Plan EIR and are applicable to the project. With implementation of the City's Mitigating Ordinances, Guidelines, and Standards and best management practices, mitigation measures described in this chapter, and permit conditions, the proposed project will not have a significant impact on the habitat of any plant or animal species. Based on the foregoing analysis, the proposed project does not have the potential to degrade the quality of the environment, substantially reduce the habitat of any wildlife species, or create adverse effects on human beings.

ENVIRONMENTAL DETERMINATION:

In reviewing the site specific information provided for this project and acting as Lead Agency, the City of Roseville, Development Services Department, Planning Division has analyzed the potential environmental impacts created by this project and determined that with mitigation the impacts are less than significant. As demonstrated in the initial study checklist, there are no "project specific significant effects which are peculiar to the project or site" that cannot be reduced to less than significant effects through mitigation (CEQA Section 15183) and therefore an EIR ***is not*** *required. Therefore,* ***on the basis of the foregoing initial study:***

[**X**] I find that the proposed project COULD, but with mitigation agreed to by the applicant, clearly will not have a significant effect on the environment and a *MITIGATED NEGATIVE DECLARATION* has been prepared.

Initial Study Prepared by:

_____

Charity Gold, Associate Planner
City of Roseville, Development Services – Planning Division

Attachments:

1. Arborist Report and Tree Inventory
2. CalEEMod (version 2016.3.1) Modeling

CITY OF ROSEVILLE CALIFORNIA

DEVELOPMENT SERVICES DEPARTMENT – PLANNING DIVISION
311 Vernon Street, Roseville, CA 95678 (916) 774-5276

MITIGATION MONITORING AND REPORTING PROGRAM

Project Title/File Number:	NCRSP Parcel 95 and 98A; Creekside C6 Retail; PL18-0060
Project Location:	1001 Creekside Ridge, Roseville CA, Placer County
Project Description:	A General Plan Amendment and a Specific Plan Amendment to change the land use designation on Parcel 2 from Open Space to Regional Commercial, a Rezone to change the zoning designation on Parcel 2 from General Industrial (M2) to Regional Commercial (RC), a Major Project Permit Modification to add two retail buildings and an office building to the approved Creekside Center site plan, a Major Project Permit Stage 2 to approve the design of the three buildings, a Tree Permit to encroach into the protected zones of native oak trees, and a Lot Line Adjustment to reconfigure the existing parcels.
Environmental Document	Mitigated Negative Declaration
Project Applicant:	Tiffany Wilson, RSC Engineering, Inc.
Property Owner:	Trey Gundlach, Allegiant Development Co., Inc. For: Evergreen Britannia 026 LLC
Lead Agency Contact Person:	Charity Gold, Associate Planner, (916) 774-5276

Section 21081.6 of the California Public Resources Code requires public agencies to "adopt a reporting and monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment." This Mitigation Monitoring and Reporting Program has been adopted for the purpose of avoiding environmental impacts

MONITORING PROCESS: Existing monitoring mechanisms are in place that assist the City of Roseville in meeting the intent of CEQA. These existing monitoring mechanisms eliminate the need to develop new monitoring processes for each mitigation measure. These mechanisms include grading plan review and approval, improvement/building plan review and approval and on-site inspections by City Departments. Given that these monitoring processes are requirements of the project, they are not included in the mitigation monitoring program.

It shall be the responsibility of the project applicant/owner to provide written notification to the City using the Mitigation Verification Cover Sheet and Forms, in a timely manner, of the completion of each Mitigation Measure as identified on the following pages. The City will verify that the project is in compliance with the adopted Mitigation Monitoring and Reporting Program. Any non-compliance will be reported by the City to the applicant/owner, and it shall be the project applicant's/owner's responsibility to rectify the situation by bringing the project into compliance. The purpose of this program is to ensure diligent and good faith compliance with the Mitigation Measures which have been adopted as part of the project.

TABLE OF MITIGATION MEASURES

Mitigation Measure	Implementation	Timing	Reviewing Party	Documents to be Submitted to City	Staff Use Only
MM-CR-1 – EXTENDED PHASE I IDENTIFICATION Prior to issuance improvement or grading permits, the applicant shall retain a qualified archaeologist, meeting the Secretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation (per 36 CFR 61), to conduct extended Phase I identification (XPI) excavations (presence/absence testing) within the sensitive portion of the project area. The applicant shall submit the qualifications to the City of Roseville (City) for review. The applicant shall provide pertinent documents such as design plans and sensitivity maps to the qualified archaeologist for review. The qualified archaeologist shall prepare and submit to the City for review an XPI plan describing the methods and decision thresholds to be used. A Native American monitor from the United Auburn Indian Community (UAIC) may be present during XPI excavations. Should the qualified archaeologist determine from the XPI excavations that resources potentially eligible for the California Register of Historical Resources (CRHR) and/or tribal cultural resources, occur on the site the resources shall be avoided in compliance with MM-CR-2. If the resources cannot be avoided, then MM-CR-3 shall apply.	Results of XPI shall be submitted to the Planning Division prior to the issuance of a Grading Permit or Improvement Plans. Applicable construction restrictions shall be reflected within plans.	*Pre-Construction and Construction*: XPI required prior to construction. If surveys are positive, then remainder of mitigation steps are required prior to construction. Add as note on Improvement Plans.	Planning and Engineering	XPI Results	
MM-CR-2: AVOID AND PROTECT POTENTIALLY SIGNIFICANT RESOURCES If potentially CRHR-eligible resources or tribal cultural resources are identified during the XPI testing implemented in accordance with MM-CR-1, then the resources shall be avoided from direct project impacts by project redesign, if feasible. If the potentially CRHR-eligible cultural resources and/or tribal cultural resources cannot be avoided from direct impacts by project redesign, the applicant shall undertake additional studies to evaluate the CRHR eligibility of the resource. Evaluations will be based on surface remains, subsurface testing, and archival and ethnographic resources and will be made within the framework of the historic context and important research questions of the project area. The City, in consultation the UAIC, shall decide the appropriate actions to mitigate impacts to tribal cultural resources. Results of those evaluation studies, recommendations, and consultations for mitigation of project effects shall be incorporated into a Historical Resources Treatment Plan (HRTP) as described in MM-CR-3.	Results of XPI shall be submitted to the Planning Division prior to the issuance of a Grading Permit or Improvement Plans. Applicable construction restrictions shall be reflected within plans.	*Pre-Construction and Construction*: XPI required prior to construction. If surveys are positive, then remainder of mitigation steps are required prior to construction. Add as note on Improvement Plans.	Planning and Engineering	CRHR Eligibility Results	

MM-CR-3: DEVELOP AND IMPLEMENT HISTORICAL RESOURCES TREATMENT PLAN If CRHR-eligible resources or tribal cultural resources are identified during the XPI testing implemented in accordance with MM-CR-1 which cannot be avoided as per MM-CR- 2, then the applicant shall prepare and submit for City review a Historical Resources Treatment Plan (HRTP) for CRHR-eligible cultural resources and/or tribal cultural resources to mitigate or avoid identified impacts. Treatment of cultural resources and tribal cultural resources shall follow the procedures established by state and local regulations. Avoidance, recordation, and data recovery will be used as mitigation alternatives. As part of the HRTP, the applicant shall prepare a research design and a scope of work for evaluation of cultural resources and for data recovery or additional treatment of CRHR- eligible sites or tribal cultural resources that cannot be avoided. Data recovery of most resources would consist of sample excavation and/or surface artifact collection, and site documentation (MM-CR-4). A possible exception would be a site or tribal cultural resource where burials, cremations, or sacred features are discovered that cannot be avoided. The HRTP shall define and map all known CRHR-eligible resources and tribal cultural resources within the project area and shall identify the cultural values that contribute to their CRHR eligibility and significance to the affiliated tribes. A cultural resources protection plan shall be included in the HRTP that details how CRHR - eligible resources and tribal cultural resources will be avoided and protected during construction. Measures shall include, at a minimum, designation and marking of Environmentally Sensitive Areas (ESAs) within 100 feet of a CRHR-eligible or tribal cultural resource (MM-CR-4); archaeological and Native American monitoring (MM-CR-5); personnel training (MM-CR-6); and reporting. The plan shall detail what measures will be used; how, when, and where they will be implemented; and how protective measures and enforcement will be coordinated with construction personnel. The HRTP shall also define any additional areas that are considered to be of high sensitivity for discovery of buried CRHR-eligible cultural resources, including burials, cremations, or sacred features. The HRTP shall detail provisions for monitoring construction in these high-sensitivity areas. It shall also detail procedures for halting construction; making appropriate notifications to agencies, officials, and Native Americans; and assessing CRHR eligibility in the event that unknown cultural resources are discovered during construction. For all unanticipated cultural resource, tribal cultural resource and human remains discoveries, the HRTP shall detail the methods, consultation procedures, and timelines for assessing CRHR eligibility, formulating a mitigation plan, and implementing treatment (MM-CR-7 and MM-CR- 8). Mitigation and treatment plans for unanticipated discoveries shall be approved by the City, in consultation with the UAIC (for tribal cultural resources), prior to implementation. The HRTP shall include the dates that field studies were completed. It shall stipulate that the archaeologists and other discipline specialists conducting the studies must meet the Secretary of the Interior's Standards (per 36 CFR 61); that all artifacts and data (maps, field notes, archival materials, recordings, reports, photographs, and analysts' data) must be curated at a facility meeting 36 CFR 79 repository requirements; and that reports must be disseminated to local and state repositories, libraries, and interested professionals.	The HRTP shall be submitted to the Planning Division prior to the issuance of a Grading Permit or Improvement Plans. Applicable construction restrictions shall be reflected within plans.	*Pre-Construction and Construction*: Add as note on Improvement Plans.	Planning and Engineering	Historical Resources Treatment Plan	
MM-CR-4: CONDUCT DATA RECOVERY TO REDUCE ADVERSE EFFECTS	Results of data recovery report shall be submitted to the Planning Division	*Pre-Construction and Construction*: Results of the data recovery will	Planning and Engineering	Data recovery results.	

Mitigation Measure	Implementation	Timing	Reviewing Party	Documents to be Submitted to City	Staff Use Only
If CRHR-eligible resources identified during implementation of MM-CR-2 cannot be protected from direct impacts as per MM-CR-2, the applicant shall conduct data recovery investigations to reduce adverse effects to the characteristics of each resource that contribute to its CRHR eligibility. For sites eligible under CRHR Criterion 4, significant data would be recovered through excavation and analysis. For historical resources eligible under CRHR Criteria 1, 2, or 3, data recovery may include historical documentation, photography, collection of oral histories, architectural or engineering documentation, preparation of a scholarly work, or some form of public awareness or interpretation. Sampling for data recovery excavations will follow standard statistical sampling methods, but sampling will be confined, as much as possible, to the direct impact area. Data-recovery methods, sample sizes, and procedures shall be detailed in the HRTP. Following any field investigations required for data recovery, the applicant shall document the field studies and findings, including an assessment of whether adequate data were recovered to reduce adverse project effects, in a data recovery report. The data recovery report shall be submitted to the City for review and approval, as well as to appropriate state repositories and local governments. Construction work within 100 feet of historical resources that require data- recovery fieldwork shall not begin until authorized by the City.	prior to the issuance of a Grading Permit or Improvement Plans. Applicable construction restrictions shall be reflected within plans.	determine if the remainder of mitigation steps are required prior to construction. Add as note on Improvement Plans.			
MM-CR-5 – CONSTRUCTION MONITORING Should the City, as advised by a qualified archaeologist and in consultation with the UAIC, determine that the project could cause an adverse change in significant archaeological resources and/or tribal cultural resources, or that the sensitivity for intact subsurface cultural resources is high, full-time archaeological monitoring shall be conducted for ground disturbing activity which includes but not limited to grubbing, trenching, boring, and mechanical excavation within 100 feet of an eligible resource. Archaeological monitoring is not required outside the 100-foot resource boundary, during above-surface construction activities, or when excavating or re-excavating imported fill or previously disturbed soil. The HRTP shall describe which areas have a high potential for significant archaeological resources and/or tribal cultural resources, areas to be monitored, methods of monitoring, and the protocol for inadvertent discoveries. If prehistoric cultural resources or tribal cultural resources are involved, a Native American monitor from the UAIC may be present continuously during ground disturbing activities. Within 3 months of the completion of ground disturbing activity, a monitoring compliance report shall be submitted to the City for review. The report will detail the results of the monitoring program and of analysis of finds, if any.	The applicant shall notify the Planning Division prior to construction.	*Pre-Construction and Construction*	Planning	Monitoring Compliance Report	
MM-CR-6 – WORKERS' AWARENESS TRAINING The developer shall ensure that a Contractor Awareness Training Program is developed and delivered to train equipment operators about cultural resources and tribal cultural resources. The program shall be designed to inform construction personnel about: federal and state regulations pertaining to cultural resources and tribal cultural resources; the subsurface indicators of resources that shall require a work stoppage; procedures for notifying the City of any occurrences; and project-specific requirements; and enforcement of penalties and repercussions for non-compliance with the program. The training shall be prepared by a qualified professional archaeologist and reviewed by City for approval, and may be provided in an audio-visual format, such	The applicant shall notify the Planning Division of the pre-construction meeting date.	Add as note on Improvement Plans.	Planning		

Mitigation Measure	Implementation	Timing	Reviewing Party	Documents to be Submitted to City	Staff Use Only
as a DVD. The developer shall provide the UAIC with the option of attending the initial training in person and/or providing additional materials germane to the unanticipated discovery of tribal cultural resources for incorporation into the training. The training program shall be required for all construction supervisors, forepersons, and operators of ground-disturbing equipment, and all personnel shall be required to sign a training roster and display a hard hat sticker that is visible to City inspectors. The construction manager is responsible for ensuring that all required personnel receive the training. The developer shall provide a copy of the signed training roster to the City as proof of compliance.					

MM-CR-7 – POST-REVIEW DISCOVERY If subsurface deposits believed to be cultural or human in origin, or tribal cultural resources, are discovered during construction, all work shall halt within a 50-foot radius of the discovery, and the developer shall immediately notify the City of Roseville Development Services Director. The developer shall retain a qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology and subject to approval by the City, to evaluate the significance of the find and develop appropriate management recommendations. All management recommendations shall be provided to the City in writing for the City's review and approval. If recommended by the qualified professional and approved by the City, this may include modification of the no-work radius. The following notifications shall apply, depending on the nature of the find, subject to the review and approval of the City: • If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required. • If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, the City shall be notified immediately, to consult on a finding of eligibility and implementation of appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines. Work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the site either: 1) is not a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or 2) that the treatment measures have been completed to its satisfaction. • If the find represents a Native American or potentially Native American resource (including a tribal cultural resource) that does not include human remains, the **UAIC** and City shall be notified. The City will consult with the tribe(s) on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be either a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines, or a Tribal Cultural Resource, as defined in Section 21074 of the Public Resources Code. Preservation in place is the preferred treatment, if feasible. Work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the site either: 1) is not a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or 2) not a Tribal Cultural Resource, as defined in Section 21074 of the Public Resources Code; or 3) that the treatment measures have been completed to its satisfaction. • If the find includes human remains, or remains that are potentially human, the construction supervisor or on-site archaeologist shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641) and shall notify the City and Placer County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California Public Resources Code, and Assembly Bill 2641 shall be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the Native American Heritage Commission, which then will designate a Native American Most Likely Descendant (MLD) for the project (§ 5097.98 of the Public Resources Code). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning	The applicant shall notify the Planning Division of the pre-construction meeting is date.	Add as note on Improvement Plans.	Planning		

Mitigation Measure	Implementation	Timing	Reviewing Party	Documents to be Submitted to City	Staff Use Only
treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the Public Resources Code). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the Public Resources Code). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the treatment measures have been completed to its satisfaction.					
MM-CR-8 – HUMAN REMAINS In compliance with Section 5097.98 of the Public Resources Code and Section 7050.5 of the California Health and Safety Code, if human remains are encountered, all ground disturbing activities shall be immediately suspended in that area and within 100 feet of the discovery, and the Placer County Coroner shall be notified immediately. If the Placer County Coroner determines the remains are Native American in origin, the Placer County Coroner must notify the Native American Heritage Commission within 24 hours of such identification so that the Native American Heritage Commission can contact the Most Likely Descendant (MLD). The MLD shall be provided access to the discovery and will provide recommendations or preferences for treatment of the remains within 48 hours of accessing the discovery site. Disposition of human remains and any associated grave goods, if encountered, shall be treated in accordance with procedures and requirements set forth in Sections 5097.94 and 5097.98 of the Public Resources Code; Section 7050.5 of the California Health and Safety Code; and CEQA Guidelines Section 15064.5.	The applicant shall notify the Planning Division of the pre-construction meeting is date.	Add as note on Improvement Plans.	Planning		

CITY OF ROSEVILLE CALIFORNIA

DEVELOPMENT SERVICES DEPARTMENT
311 Vernon Street, Roseville, CA 95678 (916) 774-5276

MITIGATION VERIFICATION SUBMITTAL COVER SHEET

Project Title/Planning File # _____

Project Address _____

Property Owner _____

Planning Division Contact _____

SUMMARY OF VERIFICATION MATERIALS INCLUDED IN THIS SUBMITTAL

Mitigation Measure	Supporting Attachments Included	Date Complete

I HAVE ATTACHED THE FOLLOWING REQUIRED ITEMS:

☐ Table of Applicable Mitigation Measures

☐ Mitigation Verification Form(s)

☐ Specific supporting documentation required by measure(s), if applicable (e.g. biologist's report)

I hereby certify under penalty of perjury under the laws of the State of California that I am the property owner or an agent of the property owner and am authorized to submit this Mitigation Verification Form. I also certify that the above-listed mitigation measures have been completed in the manner required, and that all of the information in this submittal is true and correct, to the best of my knowledge:

_____	_____	_____
Signature and Date	Print Name	Contact Number

MITIGATION VERIFICATION FORM

Mitigation Measure_____

Description of Monitoring and Verification Work Performed. The following information is a required part of the description: dates, personnel names or titles, and the stage/phase of construction work. Additional notes sheets may be attached, if necessary, or the below may simply reference a separate attachment that provides the required information.

INSTRUCTIONS

COVER SHEET:

A Cover Sheet for the project/development is prepared by City staff, with the top portion filled out. Each time Mitigation Verification Forms(s) are being submitted, a Cover Sheet completed by the Developer, Contractor, or Designee is required. An example of a completed summary table is provided below. The signature on the Cover Sheet must be *original wet ink*.

EXAMPLE MITIGATION VERIFICATION SUBMITTAL COVER SHEET

Project Title/Planning File #	New Coffee Shop, PL15-0000
Project Address	10 Justashort Street
Property Owner	Jane Owner
Planning Division Contact	Joe Planner, Associate Planner, (916) 774-####

SUMMARY OF VERIFICATION MATERIALS INCLUDED IN THIS SUBMITTAL

Mitigation Measure	Supporting Attachments Included	Date Complete
MM-3	Copy of survey report signed by biologist	5/10/2016
MM-4	All information included in Mitigation Verification Form	5/12/2016
MM-5	E-mail from Air District approving Dust Control Plan	5/05/2016

MITIGATION VERIFICATION FORM:

A Mitigation Verification Form is provided by City staff, along with the Cover Sheet and Table of Applicable Mitigation Measures. A form is filled in and submitted for each mitigation measure by the Developer, Contractor, or Designee. The form needs only the mitigation number to be filled in, along with the Description of Monitoring and Verification Work Performed. Multiple forms may be submitted simultaneously, under one cover sheet. It is also permissible to submit a form for each part of a measure, on separate dates. For instance, in the example measure MM-4 in the table above, the actual mitigation requires informing construction workers *and* retaining a qualified archeologist if resources are uncovered. Thus, a developer may submit a form in May certifying that construction workers have been informed, and also submit a second copy of the form in July because resources were discovered and additional actions had to be undertaken.

Each mitigation measure specifies the type of supporting documentation required; this must be submitted in order for the City to accept the mitigation as complete. An example of a completed Mitigation Verification Form is provided below.

EXAMPLE
MITIGATION VERIFICATION FORM

Mitigation Measure MM3

Description of Monitoring and Verification Work Performed. The following information is a required part of the description: dates, personnel names or titles, and the stage/phase of construction work. Additional notes sheets may be attached, if necessary, or the below may simply reference a separate attachment that provides the required information.

The mitigation measure text is included on the Improvement Plans General Notes page (Improvement Plan EN15-0001). On May 4, 2016, prior to any ground-disturbing activities (the pre-construction phase), a site meeting was held. At this meeting, workers on the site were informed of the potential to unearth remains, and were instructed to cease work and notify their supervisor immediately if any resources were observed.

ABACUS
CONSULTING ARBORISTS

P.O. Box 4248
Auburn, CA 95604
www.abacus-tree.com (530) 305-0165 Nicole.Abacus@gmail.com

Consulting Arborist Report & Tree Inventory

For the project of:

1001 Creekside Ridge Drive, Parcel 2

City of Roseville, California

Prepared at the Request of:

RSC Engineering, Inc.

June 11, 2018

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TABLE OF CONTENTS

TABLE OF CONTENTS **1**

EXECUTIVE SUMMARY **2**

METHODS **3**

TERMS 3
CHART A – TREE RATINGS 4
RATINGS DESCRIPTION 4
IMPACT TERMS 5

CHART B – INVENTORY OF TREES **6**

LIMITATIONS **8**

DISCUSSION **8**

ROOT STRUCTURE 8

CONCLUSION **9**

CHART C – TREES PROPOSED FOR REMOVAL OR IMPACT 10
CHART D – TREE PRESERVATION RESTRICTIONS 11

GENERAL DEVELOPMENT GUIDELINES **13**

TREE LOCATION MAP **15**

TREE SIZE EXPRESSED BY TRUNK DIAMETER **16**

DISCLOSURE, ASSUMPTIONS AND DISCLAIMER **17**

Executive Summary

Tiffany Wilson of RSC Engineering, Inc. contacted Abacus Consulting Arborists to inventory and evaluate the protected trees and produce an Arborist Report as the end product. The property is parcel 015-011-021-000, parcel 2, located at 1001 Creekside Ridge Drive in Roseville, California. See Tree Location Map.

Nicole Harrison, ISA Certified Arborist #WE6500AM, and Nicholas McNamara, arborists assistant, of Abacus Consulting Arborists was on site on May 23rd, 2018; to identify species, take measurements of DBH[1] and canopy, field condition notes, recommended actions, ratings, and locations of the protected trees.

There are 11 trees surveyed, none of which belong to the subject parcel. All 11 qualify as protected trees as defined by the City of Roseville municipal code, Title 19, Article IV, Chapter 19.66 Tree Preservation. There are six (6) trees which would be impacted by the development of the site[2].

Tree Species	Trees on this Site:	Property Line[3] and/or Offsite Trees	Protected by City of Roseville Title 19 Chapter 19.66	Trees Proposed for Removal[4]	Protected Trees Proposed for Retention with Impacts[5]	Total Trees to be Retained
Interior Live Oak, *Quercus wislizenii*	0	2	2	0	1	2
Blue Oak, *Quercus douglasii*	0	9	9	0	3	9
Total	0	11	11	0	4	11

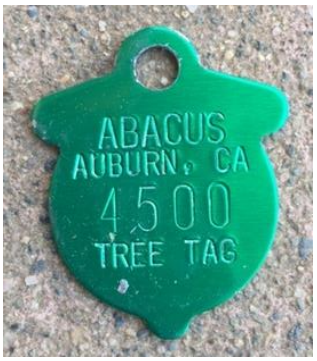
See Chart B – Inventory of Trees for specific information on each tree.

See Chart C – Trees Proposed for Removal or Impact for additional Mitigation information.

See Chart D – Tree Preservation Restrictions and General Development Guidelines for recommendations during Development

[1] DBH or 'Diameter at Breast High' is the industry accepted measurement for mature trees. The measurement is taken at 54" off of native grade. See attached 'Tree Size Expressed by Trunk Diameter'.
[2] Tree locations are approximate. Abacus Consulting Arborists is not responsible for determination of tree location and/or ownership.
[3] Trees with any portion of the trunk on the property line are considered to be joint ownership trees between the parcels and require agreement between parcel owners for removal or impact (Stamen, 1997).
[4] Current Development Plan by RFE Engineering, Inc. Titled Creekside C6 Retail and dated 4-19-2018.
[5] Impacts occur when development activities, including grading or trenching, are within the protected root zone defined for each tree in Chart B. The impact result and/or additional protection measures can be found in the conclusion of this report

Methods



The protected trees (on-site) tagged by **ABACUS** have a numbered tag, placed on each one that is 1-1/8" x 1-3/8", green anodized aluminum, "acorn" shaped, and labeled: **ABACUS**, Auburn, CA with 1/4" pre-stamped tree number and Tree Tag. They are attached with a natural colored aluminum 10d nail, installed at approximately 6 feet above ground level on the approximate north side of the tree. The tag should last ~10 – 20+ years depending on the species, before it is enveloped by the trees' normal growth cycle.

A Level 2 – Basic Visual Assessment was performed in accordance with the International Society of Arboriculture's best management practices. This assessment level is limited to the observation of conditions and defects which are readily visible. Additional limiting factors, such as blackberries, poison oak, and/or debris piled at the base of a tree can inhibit the visual assessment.

Tree Location: The GPS location of each tree was collected using the ESRI's ArcGIS collector application on an Apple iPad. The data was then processed in ESRI's ArcMap by Julie McNamara, M.S. GISci, to produce the tree location map.

Tree Measurements: DBH (diameter breast high) is normally measured at 4'6" (above the average ground height for "Urban Forestry"), but if that varies then the location where it is measured is noted. A Haglöf Mantax Caliper was used to measure the DBH for trees less than 32" in diameter or less and a steel diameter tape for trees greater than 32".

Terms

Field Tag #	The pre-stamped tree number on the tag which is installed at approximately 6 feet above ground level on the north side of the tree.
Other Tag #	If additional field tags are found on the trees and are legible, they are listed here.
Offsite/Property Line	Indicates if an off-site tree was included in the inventory. Inclusion of off-site trees is conducted when these trees could potentially be impacted by any proposed development. Trees located within 25' of the development boundary are normally included and provided protection recommendations when development is proposed in the area. We are not surveyors and do not guarantee trees listed as on or off the site are correctly indicated.
Protected	Indicates if the tree qualifies as a "protected tree" by the standards of the local jurisdiction.
Species Common Name	The species of a tree is listed by our local common name. Our native oaks frequently cross-pollinate and hybridize, but the identification is towards the strongest characteristics.
Species Botanical Name	Industry accepted botanical name by genus (capitalized) and species (lower case).
DBH	'Diameter Breast High' is normally measured at 4'6" (above the average ground height for "Urban Forestry"), but if the measurement was taken at another location it is noted here. A Swedish caliper [1] was used to measure the DBH for trees less than 30" in diameter and a steel diameter tape for trees greater than 30"Ø.
Measured Canopy radius	The farthest extent of the crown composed of leaves and small twigs. Often a tree's canopy will be irregular, however, the canopy radius is measured as longest dripline measurement from the center point of the tree as the limbs with the farthest reach.

Notes: Notes provide notable details about each tree which are factors considered in the determination of the tree rating including: (a) condition of root crown and/or roots; (b) condition of trunk; (c) condition of limbs and structure; (d) growth history and twig condition; (e) leaf appearance; and (f) dripline environment. Notes also indicate if the standard tree evaluation procedure was not followed and why (ie. why dbh may have been measured at a location other than the standard 54"). Additionally, notes will list any evaluation limiting factors such as debris at the base of a tree.

City of Roseville Tree Rating: Pursuant to Title 19, Chapter 19.66 Tree Preservation of the Roseville Municipal Code as information to be included in the Arborist Report.

Arborist Rating: Subjective to condition and is based on both the health and structure of the tree. All of the trees were rated for condition, per the recognized national standard as set up by the Council of Tree and Landscape Appraisers and the International Society of Arboriculture (ISA) on a numeric scale of 5 (being the highest) to 0 (the worst condition, dead) as in Chart A. The rating was done in the field at the time of the measuring and inspection. The scale is as follows:

Chart A – Tree Ratings

Arborist Ratings			Roseville Ratings, 19.66.050 B.1.
No problem(s)	Excellent	**5**	Excellent
No apparent problem(s)	Good	**4**	Good
Minor problem(s)	Fair	**3**	Fair to Good
Minor problem(s)		**2 or 3**	Fair
Major problem(s)	Poor	**2**	Fair to Poor
Extreme problem(s)	Hazardous	**1**	Poor
Dead	Dead	**0**	Dead

Ratings Description

Rating #0: This indicates a tree that has no significant sign of life.

Rating #1: The problems are extreme. This rating is assigned to a tree that has structural and/or health problems that no amount of work or effort can change. The issues may or may not be considered a dangerous situation.

Rating #2: The tree has major problems. If the option is taken to preserve the tree, its condition could be improved with correct arboricultural work including, but not limited to: pruning, cabling, bracing, bolting, guying, spraying, mistletoe removal, vertical mulching, fertilization, etc. If the recommended actions are completed correctly, hazard can be reduced and the rating can be elevated to a 3. If no action is taken the tree is considered a liability and should be removed.

Rating #3: The tree is in fair condition. There are some minor structural or health problems that pose no immediate danger. When the recommended actions in an arborist report are completed correctly the defect(s) can be minimized or eliminated.

Rating #4: The tree is in good condition and there are no apparent problems that a Certified Arborist can see from a visual ground inspection. If potential structural or health problems are tended to at this stage future hazard can be reduced and more serious health problems can be averted.

Rating #5: No problems found from a visual ground inspection. Structurally, these trees have properly spaced branches and near perfect characteristics for the species. Highly rated trees are not common in natural or developed landscapes. No tree is ever perfect especially with the unpredictability of nature, but with this highest rating, the condition should be considered excellent.

Development Status	Indicates if the tree is planned for removal or preservation, and if preserved, the relative impact of the proposed development according to the development plans. The scale is as follows:

Impact Terms	Impact Description
Negligible	Tree is unlikely to show any symptoms. Chance of survival post development is excellent. Impacts to the Protected Root Zone (see Glossary) are less than 5%.
Minor	Tree is likely to show minor symptoms. Chance of survival post development is good. Impacts to the Protected Root Zone are less than 15% and species tolerance is good.
Moderate	Tree is likely to show moderate symptoms. Chance of survival post development is fair. Impacts to the Protected Root Zone are less than 35% and species tolerance is good or moderate.
Severe	Tree is likely to show moderate symptoms annually and a pattern of decline. Chance of long term survival post development is low. Impacts to the Protected Root Zone are up to 50% and species tolerance is moderate to poor.
Critical	Tree is likely to show moderate to severe symptoms annually and a pattern of decline. Chance of long term survival post development is negligible. Impacts to the Protected Root Zone are up to 80%.

Impact Notes	The proposed impact to the tree based on the current development plan
Development Restrictions	Arborist preservation recommendations to support long-term health of the tree during the development process often in the form of restrictions.

Chart B – Inventory of Trees

All trees appear to be offsite on the neighboring parcels Note: Actual tree locations are to be determined by others. We are not surveyors. Abacus takes no responsibility for determination of tree

Field Tag #	Protected by 19.66	Species Common Name	Species Botanical Name	DBH	Measured Canopy Radius	Protected Root Zone calculated	Notes	City of Roseville Tree Rating	Arborist Rating	Development Status
4453	Yes	Blue Oak	Quercus douglasii	26 @ 3'	25	33	large rock and cavity at base w, closed failure stubs N and E, epicormic growth, fair leaf surface, 1-5" deadwood	Fair	3 Fair - Minor Problems	Preserve with Impact
4454	Yes	Blue Oak	Quercus douglasii	16	23	20	rock and large cavity at base SW, leans S with correction, fair leaf surface, 1-3" deadwood	Fair to Poor	2 Major Structure or Health Problems	Preserve with Impact
4455	Yes	Blue Oak	Quercus douglasii	15	19	19	cavities at base and open wounds up main trunk, fair leaf surface, very poor structure, fair health	Poor	1 Extreme Structure or Health Problems	Remove
4456	Yes	Interior Live Oak	Quercus wislizenii	40 @ 1'	30	50	growing over rocks, codominant leader at 4' with open wound and advanced decay in crotch, large size-class deadwood, wounds and sloughing bark in many locations, fair leaf surface	Fair	3 Fair - Minor Problems	Preserve with Impact
4457	Yes	Blue Oak	Quercus douglasii	18	20	23	vertical cavity ground to 4', suppressed upper canopy lean and over extended to SE, fair leaf surface	Fair	2 Major Structure or Health Problems	Preserve with Impact
4458	Yes	Interior Live Oak	Quercus wislizenii	16	0	20	vertical cavity ground to 5' advanced decay, slight lean S, poor taper above wound, epicormic growth, fair leaf surface	Fair to Poor	2 Major Structure or Health Problems	Preserve with Impact
4459	Yes	Blue Oak	Quercus douglasii	21 @ 3'	23	26	cavity in main stem from ground to 4', significant lean, suppressed, unbalanced canopy NE, 6 - 8" failures, fire damage, fair leaf surface	Poor	1 Extreme Structure or Health Problems	Remove
4460	Yes	Blue Oak	Quercus douglasii	14	15	18	old 3, good upright form, balanced canopy, fair leaf service	Good	4 Good - No Apparent Problems	Preserve - No Proposed Impact

Field Tag #	Protected by 19.66	Species Common Name	Species Botanical Name	DBH	Measured Canopy Radius	Protected Root Zone calculated	Notes	City of Roseville Tree Rating	Arborist Rating	Development Status
4461	Yes	Blue Oak	Quercus douglasii	24 @ 3'	36	30	fair leaf surface, over extended north, codominant leader at 7', large structural limb S at 6' off the ground, canopy touches the ground at 35', may require significant clearance pruning	Fair to Good	3 Fair - Minor Problems	Preserve - No Proposed Impact
4462	Yes	Blue Oak	Quercus douglasii	15 @ 3'	13	19	vertical cavity 1', previous fire damage, fair leaf service, HVL above	Fair	3 Fair - Minor Problems	Preserve - No Proposed Impact
4463	Yes	Blue Oak	Quercus douglasii	12	16	15	rocks at base, embedded fence wire, very poor structure, HVL above, fair leaf surface with epicormic growth	Fair to Poor	2 Major Structure or Health Problems	Preserve - No Proposed Impact

Limitations

All of the conclusions in this report are based solely on the observation of conditions on the site which were readily visible. Trees may appear to be healthy and structurally sound but can contain hidden faults which could result in failure.

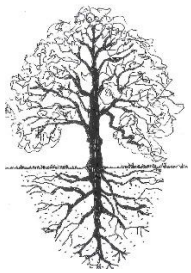
This inventory and all the evaluations were conducted during the dormant season. While we endeavor to evaluate the canopy of each tree based on twig condition, there may be conditions which cannot be detected at this time of the year.

Blackberries, Poison Oak and/or Debris (such as limbs, firewood, garbage, etc) visually inhibit the observation of critical defects at the base of a tree such as decay or evidence of decay agents (mushrooms or conks). They also can hide ground heaving, compacted soil, soil contamination, and many other critical evaluation details. Whenever these conditions exist, the visual assessment was limited and the tree should be reevaluated upon removal of the inhibiting condition.

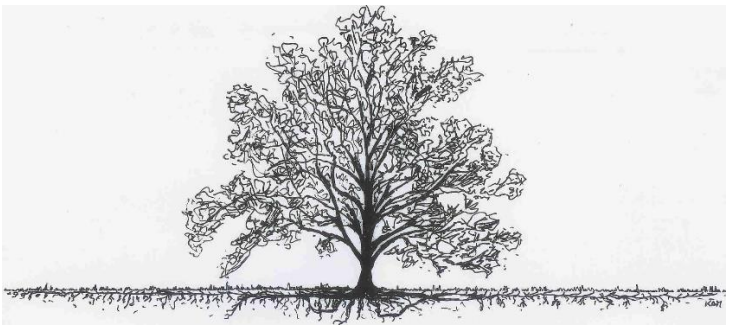
Discussion

Root Structure

The majority of a tree's roots are contained in a radius from the main trunk outward approximately two to three times the canopy of the tree. These roots are located in the top 6" to 3' of soil. It is a common misconception that a tree underground resembles the canopy (see Drawing A below). The correct root structure of a tree is in Drawing B. Accordingly, tree protection during development involves preserving an area that extends beyond the dripline.



Drawing A
Common misconception of where tree roots are assumed to be located



Drawing B
The reality of where roots are located

Conclusion

There are 11 trees surveyed of which 11 qualify as protected trees as defined by the City of Roseville municipal code, Title 19, Article IV, Chapter 19.66 Tree Preservation. There are six (6) trees off site which would be impacted by the development of the site.

Protected Tree Status	Tree Count	Inches[6]
Trees to Remain on the Site without Impact	0	_
Trees Proposed for Removal	0	_
Trees with Impacts Causing Early Demise	1 (TBD #4453)	TBD
Trees with Impacts to be Determined	5 (4454-57 and 4459)	TBD

Projected development impacts are based solely on distance relationships between tree location and grading and/or trenching. Field inspections and findings during the project at the time of grading and trenching can change relative impacts. Closely followed guidelines and restrictions can result in a higher chance of survival, while restrictions that are overlooked can result in a dramatically lower chance of survival. **The final impact will be measured at project completion and reported by the project arborist in the 'Final Compliance Letter'.**

[6] Inches are DBH for single trunk trees and DBH added together for multi-stem trees

Chart C – Trees Proposed for Removal or Impact

Field Tag #	Species Common Name	Species Botanical Name	DBH	Measured Canopy Radius	Protected Root Zone calculated	City of Roseville Tree Rating	Arborist Rating	Development Status	Impact Notes	Impact Term
4453	Blue Oak	Quercus douglasii	26 @ 3'	25	33	Fair	3 Fair - Minor Problems	Preserve with Impact	±10' to retaining wall, impacts based on 8' trunk to fence distance	35% Moderate to Severe
4454	Blue Oak	Quercus douglasii	16	23	20	Fair to Poor	2 Major Structure or Health Problems	Preserve with Impact	±10' to retaining wall, impacts based on 8' trunk to fence distance	25% Moderate
4455	Blue Oak	Quercus douglasii	15	19	19	Poor	1 Extreme Structure or Health Problems	Remove	Recommended for Removal. Impacts will not substantially change the SULE[7]	Not Calculated
4456	Interior Live Oak	Quercus wislizenii	40 @ 1'	30	50	Fair	3 Fair - Minor Problems	Preserve with Impact	±10' to retaining wall, impacts based on 8' trunk to fence distance	26% Moderate
4457	Blue Oak	Quercus douglasii	18	20	23	Fair	2 Major Structure or Health Problems	Preserve with Impact	±15' to retaining wall, impacts based on 12' trunk to fence distance	18% Moderate
4459	Blue Oak	Quercus douglasii	21 @ 3'	23	26	Poor	1 Extreme Structure or Health Problems	Remove	Recommended for Removal. Impacts will not substantially change the SULE	Not Calculated

[7] SULE – Safe & Useful Life Expectancy

Chart D – Tree Preservation Restrictions

Field Tag #	Species Common Name	Species Botanical Name	DBH	Measured Canopy Radius	Protected Root Zone calculated	Impact Notes	Impact Term	Development Restrictions
4453	Blue Oak	Quercus douglasii	26 @ 3'	25	33	±10' to retaining wall, impacts based on 8' trunk to fence distance	35% Moderate to Severe	Pretreat with chemical stress application and preventative for leaf feeding insects and fungicide; install fencing a minimum of 40' southwest and 8' from trunk along proposed retaining wall and extending to include trees 4454 and 4456. See recommended fencing diagram; provide summer irrigation once per month if grading occurs between May and October. Re-evaluate for clearance pruning prior to commencement of grading
4454	Blue Oak	Quercus douglasii	16	23	20	±10' to retaining wall, impacts based on 8' trunk to fence distance	25% Moderate	Install exclusionary fencing at minimum of 8' from trunk. Follow all general recommendations
4455	Blue Oak	Quercus douglasii	15	19	19	Recommended for Removal. Impacts will not substantially change the SULE	Not Calculated	Re-evaluate for risk management
4456	Interior Live Oak	Quercus wislizenii	40 @ 1'	30	50	±10' to retaining wall, impacts based on 8' trunk to fence distance	26% Moderate	Pretreat with chemical stress application and preventative for leaf feeding insects and fungicide; install fencing a minimum of 8' from trunk along proposed retaining wall and extending to include trees 4458-4459. See recommended fencing diagram; provide summer irrigation once per month if grading occurs between May and October. Re-evaluate for clearance pruning prior to commencement of grading
4457	Blue Oak	Quercus douglasii	18	20	23	±15' to retaining wall, impacts based on 12' trunk to fence distance	18% Moderate	Install exclusionary fencing at minimum of 12' from trunk. Follow all general recommendations
4458	Interior Live Oak	Quercus wislizenii	16	0	20	±20' to retaining wall	Minor	Install exclusionary fencing at minimum of 17' from trunk. Follow all general recommendations
4459	Blue Oak	Quercus douglasii	21 @ 3'	23	26	Recommended for Removal. Impacts will not substantially change the SULE	Not Calculated	Re-evaluate for risk management
4460	Blue Oak	Quercus douglasii	14	15	18		Negligible	Install exclusionary fencing at minimum of 18' from trunk. Follow all general recommendations

Field Tag #	Species Common Name	Species Botanical Name	DBH	Measured Canopy Radius	Protected Root Zone calculated	Impact Notes	Impact Term	Development Restrictions
4461	Blue Oak	Quercus douglasii	24 @ 3'	36	30		Negligible	Install exclusionary fencing at minimum of 30' from trunk. Follow all general recommendations
4462	Blue Oak	Quercus douglasii	15 @ 3'	13	19		Negligible	Install exclusionary fencing at minimum of 19' from trunk. Follow all general recommendations
4463	Blue Oak	Quercus douglasii	12	16	15		Negligible	Install exclusionary fencing at minimum of 15' from trunk. Follow all general recommendations

General Development Guidelines

1. No wheeled equipment or pickup trucks shall be allowed on site until exclusionary tree fencing is installed by project arborist.
2. All of the trees to be removed or pruned shall be chipped onsite to the greatest degree possible. The chips are to be used under the trees that are to remain as mulch in the Protected Root Zone.
3. All of the trees to remain shall have mulch installed in the Protected Root Zone 4 - 6" deep prior to grading and/or grubbing. It is prefered this mulch is from the trees to be removed, however, other mulch may be used but it is required to be arborist type woodchips (4 – 6" deep), but not redwood or cedar bark. Redwood or Cedar bark mulch will not be accepted. If applied, it will be required to be removed and placed on top of the required arborist type mulch.
4. All trees to be saved shall have their root zones and trunk(s) protected with exclusionary fencing. Unless otherwise specified by the City or County, a four (4') foot high orange or yellow plastic, high visibility fence shall be installed surrounding the trees' root zone (defined by canopy radius), hereafter refered to as the Protected Root Zone. The fence shall be staked 10'o.c. maximum spacing, with 5' steel "T" posts, 2" x 2" square or 2"+ ∅ wood posts. The Protected Root Zone area shall extend out to the tree's longest dripline radius plus one foot, as a circle. See Arborist Report - Chart B for radius measurement for each individual tree. The fencing shall completely surround the trees' root zone and not be "U" shaped or open at any point. Whenever possible, include as many trees that are to be saved into one fenced exclusionary Protected Root Zone. The fencing shall be maintained and not moved or removed until the final arborist inspection at the completion of construction.
5. No material storage, people, portable outhouses, vehicles, or dogs shall be allowed in the Protected Root Zone.
6. Utility-trenching paths are to be placed outside the Protected Root Zone unless previously approved by project Arborist.
7. The cut and fill material excavated from or added to the lot can kill trees by removing too many roots, drying/wetting the soil, or by suffocating the roots with too much soil. If fill material is needed within 20' of the Protected Root Zone, properly designed aeration/ventilation systems made to protect the trees and allow for the fill material can be installed.
8. Limestone gravel shall not be used as base material or for drain rock as it will change the pH to be more alkaline, and may harm the trees.
9. Soil contamination shall be avoided by eliminating chemical dumping on the property that may infiltrate into the Protected Root Zone. **No**: washing, dumping, or contaminating the site including but not necessarily limited to the following: concrete from tools or trucks, paint materials, sheetrock mud or stucco materials, other chemicals, solvents, herbicides, etc.
10. Irrigation is required once per month for a trees to remain within 30' of any grading activity during the months of May - November, unless 1" of rain has been recorded within the 2 week period.
11. Irrigation is required as soon as the concrete is poured and footings and stem walls are backfilled. The protected trees within 30' should be watered to the point of soil saturation at a minimum depth of 12".
12. Do not nail, tie, screw, or fasten any signs, braces, etc. to the trees that are to remain.

13 Pruning is to be completed by a qualified ISA Certified Arborist or under the direct supervision of the project arborist. No cutting of live wood over 2”∅ shall be made. All cutting, pruning, trimming, cabling, guying, bracing, and lightning protection systems shall conform to the most current standards of the American National Standards Institute (ANSI). The current ANSI Tree Care Standards are A300 (Parts 1-4) 2000 to 2002 (copies at: www.ansi.org). The BMPs are “Best Management Practices”, as companion publications to the ANSI Tree Care Standards, printed by the International Society of Arboriculture (copies at: www.isa-arbor.com). The BMP booklets explain the details of the ANSI Tree Care Standards and how to follow them correctly. Pruning of branches under 3” in diameter should be made with sharp hand tools: pruners, loppers, and/or handsaws, <u>not</u> chainsaws.

14 Chemical treatments to enhance the likelihood of tree survival may be required or recommended in supplemental inspections.

These important details will greatly increase the likelihood of survival for your protected trees.

ABACUS
CONSULTING ARBORISTS

Tree Location Map
with Development Plans

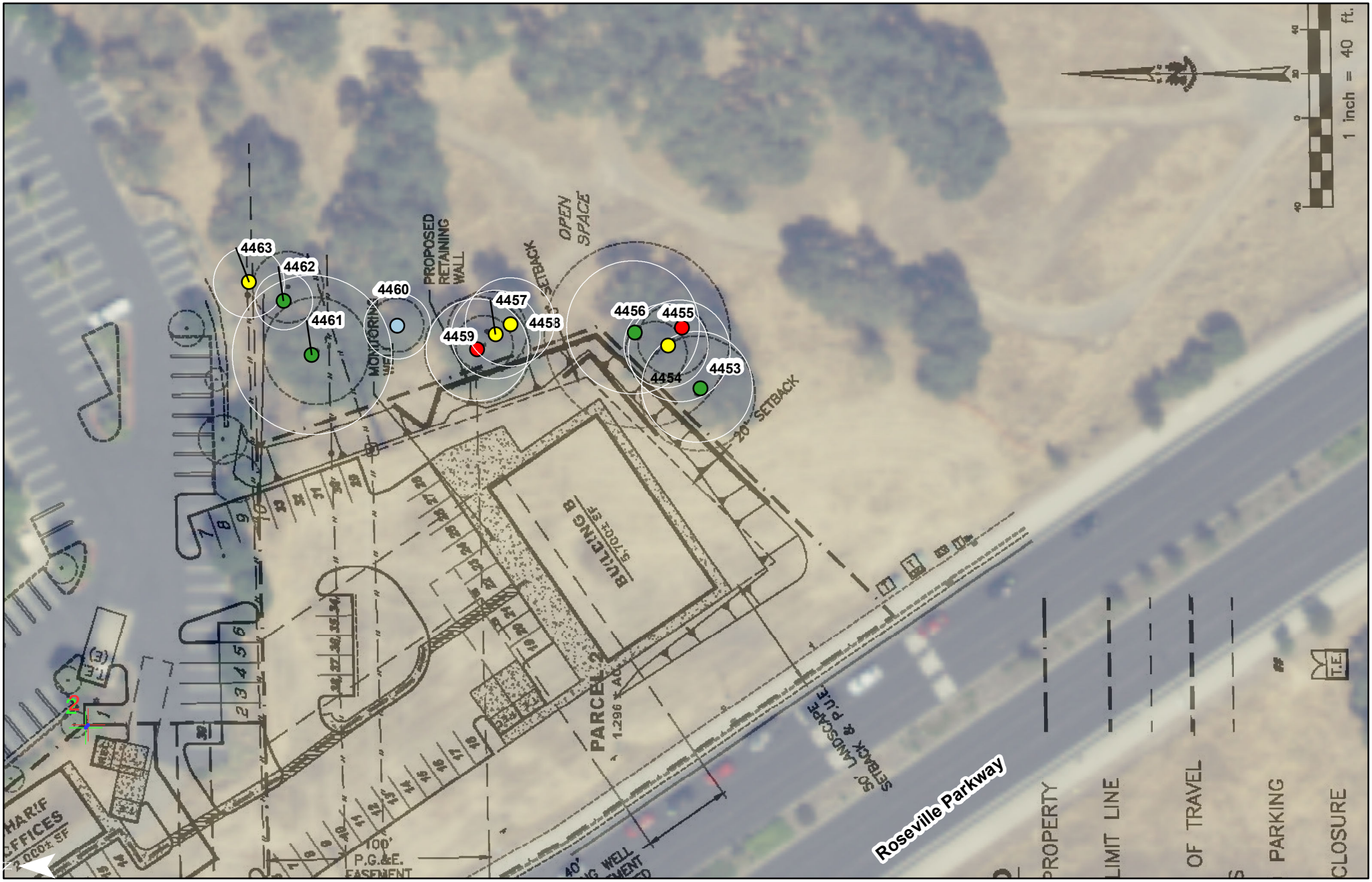
5/23/2018

1001 Creekside Ridge Drive

in

City of Roseville, California

Tree Rating
- 1 Extreme Structure or Health Problems
- 2 Major Structure or Health Problems
- 3 Fair - Minor Problems
- 4 Good - No Apparent Problems
- Canopy



0 0.0075 0.015 0.03 Miles

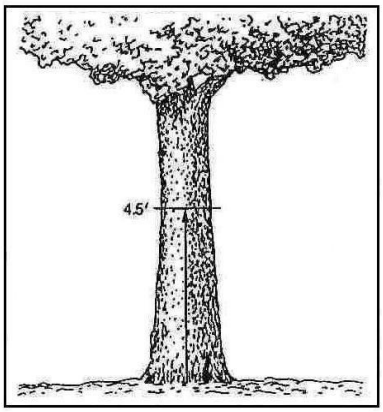
Please refer to the Arborist Report for additional information.
Parcels downloaded 05/23/2018 from County website.
Tree locations are approximate.

Tree Size Expressed by Trunk Diameter

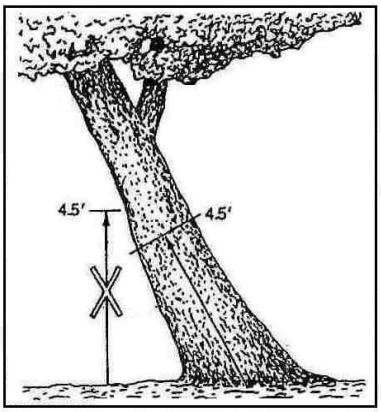
Tree SIZE Expressed by Trunk Diameter

"The height at which the trunk diameter of a tree is measured depends upon its size. The American Standard for Nursery Stock (ANSI, 1990) state that measurements shall be taken 6 inches (15 cm) above the ground for trunk diameters up to and including 4 inches (10 cm). Larger trees (assumed, but not stated, to be of transplantable size) are to be measured at 12 inches (30 cm). Trees normally considered too large to transplant are to be measured 4.5 feet [4'-6" is also called diameter breast high or dbh] (1.4 m) above the ground. Trees, like conifers, which have branches below 4.5 feet should be measured at a height that most effectively represents the size of the tree." The diameter is calculated by first measuring the circumference divided by 3.14 (π called pi) or by using a "diameter tape" whereon the inches are multiplied by π and shown to produce the diameter directly.

This is the dbh standard for measurement as shown in figure 4-2.



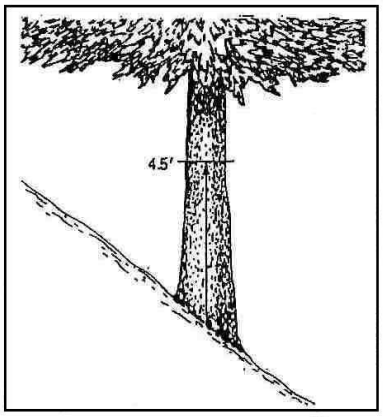
Figures 4-2. Trees with fairly straight, upright trunks with the lowest branch arising on the trunk higher than 6 feet (1.8 m) above the ground should be measured at 4.5 feet (1.4 m).

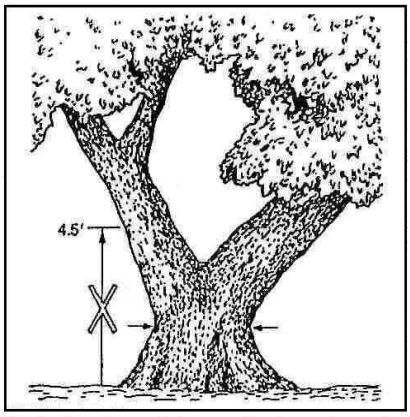


Figures 4-3 (top) and 4-4 (bottom). In each case, the trunk circumference should be measured at right angles to the trunk 4.5 feet (1.4 cm) along the center of the trunk axis so the height is the average of the s hortest and longest sides of the trunk.

There are some exceptions to the dbh standard as shown in the figures 4-3, 4-4, 4-5 & 4-6.

Figure 4-6. In a multi-stem tree, measure the trunk circumference of each trunk at 4.5 feet (1.4 m) above the ground. The area of each trunk is determined and then added together to obtain a trunk area that is representative of the size of the tree and each of the stems contribute its proportionate share to the canopy.





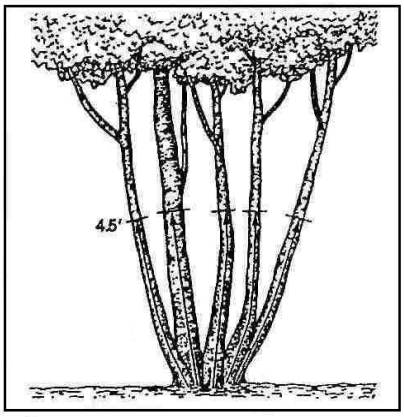


Figure 4-5. When low branches preclude measuring the trunk at 4.5 feet (1.4 m) measure the smallest circumference below the smallest branch. In this example, an alternative would be to determine the sum of the cross-sectional areas of the two stems measured about 12 inches (30 cm) above the crotch; then average the sum of the two branch areas and the smallest cross-sectional area below the branches. This may give a better estimate of tree size. Record the height of measurement(s) and the reasons the height or those heights were chosen.

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This information is taken from: Guide for Planting Appraisal, English Edition, authored by the Council of Tree & Landscape Appraisers, edited, published & copyrighted by the International Society of Arboriculture, representing: American Association of Nurseryman, American Society of Consulting Arborist, Associated Landscape Contractors of America, International Society of Arboriculture and the National Arborist Association.

Tree SIZE Expressed by Trunk Diameter	
Scale: NTS	Drawing: TSE

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Disclosure, Assumptions and Disclaimer

1) I, Nicole Harrison, *ISA Certified Arborist WE-6500AM,* with "**ABACUS**", did personally inspect the site and investigated the tree(s) as mentioned in this report and I performed all aspects of this report unless noted otherwise in the report.

2) We have neither financial interest in the tree work that may or may not be done, nor financial interest in the property where the tree(s) is (are) located unless noted within the report.

3) All opinions and recommendations expressed herein this report are ours solely. We have used our specialized education, knowledge, training and experience to examine the tree(s) and to make our opinions and recommendations to enhance the beauty, health and longevity, with an attempt to reduce the risk of who and/or what is near these trees. We cannot guarantee or warranty that a tree will not be healthy or safe under all circumstances, nor for a specific period of time or that problems may not arise in the future.

4) Our report with its opinions and recommendations are limited to the tree(s) inspected.

5) We attempt to be cognizant of the whole scope of a project, but many matters are beyond the scope of our professional consulting arborist services such as: exact property boundaries, property ownership, site lines, easements, codes, covenants & restrictions (CC&Rs), disputed between neighbors, and other issues.

6) We rely on the information disclosed to us and assume the information to be complete, true, and accurate.

7) The inspection is limited to visual examination of accessible items of the tree(s), from the ground unless otherwise noted, without excavation, probing, boring, or dissection, unless noted otherwise. Only information covered in this report was examined, and reflects the condition of those inspected items at that specific time.

8) Clients may choose to accept or disregard these opinions and recommendations of the arborist or to seek additional advice.

9) This report is copyrighted. Any modification or partial use shall nullify the whole report. Do not copy without written permission. This report is for the client and the client's assignees.

10) 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 detail, reports or surveys.

11) We shall not attend or give a deposition and/or attend court by reason of this report unless fees are contracted for in advance, according to our standard fee schedule, adjusted yearly, for such services as described.

Signed: _____

Arborist Report by:

ABACUS

Nicole Harrison © 2018

Creekside C6 Retail

Placer-Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	2.00	1000sqft	0.05	2,000.00	0
Regional Shopping Center	4.50	1000sqft	0.10	4,500.00	0
Regional Shopping Center	6.00	1000sqft	0.14	6,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2020
Utility Company	Roseville Electric				
CO2 Intensity (lb/MWhr)	793.8	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 1 sharif jeweler retail building, 1 sharif office building, 1 three tenant retail building

Construction Phase - assumed construction timeline. not based on actual data from the applicant

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	23.00
tblConstructionPhase	NumDays	100.00	285.00
tblConstructionPhase	NumDays	2.00	23.00
tblConstructionPhase	NumDays	5.00	21.00
tblConstructionPhase	NumDays	1.00	22.00
tblConstructionPhase	PhaseEndDate	8/6/2019	8/5/2020
tblConstructionPhase	PhaseEndDate	7/23/2019	6/4/2020
tblConstructionPhase	PhaseEndDate	3/5/2019	5/2/2019
tblConstructionPhase	PhaseEndDate	7/30/2019	7/3/2020
tblConstructionPhase	PhaseEndDate	3/1/2019	4/1/2019
tblConstructionPhase	PhaseStartDate	7/31/2019	7/4/2020
tblConstructionPhase	PhaseStartDate	3/6/2019	5/3/2019
tblConstructionPhase	PhaseStartDate	3/2/2019	4/2/2019
tblConstructionPhase	PhaseStartDate	7/24/2019	6/5/2020
tblGrading	AcresOfGrading	11.00	0.50

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2019	0.1044	1.0702	0.8061	1.3200e-003	0.0141	0.0627	0.0769	6.1900e-003	0.0579	0.0641	0.0000	118.6457	118.6457	0.0337	0.0000	119.4883
2020	0.1190	0.6053	0.5231	8.5000e-004	4.0600e-003	0.0348	0.0388	1.1000e-003	0.0321	0.0332	0.0000	74.8015	74.8015	0.0214	0.0000	75.3376
Maximum	**0.1190**	**1.0702**	**0.8061**	**1.3200e-003**	**0.0141**	**0.0627**	**0.0769**	**6.1900e-003**	**0.0579**	**0.0641**	**0.0000**	**118.6457**	**118.6457**	**0.0337**	**0.0000**	**119.4883**

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2019	0.1044	1.0702	0.8061	1.3200e-003	0.0141	0.0627	0.0769	6.1900e-003	0.0579	0.0641	0.0000	118.6455	118.6455	0.0337	0.0000	119.4881
2020	0.1190	0.6053	0.5231	8.5000e-004	4.0600e-003	0.0348	0.0388	1.1000e-003	0.0321	0.0332	0.0000	74.8014	74.8014	0.0214	0.0000	75.3375
Maximum	**0.1190**	**1.0702**	**0.8061**	**1.3200e-003**	**0.0141**	**0.0627**	**0.0769**	**6.1900e-003**	**0.0579**	**0.0641**	**0.0000**	**118.6455**	**118.6455**	**0.0337**	**0.0000**	**119.4881**

	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**3-1-2019**	**5-31-2019**	0.3317	0.3317
2	**6-1-2019**	**8-31-2019**	0.3636	0.3636
3	**9-1-2019**	**11-30-2019**	0.3598	0.3598
4	**12-1-2019**	**2-29-2020**	0.3365	0.3365
5	**3-1-2020**	**5-31-2020**	0.3280	0.3280
6	**6-1-2020**	**8-31-2020**	0.1804	0.1804
		Highest	0.3636	0.3636

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	0.0546	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000	0.0000	2.4000e-004
Energy	8.4000e-004	7.6400e-003	6.4100e-003	5.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004	0.0000	60.0947	60.0947	2.0500e-003	5.4000e-004	60.3081
Mobile	0.1343	0.8888	1.3350	4.3700e-003	0.2971	4.8200e-003	0.3020	0.0799	4.5400e-003	0.0845	0.0000	402.1125	402.1125	0.0198	0.0000	402.6064
Waste						0.0000	0.0000		0.0000	0.0000	2.6166	0.0000	2.6166	0.1546	0.0000	6.4824
Water						0.0000	0.0000		0.0000	0.0000	0.3595	3.0832	3.4427	0.0370	9.0000e-004	4.6354
Total	**0.1898**	**0.8965**	**1.3415**	**4.4200e-003**	**0.2971**	**5.4000e-003**	**0.3025**	**0.0799**	**5.1200e-003**	**0.0851**	**2.9761**	**465.2906**	**468.2666**	**0.2135**	**1.4400e-003**	**474.0325**

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	0.0546	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000	0.0000	2.4000e-004
Energy	8.4000e-004	7.6400e-003	6.4100e-003	5.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004	0.0000	60.0947	60.0947	2.0500e-003	5.4000e-004	60.3081
Mobile	0.1343	0.8888	1.3350	4.3700e-003	0.2971	4.8200e-003	0.3020	0.0799	4.5400e-003	0.0845	0.0000	402.1125	402.1125	0.0198	0.0000	402.6064
Waste						0.0000	0.0000		0.0000	0.0000	2.6166	0.0000	2.6166	0.1546	0.0000	6.4824
Water						0.0000	0.0000		0.0000	0.0000	0.3595	3.0832	3.4427	0.0370	9.0000e-004	4.6354
Total	**0.1898**	**0.8965**	**1.3415**	**4.4200e-003**	**0.2971**	**5.4000e-003**	**0.3025**	**0.0799**	**5.1200e-003**	**0.0851**	**2.9761**	**465.2906**	**468.2666**	**0.2135**	**1.4400e-003**	**474.0325**

	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	Site Preparation	Site Preparation	3/1/2019	4/1/2019	5	22	
2	Grading	Grading	4/2/2019	5/2/2019	5	23	
3	Building Construction	Building Construction	5/3/2019	6/4/2020	5	285	
4	Paving	Paving	6/5/2020	7/3/2020	5	21	
5	Architectural Coating	Architectural Coating	7/4/2020	8/5/2020	5	23	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 18,750; Non-Residential Outdoor: 6,250; Striped Parking Area: 0 (Architectural Coating – sqft)

<u>OffRoad Equipment</u>

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	4.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	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					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.9100e-003	0.0981	0.0456	1.1000e-004		4.0400e-003	4.0400e-003		3.7200e-003	3.7200e-003	0.0000	9.6315	9.6315	3.0500e-003	0.0000	9.7076
Total	**7.9100e-003**	**0.0981**	**0.0456**	**1.1000e-004**	**2.7000e-004**	**4.0400e-003**	**4.3100e-003**	**3.0000e-005**	**3.7200e-003**	**3.7500e-003**	**0.0000**	**9.6315**	**9.6315**	**3.0500e-003**	**0.0000**	**9.7076**

Unmitigated Construction Off-Site

	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					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.5900e-003	0.0000	4.3000e-004	0.0000	4.3000e-004	1.1000e-004	0.0000	1.2000e-004	0.0000	0.3851	0.3851	1.0000e-005	0.0000	0.3854
Total	**2.1000e-004**	**1.5000e-004**	**1.5900e-003**	**0.0000**	**4.3000e-004**	**0.0000**	**4.3000e-004**	**1.1000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.3851**	**0.3851**	**1.0000e-005**	**0.0000**	**0.3854**

3.2 Site Preparation - 2019

Mitigated Construction On-Site

	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					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.9100e-003	0.0981	0.0456	1.1000e-004		4.0400e-003	4.0400e-003		3.7200e-003	3.7200e-003	0.0000	9.6314	9.6314	3.0500e-003	0.0000	9.7076
Total	**7.9100e-003**	**0.0981**	**0.0456**	**1.1000e-004**	**2.7000e-004**	**4.0400e-003**	**4.3100e-003**	**3.0000e-005**	**3.7200e-003**	**3.7500e-003**	**0.0000**	**9.6314**	**9.6314**	**3.0500e-003**	**0.0000**	**9.7076**

Mitigated Construction Off-Site

	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					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.5900e-003	0.0000	4.3000e-004	0.0000	4.3000e-004	1.1000e-004	0.0000	1.2000e-004	0.0000	0.3851	0.3851	1.0000e-005	0.0000	0.3854
Total	**2.1000e-004**	**1.5000e-004**	**1.5900e-003**	**0.0000**	**4.3000e-004**	**0.0000**	**4.3000e-004**	**1.1000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.3851**	**0.3851**	**1.0000e-005**	**0.0000**	**0.3854**

3.3 Grading - 2019

Unmitigated Construction On-Site

	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					
Fugitive Dust					8.6600e-003	0.0000	8.6600e-003	4.7600e-003	0.0000	4.7600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0110	0.0989	0.0885	1.4000e-004		6.1800e-003	6.1800e-003		5.8900e-003	5.8900e-003	0.0000	12.0983	12.0983	2.3100e-003	0.0000	12.1559
Total	**0.0110**	**0.0989**	**0.0885**	**1.4000e-004**	**8.6600e-003**	**6.1800e-003**	**0.0148**	**4.7600e-003**	**5.8900e-003**	**0.0107**	**0.0000**	**12.0983**	**12.0983**	**2.3100e-003**	**0.0000**	**12.1559**

Unmitigated Construction Off-Site

	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					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	3.1000e-004	3.3300e-003	1.0000e-005	9.0000e-004	1.0000e-005	9.1000e-004	2.4000e-004	1.0000e-005	2.5000e-004	0.0000	0.8052	0.8052	2.0000e-005	0.0000	0.8058
Total	**4.4000e-004**	**3.1000e-004**	**3.3300e-003**	**1.0000e-005**	**9.0000e-004**	**1.0000e-005**	**9.1000e-004**	**2.4000e-004**	**1.0000e-005**	**2.5000e-004**	**0.0000**	**0.8052**	**0.8052**	**2.0000e-005**	**0.0000**	**0.8058**

3.3 Grading - 2019

Mitigated Construction On-Site

	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					
Fugitive Dust					8.6600e-003	0.0000	8.6600e-003	4.7600e-003	0.0000	4.7600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0110	0.0989	0.0885	1.4000e-004		6.1800e-003	6.1800e-003		5.8900e-003	5.8900e-003	0.0000	12.0983	12.0983	2.3100e-003	0.0000	12.1559
Total	**0.0110**	**0.0989**	**0.0885**	**1.4000e-004**	**8.6600e-003**	**6.1800e-003**	**0.0148**	**4.7600e-003**	**5.8900e-003**	**0.0107**	**0.0000**	**12.0983**	**12.0983**	**2.3100e-003**	**0.0000**	**12.1559**

Mitigated Construction Off-Site

	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					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	3.1000e-004	3.3300e-003	1.0000e-005	9.0000e-004	1.0000e-005	9.1000e-004	2.4000e-004	1.0000e-005	2.5000e-004	0.0000	0.8052	0.8052	2.0000e-005	0.0000	0.8058
Total	**4.4000e-004**	**3.1000e-004**	**3.3300e-003**	**1.0000e-005**	**9.0000e-004**	**1.0000e-005**	**9.1000e-004**	**2.4000e-004**	**1.0000e-005**	**2.5000e-004**	**0.0000**	**0.8052**	**0.8052**	**2.0000e-005**	**0.0000**	**0.8058**

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	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					
Off-Road	0.0828	0.8495	0.6525	9.8000e-004		0.0524	0.0524		0.0482	0.0482	0.0000	88.4899	88.4899	0.0280	0.0000	89.1898
Total	**0.0828**	**0.8495**	**0.6525**	**9.8000e-004**		**0.0524**	**0.0524**		**0.0482**	**0.0482**	**0.0000**	**88.4899**	**88.4899**	**0.0280**	**0.0000**	**89.1898**

Unmitigated Construction Off-Site

	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					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.7000e-004	0.0223	4.6200e-003	5.0000e-005	1.1300e-003	1.3000e-004	1.2600e-003	3.3000e-004	1.3000e-004	4.6000e-004	0.0000	4.8131	4.8131	2.5000e-004	0.0000	4.8195
Worker	1.3100e-003	9.5000e-004	0.0100	3.0000e-005	2.7200e-003	2.0000e-005	2.7400e-003	7.2000e-004	2.0000e-005	7.4000e-004	0.0000	2.4226	2.4226	7.0000e-005	0.0000	2.4243
Total	**2.0800e-003**	**0.0232**	**0.0147**	**8.0000e-005**	**3.8500e-003**	**1.5000e-004**	**4.0000e-003**	**1.0500e-003**	**1.5000e-004**	**1.2000e-003**	**0.0000**	**7.2357**	**7.2357**	**3.2000e-004**	**0.0000**	**7.2437**

3.4 Building Construction - 2019

Mitigated Construction On-Site

	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					
Off-Road	0.0828	0.8495	0.6525	9.8000e-004		0.0524	0.0524		0.0482	0.0482	0.0000	88.4898	88.4898	0.0280	0.0000	89.1897
Total	**0.0828**	**0.8495**	**0.6525**	**9.8000e-004**		**0.0524**	**0.0524**		**0.0482**	**0.0482**	**0.0000**	**88.4898**	**88.4898**	**0.0280**	**0.0000**	**89.1897**

Mitigated Construction Off-Site

	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					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.7000e-004	0.0223	4.6200e-003	5.0000e-005	1.1300e-003	1.3000e-004	1.2600e-003	3.3000e-004	1.3000e-004	4.6000e-004	0.0000	4.8131	4.8131	2.5000e-004	0.0000	4.8195
Worker	1.3100e-003	9.5000e-004	0.0100	3.0000e-005	2.7200e-003	2.0000e-005	2.7400e-003	7.2000e-004	2.0000e-005	7.4000e-004	0.0000	2.4226	2.4226	7.0000e-005	0.0000	2.4243
Total	**2.0800e-003**	**0.0232**	**0.0147**	**8.0000e-005**	**3.8500e-003**	**1.5000e-004**	**4.0000e-003**	**1.0500e-003**	**1.5000e-004**	**1.2000e-003**	**0.0000**	**7.2357**	**7.2357**	**3.2000e-004**	**0.0000**	**7.2437**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	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					
Off-Road	0.0483	0.4957	0.4137	6.4000e-004		0.0293	0.0293		0.0269	0.0269	0.0000	56.0339	56.0339	0.0181	0.0000	56.4869
Total	**0.0483**	**0.4957**	**0.4137**	**6.4000e-004**		**0.0293**	**0.0293**		**0.0269**	**0.0269**	**0.0000**	**56.0339**	**56.0339**	**0.0181**	**0.0000**	**56.4869**

Unmitigated Construction Off-Site

	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					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1000e-004	0.0133	2.6300e-003	3.0000e-005	7.3000e-004	6.0000e-005	7.9000e-004	2.1000e-004	6.0000e-005	2.7000e-004	0.0000	3.0916	3.0916	1.5000e-004	0.0000	3.0954
Worker	7.8000e-004	5.4000e-004	5.8100e-003	2.0000e-005	1.7600e-003	1.0000e-005	1.7700e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.5183	1.5183	4.0000e-005	0.0000	1.5192
Total	**1.1900e-003**	**0.0139**	**8.4400e-003**	**5.0000e-005**	**2.4900e-003**	**7.0000e-005**	**2.5600e-003**	**6.8000e-004**	**7.0000e-005**	**7.5000e-004**	**0.0000**	**4.6098**	**4.6098**	**1.9000e-004**	**0.0000**	**4.6146**

3.4 Building Construction - 2020

Mitigated Construction On-Site

	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					
Off-Road	0.0483	0.4957	0.4137	6.4000e-004		0.0293	0.0293		0.0269	0.0269	0.0000	56.0338	56.0338	0.0181	0.0000	56.4869
Total	**0.0483**	**0.4957**	**0.4137**	**6.4000e-004**		**0.0293**	**0.0293**		**0.0269**	**0.0269**	**0.0000**	**56.0338**	**56.0338**	**0.0181**	**0.0000**	**56.4869**

Mitigated Construction Off-Site

	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					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1000e-004	0.0133	2.6300e-003	3.0000e-005	7.3000e-004	6.0000e-005	7.9000e-004	2.1000e-004	6.0000e-005	2.7000e-004	0.0000	3.0916	3.0916	1.5000e-004	0.0000	3.0954
Worker	7.8000e-004	5.4000e-004	5.8100e-003	2.0000e-005	1.7600e-003	1.0000e-005	1.7700e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.5183	1.5183	4.0000e-005	0.0000	1.5192
Total	**1.1900e-003**	**0.0139**	**8.4400e-003**	**5.0000e-005**	**2.4900e-003**	**7.0000e-005**	**2.5600e-003**	**6.8000e-004**	**7.0000e-005**	**7.5000e-004**	**0.0000**	**4.6098**	**4.6098**	**1.9000e-004**	**0.0000**	**4.6146**

3.5 Paving - 2020

Unmitigated Construction On-Site

	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					
Off-Road	8.1000e-003	0.0759	0.0747	1.2000e-004		4.1500e-003	4.1500e-003		3.8500e-003	3.8500e-003	0.0000	9.8626	9.8626	2.8700e-003	0.0000	9.9344
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**8.1000e-003**	**0.0759**	**0.0747**	**1.2000e-004**		**4.1500e-003**	**4.1500e-003**		**3.8500e-003**	**3.8500e-003**	**0.0000**	**9.8626**	**9.8626**	**2.8700e-003**	**0.0000**	**9.9344**

Unmitigated Construction Off-Site

	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					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	4.6000e-004	4.9100e-003	1.0000e-005	1.4800e-003	1.0000e-005	1.4900e-003	4.0000e-004	1.0000e-005	4.0000e-004	0.0000	1.2810	1.2810	3.0000e-005	0.0000	1.2818
Total	**6.5000e-004**	**4.6000e-004**	**4.9100e-003**	**1.0000e-005**	**1.4800e-003**	**1.0000e-005**	**1.4900e-003**	**4.0000e-004**	**1.0000e-005**	**4.0000e-004**	**0.0000**	**1.2810**	**1.2810**	**3.0000e-005**	**0.0000**	**1.2818**

3.5 Paving - 2020

Mitigated Construction On-Site

	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					
Off-Road	8.1000e-003	0.0759	0.0747	1.2000e-004		4.1500e-003	4.1500e-003		3.8500e-003	3.8500e-003	0.0000	9.8626	9.8626	2.8700e-003	0.0000	9.9344
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**8.1000e-003**	**0.0759**	**0.0747**	**1.2000e-004**		**4.1500e-003**	**4.1500e-003**		**3.8500e-003**	**3.8500e-003**	**0.0000**	**9.8626**	**9.8626**	**2.8700e-003**	**0.0000**	**9.9344**

Mitigated Construction Off-Site

	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					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	4.6000e-004	4.9100e-003	1.0000e-005	1.4800e-003	1.0000e-005	1.4900e-003	4.0000e-004	1.0000e-005	4.0000e-004	0.0000	1.2810	1.2810	3.0000e-005	0.0000	1.2818
Total	**6.5000e-004**	**4.6000e-004**	**4.9100e-003**	**1.0000e-005**	**1.4800e-003**	**1.0000e-005**	**1.4900e-003**	**4.0000e-004**	**1.0000e-005**	**4.0000e-004**	**0.0000**	**1.2810**	**1.2810**	**3.0000e-005**	**0.0000**	**1.2818**

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	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					
Archit. Coating	0.0579					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7900e-003	0.0194	0.0211	3.0000e-005		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	2.9362	2.9362	2.3000e-004	0.0000	2.9419
Total	**0.0607**	**0.0194**	**0.0211**	**3.0000e-005**		**1.2800e-003**	**1.2800e-003**		**1.2800e-003**	**1.2800e-003**	**0.0000**	**2.9362**	**2.9362**	**2.3000e-004**	**0.0000**	**2.9419**

Unmitigated Construction Off-Site

	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					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.0000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0780	0.0780	0.0000	0.0000	0.0780
Total	**4.0000e-005**	**3.0000e-005**	**3.0000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0780**	**0.0780**	**0.0000**	**0.0000**	**0.0780**

3.6 Architectural Coating - 2020

Mitigated Construction On-Site

	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					
Archit. Coating	0.0579					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7900e-003	0.0194	0.0211	3.0000e-005		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	2.9362	2.9362	2.3000e-004	0.0000	2.9419
Total	**0.0607**	**0.0194**	**0.0211**	**3.0000e-005**		**1.2800e-003**	**1.2800e-003**		**1.2800e-003**	**1.2800e-003**	**0.0000**	**2.9362**	**2.9362**	**2.3000e-004**	**0.0000**	**2.9419**

Mitigated Construction Off-Site

	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					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.0000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0780	0.0780	0.0000	0.0000	0.0780
Total	**4.0000e-005**	**3.0000e-005**	**3.0000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0780**	**0.0780**	**0.0000**	**0.0000**	**0.0780**

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	0.1343	0.8888	1.3350	4.3700e-003	0.2971	4.8200e-003	0.3020	0.0799	4.5400e-003	0.0845	0.0000	402.1125	402.1125	0.0198	0.0000	402.6064
Unmitigated	0.1343	0.8888	1.3350	4.3700e-003	0.2971	4.8200e-003	0.3020	0.0799	4.5400e-003	0.0845	0.0000	402.1125	402.1125	0.0198	0.0000	402.6064

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	22.06	4.92	2.10	40,052	40,052
Regional Shopping Center	192.15	224.87	113.58	325,412	325,412
Regional Shopping Center	256.20	299.82	151.44	433,883	433,883
Total	470.41	529.61	267.12	799,347	799,347

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
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.489257	0.041257	0.220156	0.132626	0.025790	0.006586	0.027831	0.045583	0.001467	0.001229	0.006102	0.000783	0.001333
Regional Shopping Center	0.489257	0.041257	0.220156	0.132626	0.025790	0.006586	0.027831	0.045583	0.001467	0.001229	0.006102	0.000783	0.001333

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					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	51.7823	51.7823	1.8900e-003	3.9000e-004	51.9462
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	51.7823	51.7823	1.8900e-003	3.9000e-004	51.9462
NaturalGas Mitigated	8.4000e-004	7.6400e-003	6.4100e-003	5.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004	0.0000	8.3125	8.3125	1.6000e-004	1.5000e-004	8.3619
NaturalGas Unmitigated	8.4000e-004	7.6400e-003	6.4100e-003	5.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004	0.0000	8.3125	8.3125	1.6000e-004	1.5000e-004	8.3619

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					
General Office Building	32920	1.8000e-004	1.6100e-003	1.3600e-003	1.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	1.7567	1.7567	3.0000e-005	3.0000e-005	1.7672
Regional Shopping Center	52650	2.8000e-004	2.5800e-003	2.1700e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.8096	2.8096	5.0000e-005	5.0000e-005	2.8263
Regional Shopping Center	70200	3.8000e-004	3.4400e-003	2.8900e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	3.7461	3.7461	7.0000e-005	7.0000e-005	3.7684
Total		**8.4000e-004**	**7.6300e-003**	**6.4200e-003**	**5.0000e-005**		**5.8000e-004**	**5.8000e-004**		**5.8000e-004**	**5.8000e-004**	**0.0000**	**8.3125**	**8.3125**	**1.5000e-004**	**1.5000e-004**	**8.3619**

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					
General Office Building	32920	1.8000e-004	1.6100e-003	1.3600e-003	1.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	1.7567	1.7567	3.0000e-005	3.0000e-005	1.7672
Regional Shopping Center	52650	2.8000e-004	2.5800e-003	2.1700e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.8096	2.8096	5.0000e-005	5.0000e-005	2.8263
Regional Shopping Center	70200	3.8000e-004	3.4400e-003	2.8900e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	3.7461	3.7461	7.0000e-005	7.0000e-005	3.7684
Total		**8.4000e-004**	**7.6300e-003**	**6.4200e-003**	**5.0000e-005**		**5.8000e-004**	**5.8000e-004**		**5.8000e-004**	**5.8000e-004**	**0.0000**	**8.3125**	**8.3125**	**1.5000e-004**	**1.5000e-004**	**8.3619**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	20020	7.2084	2.6000e-004	5.0000e-005	7.2313
Regional Shopping Center	53055	19.1031	7.0000e-004	1.4000e-004	19.1636
Regional Shopping Center	70740	25.4708	9.3000e-004	1.9000e-004	25.5514
Total		**51.7823**	**1.8900e-003**	**3.8000e-004**	**51.9462**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	20020	7.2084	2.6000e-004	5.0000e-005	7.2313
Regional Shopping Center	53055	19.1031	7.0000e-004	1.4000e-004	19.1636
Regional Shopping Center	70740	25.4708	9.3000e-004	1.9000e-004	25.5514
Total		**51.7823**	**1.8900e-003**	**3.8000e-004**	**51.9462**

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	0.0546	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000	0.0000	2.4000e-004
Unmitigated	0.0546	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000	0.0000	2.4000e-004

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	5.7900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0488					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000	0.0000	2.4000e-004
Total	**0.0546**	**0.0000**	**1.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.2000e-004**	**2.2000e-004**	**0.0000**	**0.0000**	**2.4000e-004**

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	5.7900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0488					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000	0.0000	2.4000e-004
Total	**0.0546**	**0.0000**	**1.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.2000e-004**	**2.2000e-004**	**0.0000**	**0.0000**	**2.4000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3.4427	0.0370	9.0000e-004	4.6354
Unmitigated	3.4427	0.0370	9.0000e-004	4.6354

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.355467 / 0.217867	1.0799	0.0116	2.8000e-004	1.4540
Regional Shopping Center	0.777761 / 0.476693	2.3628	0.0254	6.1000e-004	3.1814
Total		**3.4427**	**0.0370**	**8.9000e-004**	**4.6354**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.355467 / 0.217867	1.0799	0.0116	2.8000e-004	1.4540
Regional Shopping Center	0.777761 / 0.476693	2.3628	0.0254	6.1000e-004	3.1814
Total		**3.4427**	**0.0370**	**8.9000e-004**	**4.6354**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.6166	0.1546	0.0000	6.4824
Unmitigated	2.6166	0.1546	0.0000	6.4824

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	1.86	0.3776	0.0223	0.0000	0.9354
Regional Shopping Center	11.03	2.2390	0.1323	0.0000	5.5470
Total		**2.6166**	**0.1546**	**0.0000**	**6.4824**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	1.86	0.3776	0.0223	0.0000	0.9354
Regional Shopping Center	11.03	2.2390	0.1323	0.0000	5.5470
Total		**2.6166**	**0.1546**	**0.0000**	**6.4824**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation