

NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

Notice is hereby given that, as Lead Agency, the City of Roseville, Development Services Department, Planning Division has prepared an Initial Study leading to a Mitigated Negative Declaration for the project referenced below. This Mitigated Negative Declaration is available for public review and comment.

Project Title/File#: NIPA PCL 35 – Blue Oaks Retail Center Phase 2; PL#22-0186

Project Location: 1480 Blue Oaks Boulevard; APN 482-340-012-000

Project Owner: Roseville Blue Oaks Partners, LLC

Project Applicant: Andi Panagopoulos, Cunningham Engineering

Project Planner: Escarlet Mar, Associate Planner

Project Description:

The project site is not identified on any list of hazardous materials sites compiled pursuant to California Government Code Section 65962.5

Document Review and Availability: The public review and comment period begins on March 1, 2023 and ends on March 20, 2023. The Mitigated Negative Declaration may be reviewed during normal business hours (8:00 am to 4:00 pm) at the Planning Division offices, located at 311 Vernon Street. It may also be viewed online at <https://www.roseville.ca.us/environmentaldocuments> (under Private Development Projects).

Written comments on the adequacy of the Mitigated Negative Declaration may be submitted to Escarlet Mar, Planning Division, 311 Vernon Street, Roseville, CA 95678, and must be received no later than 5:00 pm on March 20, 2023.

This project will be scheduled for a public hearing before the City's Planning Commission. At this hearing, the Planning Commission will consider the Mitigated Negative Declaration and associated project entitlements. Separate notices will be published when the hearing is scheduled.

Mike Isom
Development Services Director

Dated: February 27, 2023

Publish: March 1, 2023

MITIGATED NEGATIVE DECLARATION

Project Title/File Number: NIPA PCL 35 – Blue Oaks Retail Center Phase 2; PL#22-0186
Project Location: 1480 Blue Oaks Boulevard, Roseville, Placer County; (APN 482-340-012-000)
Project Applicant: Andi Panagopoulos, Cunningham Engineering; (916) 455-2026; 2120 20th Street, Suite 3, Sacramento, CA 95818
Property Owner: Roseville Blue Oaks Partners, LLC; (917) 688-4020; 30 East 23rd Street, 10th Floor, New York, NY 10010
Lead Agency Contact Person: Escarlet Mar, Associate Planner - City of Roseville; (916) 774-5247
Date: February 27, 2023

Project Description:

The applicant requests a Conditional Use Permit, Design Review Permit, and a Tentative Subdivision Map for a ±8.40-acre commercial center. The project would include six (6) freestanding commercial buildings ranging between 950 and 13,200 square feet in size; two (2) of the commercial buildings are proposed with a drive-through user (i.e., a Chick-fil-A and Dutch Brothers), the remaining building tenants are unknown at this time. A conditional use permit for the two (2) drive-through food pad users is proposed since the property is contiguous to residential zoned properties. The Design Review Permit would establish the design and colors of both the Chick-fil-A (Lot 2) and Dutch Brothers (Lot 4) buildings. At a later date, the unknown tenants (i.e., Lots 1, 3, 5, 6) will be required to obtain subsequent design review approvals prior to building permit issuance. The tentative subdivision map as proposed would create a total of six (6) 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.*

INITIAL STUDY & ENVIRONMENTAL CHECKLIST

Project Title/File Number:	NIPA PCL 35 – Blue Oaks Retail Center Phase 2; PL#22-0186
Project Location:	The project site is located at 1480 Blue Oaks Boulevard, on Parcel 35 of the North Industrial Plan Area. The site is bordered by Blue Oaks Boulevard on the south, Woodcreek Oaks Boulevard on the west, and existing single-family dwelling units on the north and east. The site has a land use designation of Community Commercial (CC) and a zoning designation of Community Commercial with a Special Area overlay (CC/SA).
Project Description:	The applicant requests a Conditional Use Permit, Design Review Permit, and a Tentative Subdivision Map for a ±8.40-acre commercial center. The project would include six (6) freestanding commercial buildings ranging between 950 and 13,200 square feet in size; two (2) of the commercial buildings are proposed with a drive-through user (i.e., a Chick-fil-A and Dutch Brothers), the remaining building tenants are unknown at this time. A conditional use permit for the two (2) drive-through food pad users is proposed since the property is contiguous to residential zoned properties. The Design Review Permit would establish the design and colors of both the Chick-fil-A (Lot 2) and Dutch Brothers (Lot 4) buildings. At a later date, the unknown tenants (i.e., Lots 1, 3, 5, 6) will be required to obtain subsequent design review approvals prior to building permit issuance. The tentative subdivision map as proposed would create a total of six (6) parcels.
Project Applicant:	Andi Panagopoulos, Cunningham Engineering
Property Owner:	Roseville Blue Oaks Partners, LLC
Lead Agency Contact:	Escarlet Mar, Associate Planner; Phone (916) 774-5247

This initial study has been prepared to identify and assess the anticipated environmental impacts of the above described project application. The document relies on previous environmental documents (see Attachments) 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 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	4
City of Roseville Mitigation Ordinances, Guidelines, and Standards	6
Other Environmental Documents Relied Upon	7
Explanation of Initial Study Checklist	7
Initial Study Checklist	
I. Aesthetics	8
II. Agricultural & Forestry Resources	10
III. Air Quality	11
IV. Biological Resources	14
V. Cultural Resources	18
VI. Energy	19
VII. Geology and Soils	20
VIII. Greenhouse Gases	23
IX. Hazards and Hazardous Materials	25
X. Hydrology and Water Quality	28
XI. Land Use and Planning	30
XII. Mineral Resources	31
XIII. Noise	32
XIV. Population and Housing	37
XV. Public Services	38
XVI. Recreation	39
XVII. Transportation	40
XVIII. Tribal Cultural Resources	43
XIX. Utilities and Service Systems	46
XX. Wildfire	48
XXI. Mandatory Findings of Significance	49
Environmental Determination	51
Attachments	51

PROJECT DESCRIPTION

Project Location

The ±8.40-acre project site is located at 1480 Blue Oaks Boulevard (APN 482-340-012-000), within the North Industrial Plan Area (NIPA) area (Figure 1).

Figure 1: Project Location



Background

The Project site is within the North Industrial Planning Area (NIPA) area. The NIPA, while not subject to a specific plan, is a recognized planning subarea of the City. The area consists of approximately 2,046 gross acres west of Washington Boulevard and north of the Northwest Roseville Specific Plan. Devoted primarily to industrial uses with some commercial uses within the Campus Oaks Master Plan, the area is intended to provide a major employment/ industrial center for the South Placer region.

Environmental Setting

The Project site is comprised of a single ±8.40-acre parcel, the parcel is an irregular shaped lot. The site is mostly undeveloped with the exception of frontage and landscape improvements along Blue Oaks Boulevard and Woodcreek Oaks Boulevard. Frontage improvements consist of sidewalk, curb and gutter, street trees, and groundcover. The property is heavily disturbed by past grading activities and is partially developed with two (2) existing driveways that provide access into the site. At the northeast corner of Blue Oaks Boulevard and Woodcreek Oaks Boulevard there is an existing Walgreens with surface parking, landscaping, and lighting improvements which will share internal driveways with the Project site. Topography of the site is sloped

downwards towards Blue Oaks Boulevard. The site has been previously graded and no wetlands or other significant natural features are on the site.

Location	Zoning	General Plan Land Use	Actual Use of Property
Site	Community Commercial with a Special Area overlay (CC/SA)	Community Commercial (CC)	Vacant
North	Small Lot Residential/Development Standards (RS/DS)	Medium Density Residential (MDR)	Single-family dwelling units
South	CC	CC	Commercial Center
East	RS/DS	MDR	Single-family dwelling units
West	Multi-Family Housing (R3)	High Density Residential (HDR)	Condominiums

Proposed Project

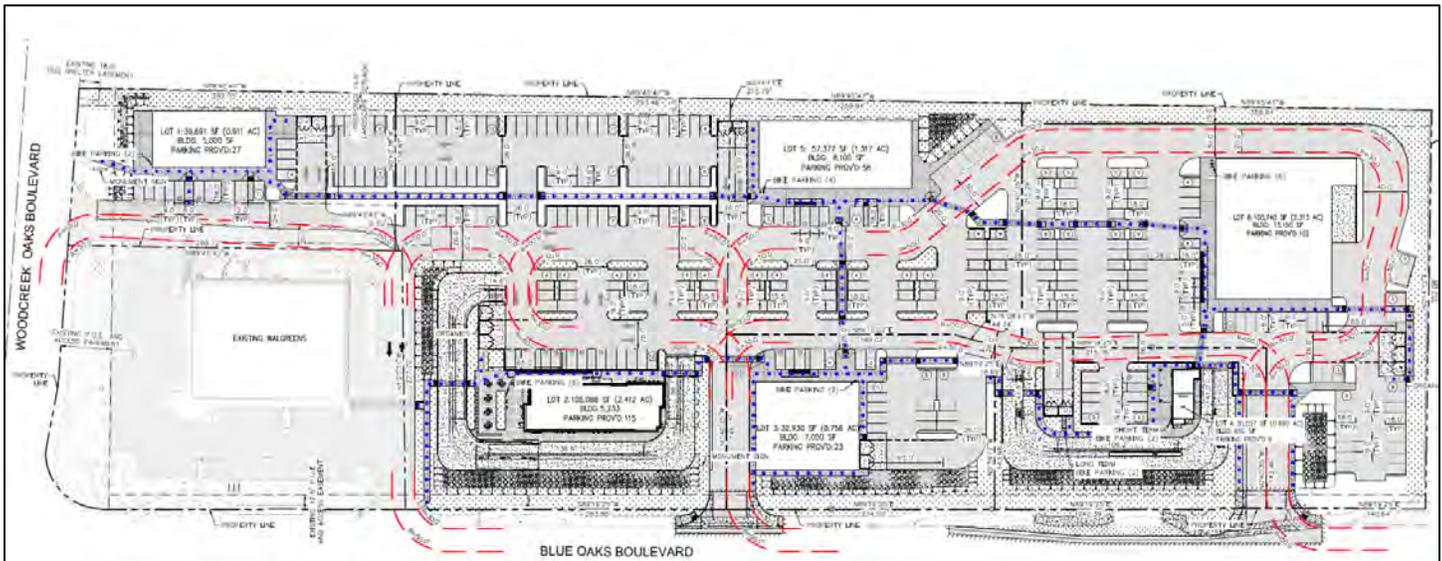
The Project site plan shows the ±8.40-acre parcel subdivided into six (6) commercial parcels to allow the development of six (6) freestanding commercial buildings ranging between 950 and 13,200 square feet in size with landscaping, lighting, and parking improvements. Two (2) of the commercial buildings are proposed with a drive-through user and a third commercial building is proposed with a loading dock; the remaining building tenants are unknown at this time. One of the drive-through users proposes an outdoor dining area. Lastly, the Project site plan shows several water quality features throughout the site and a minimum 15-foot landscape buffer adjacent to the existing single-family dwelling units and along Blue Oaks Boulevard.

Entitlements

The applicant requests a Conditional Use Permit for the two (2) drive-through food users given that the site is adjacent to residential uses. A Design Review Permit is also requested to approve building locations, site grading and landscaping and establish the design and colors of both Lot 2 and Lot 4 buildings. Finally a Tentative Subdivision Map was submitted to subdivide the existing commercial parcel into six (6) commercial lots. A copy of the proposed site plan and the list of entitlements are listed below:

1. Conditional Use Permit
2. Design Review
3. Tentative Subdivision Map

Figure 2: Proposed Site Plan



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 (Resolution 08-172), along with Findings of Fact, and were updated in January 2021 (Resolution 21-018). 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.

- Noise Regulation (RMC Ch.9.24)
- Flood Damage Prevention Ordinance (RMC Ch.9.80)
- Traffic Mitigation Fee (RMC Ch.4.44)
- Drainage Fees (Dry Creek [RMC Ch.4.49] and Pleasant Grove Creek [RMC Ch.4.48])
- City of Roseville Improvement Standards (Resolution 02-37 and as further amended)
- City of Roseville Design and Construction Standards (Resolution 01-208 and as further amended)
- Tree Preservation Ordinance (RMC Ch.19.66)
- Internal Guidance for Management of Tribal Cultural Resources and Consultation (Tribal Consultation Policy) (Resolution 20-294)
- Subdivision Ordinance (RMC Title 18)
- Community Design Guidelines
- Specific Plan Design Guidelines:
 - Development Guidelines Del Webb Specific Plan
 - Landscape Design Guidelines for North Central Roseville Specific Plan

- North Roseville Specific Plan and Design Guidelines
- Northeast Roseville Specific Plan (Olympus Pointe) Signage Guidelines
- North Roseville Area Design Guidelines
- Northeast Roseville Specific Plan Landscape Design Guidelines
- Southeast Roseville Specific Plan Landscape Design Guidelines
- Stoneridge Specific Plan and Design Guidelines
- Highland Reserve North Specific Plan and Design Guidelines
- West Roseville Specific Plan and Design Guidelines
- Sierra Vista Specific Plan and Design Guidelines
- Creekview Specific Plan and Design Guidelines
- Amoruso Ranch Specific Plan and Design Guidelines
- City of Roseville 2035 General Plan

OTHER ENVIRONMENTAL DOCUMENTS RELIED UPON

- 2035 General Plan Update Final Environmental Impact Report (GP EIR), certified August 5, 2020, located online at https://www.roseville.ca.us/government/departments/development_services/planning/general_plan_development_guidelines
- 2021 Housing Element Addendum (HE Addendum), adopted August 18, 2021, located online at <https://www.roseville.ca.us/cms/One.aspx?portalId=7964922&pageId=16922203>
- Longmeadow Initial Study and Mitigated Negative Declaration

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 2035 General Plan Update EIR (GP EIR) updated all Citywide analyses, including for vehicle miles traveled, greenhouse gas emissions, water supply, water treatment, wastewater treatment, and waste disposal. The proposed project is consistent with the adopted land use designations examined within the environmental documents listed above, and thus 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 California Environmental Quality Act (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 project site is located in a typical urbanized setting within a commercially zoned area of the City and is adjacent to roadways on two (2) sides. Public views of the site are from Blue Oaks Boulevard and Woodcreek Oaks Boulevard, both arterial roadways, and its adjacent sidewalks. The site has been previously graded and disked throughout the years as seen through an aerial search. The site consists of annual grassland and ruderal vegetation. The project will allow construction of a commercial shopping center consisting of six (6) freestanding buildings totaling approximately ±39,500 square-feet. Surrounding uses include a single-family residential properties to the north and east, a commercial shopping center to the south, and condominiums to the west.

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) In non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			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, and as a result lacks any prominent or high-quality natural features which could be negatively impacted by development. 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. Accordingly, the aesthetic impacts of the project 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. Further, all lighting adjacent to the northern and eastern property lines will be a maximum of 15-feet in height and be installed and directed to have no off-site glare onto the adjacent residential properties. 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.

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

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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 PM₁₀ 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) 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?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

Thresholds of Significance and Regulatory Setting:

In responding to checklist items a–c, 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 d, there are no quantified significance thresholds for exposure to objectionable odors or other emissions. 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 emissions are detectable/present, and the nature and intensity of the emission source.

Discussion of Checklist Answers:

a–c) 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 GP EIR analysis of Citywide traffic indicated that more than 70% of 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.

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. However, 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, and therefore modeling is not required. Typically, NO_x emissions are substantially higher than ROG and PM10; therefore, it can be assumed that projects that do not exceed the NO_x threshold will not exceed the ROG and PM10 thresholds, and will not result in a significant impact related to operational emissions. The project proposes the construction of a shopping center consisting of six (6) freestanding commercial buildings ranging between 950 and 13,200 square feet in size, but not exceeding a total building square footage of ±39,500. Thus, the project is not expected to result in construction or operational emissions that would exceed the district’s thresholds for significance-specific analysis. However, staff still used the CalEEMod (version 2022.1) program to confirm the project would not exceed construction or operational emissions that would exceed the district’s thresholds for significance-specific analysis. The CalEEMod was run using the model defaults as well as project specific information such as land use. The results are included as Attachment 5 and are summarized in Table 1 below. The modeled emissions for the project do not exceed the construction and operational thresholds of significance. Therefore, the project will not result in a significant impact related to construction or operational emissions. Impacts are less than significant.

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*. Impacts due to substantial pollutant concentrations are less than significant.

Table 1: CalEEMod Results

Pollutant	Project Emissions (lbs/day)	Significance Threshold (lbs/day)	Exceeds Threshold?
Construction Emissions			
ROG	46.1	82	No
NO _x	12.6	82	No
PM ₁₀	5.99	82	No
Operational Emissions			

ROG	1.21	55	No
NO _x	0.24	55	No
PM ₁₀	0.02	82	No

d) 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 residences and 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. Impacts related to odors are less than significant.

IV. Biological Resources

The project site is currently undeveloped and consists of grasses and ruderal vegetation. The site has been previously graded and has undergone periodic disking and other ground disturbance as shown during a review

of aerial photography. City staff determined there are no evidence of wetlands or designated open space areas on the site.

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 state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
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

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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:

There is no ironclad definition of significance as it relates to biological resources. Thus, 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” and riparian (creekside) habitat that may be affected by local, state, or federal regulations/policies while checklist item c focuses specifically on one type of such a community: protected wetlands. Focusing first on wetlands, 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 does not 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” and riparian habitat, 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 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-c) As discussed in the Environmental Setting, the project site is located in an urbanized area. The site is adjacent to paved roadways and is adjacent to residential lots. At the northeast corner of Blue Oaks Boulevard and Woodcreek Oaks Boulevard there is an existing Walgreens with surface parking, landscaping, and lighting improvements. The property does not contain sensitive natural communities which are protected by federal, state or local policies, nor does it contain any wetlands; thus, the project will have no impact with regard to this criterion.

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.

e) There are no biological resources on the project site which are protected by City policies or ordinances.

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.

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 pursuant to 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) 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–b and d) No cultural resources are known to exist on the project site per the Longmeadow Initial Study Mitigated Negative Declaration and GP EIR; however, standard mitigation measures apply which are designed to reduce impacts to cultural resources, should any be found on-site. The measure requires an immediate cessation of work, and contact with the appropriate agencies to address the resource before work can resume. The project will not result in any new impacts beyond those already discussed and disclosed in the Longmeadow Initial Study Mitigated Negative Declaration and GP EIR; project-specific impacts are less than significant.

c) No paleontological resources are known to exist on the project site per the Longmeadow Initial Study Mitigated Negative Declaration and GP EIR; however, standard mitigation measures apply which are designed to reduce impacts to such resources, should any be found on-site. The measure requires an immediate cessation of work, and contact with the appropriate agencies to address the resource before work can resume. The project will not result in any new impacts beyond those already discussed and disclosed in the Longmeadow Initial Study Mitigated Negative Declaration and GP EIR; project-specific impacts are less than significant.

VI. Energy

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy inefficiency?			X	

Thresholds of Significance and Regulatory Setting:

Established in 2002, California’s Renewable Portfolio Standard (RPS) currently requires that 33 percent of electricity retail sales be served by renewable energy resources by 2020, and 50 percent by 2030. The City published a Renewables Portfolio Standard Procurement Plan in June 2018, and continues to comply with the RPS reporting and requirements and standards. There are no numeric significance thresholds to define “wasteful, inefficient, or unnecessary” energy consumption, and therefore significance is based on CEQA Guidelines checklist items a and b, above, and by the use of expert judgment supported by facts, relying on the policies, codes, and regulations adopted by the City and by regulatory agencies which relate to energy. The analysis considers compliance with regulations and standards, project design as it relates to energy use (including transportation energy), whether the project will result in a substantial unplanned demand on the City’s energy resources, and whether the project will impede the ability of the City to meet the RPS standards.

Discussion of Checklist Answers:

a & b) The project would consume energy both during project construction and during project operation. During construction, fossil fuels, electricity, and natural gas would be used by construction vehicles and equipment. However, the energy consumed during construction would be temporary, and would not represent a significant demand on available resources. There are no unusual project characteristics that would necessitate the use of construction equipment or methods that would be less energy-efficient or which would be wasteful.

The completed project would consume energy related to building operation, exterior lighting, landscape irrigation and maintenance, and vehicle trips to and from the use. In accordance with California Energy Code Title 24, the project would be required to meet the Building Energy Efficiency Standards. This includes standards for water and space heating and cooling equipment; insulation for doors, pipes, walls, and ceilings; and appliances, to name a few. The project would also be eligible for rebates and other financial incentives from both the electric and gas providers for the purchase of energy-efficient appliances and systems, which would further reduce the operational energy demand of the project. The project was distributed to both PG&E and Roseville Electric for comments, and was found to conform to the standards of both providers; energy supplies are available to serve the project.

The project is consistent with the existing land use designation in the 2035 General Plan. The GP EIR included an assessment of energy impacts for the entire plan area. The analysis included consideration of transportation energy, and evaluated walkability, alternative transportation modes, and the degree to which the mix and location of uses would reduce vehicle miles traveled in the plan area. The EIR also included a citywide assessment of energy demand based on the existing and proposed land uses within the City and Specific Plan. Impacts related to energy consumption were found to be less than significant. The project is consistent with the existing land use designation, and therefore is consistent with the current citywide assessment of energy demand, and will not result in substantial unplanned, inefficient, wasteful, or unnecessary consumption of energy; impacts are less than significant.

VII. 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, 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) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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	
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 direct or indirect 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
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?				

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–f 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 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 archeological resources, which for this evaluation will include paleontological resources (Policies 1 and 2). Section 50987.5 of the California Public Code Section is only applicable to public land; this section prohibits the excavation, removal, destruction, or defacement/injury to any vertebrate paleontological site, including fossilized footprints or other paleontological feature.

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 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.

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

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 soils on the site are Cometa-Fiddyment complex, 1 to 5 percent slopes, which are not listed as geologically unstable or sensitive.

f) No paleontological resources are known to exist on the project site per the Longmeadow Initial Study Mitigated Negative Declaration and GP EIR; however, standard mitigation measures apply which are designed to reduce impacts to such resources, should any be found on-site. The measure requires an immediate cessation of work, and contact with the appropriate agencies to address the resource before work can resume. The project will not result in any new impacts beyond those already discussed and disclosed in the Longmeadow Initial Study Mitigated Negative Declaration and GP EIR; project-specific impacts are less than significant.

VIII. 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 (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated gases. As explained by the United States Environmental Protection Agency², 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 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, and has been updated twice.

The current 2017 Scoping Plan updated the target year from 2020 to 2030, based on the targets established in Senate Bill 32 (SB 32). SB 32 was signed by the Governor on September 8, 2016, to establish a reduction target of 40 percent below 1990 levels by 2030. Critically, the 2017 Scoping Plan also sets the path toward compliance

² <http://www3.epa.gov/climatechange/science/overview.html>. Accessed January 2016

with the 2050 target embodied within Executive Order S-3-05 as well. According to the 2017 Scoping Plan the statewide 2030 target is 260 million metric tons. The Scoping Plan recommends an efficiency target approach for local governments for 2030 and 2050 target years.

The Placer County Air Pollution Control District (PCAPCD) recommends that thresholds of significance for GHG be related to statewide 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, as well as residential and non-residential efficiency thresholds. However, the City developed its own thresholds as part of the 2035 General Plan Update project approved in July 2020. The justification for the City’s thresholds is contained within the GP EIR. The thresholds were developed based on statewide emissions data adjusted for relevant local conditions and land uses. The significance thresholds are shown in Table 2 below.

Table 2: GHG Significance Thresholds

	2020	2030	2035	2050
Per Capita Emissions Efficiency Targets (MT CO ₂ e/capita/yr)	7.21	4.00	3.22	1.19
Per Service Population Emissions Efficiency Targets (MT CO ₂ e/SP/yr)	5.07	2.79	2.25	0.83
Projects which use these thresholds for environmental analysis should include a brief justification of the type of efficiency target and the target year selected. Per capita is most applicable to projects which only include residential uses, or in cases where reliable data to generate a service population estimate is unavailable. Projects should generally use the 2035 target year. Note that future projects consistent with the General Plan will not require further analysis, per the tiering provisions of CEQA.				
Note: MMT CO ₂ e = million metric tons of carbon dioxide equivalent; Service Population (SP) = population + employment				

Discussion of Checklist Answers:

a–b) Greenhouse gases are primarily emitted as a result of vehicle operation associated with trips to and from a project, and energy consumption from operation of the buildings. Greenhouse gases from vehicles is assessed based on the vehicle miles traveled (VMT) resulting from a project, on a Citywide basis. Residential projects, destination centers (such as a regional mall), and major employers tend to increase VMT in a study area, either by adding new residents traveling in an area, or by encouraging longer trip lengths and drawing in trips from a broader regional area. However, non-residential projects and neighborhood-serving uses (e.g. neighborhood parks) tend to lower VMT in a study area because they do not generate new trips within the study area, they divert existing trips. These trips are diverted because the new use location is closer to home, on their way to another destination (e.g. work), or is otherwise more convenient.

The Project is to subdivide the ±8.40-acre parcel into six (6) commercial parcels to allow the development of six (6) freestanding commercial buildings ranging between 950 and 13,200 square feet in size with landscaping, lighting, and parking improvements. Two (2) of the commercial buildings are proposed with a drive-through user and a third commercial building is proposed with a loading dock; the remaining building tenants are unknown at this time. As discussed in the Transportation section of this Initial Study, the project is consistent with the City’s General Plan and will not create additional trips that have not already been evaluated in the GP EIR.

The California Emissions Estimator Model (CalEEMod 2022) was used to evaluate emissions related to construction and operation of the project. Construction emissions are primarily related to exhaust from construction equipment and dust from material movement. Operational emissions are those which result from the completed project, and are primarily from energy consumption, “area” emissions such as landscaping equipment usage, and mobile emissions from vehicles traveling to and from the operational project.

The model analysis of construction used default model values based on the size of the site and proposed buildings. For the operational analysis, the proposed Project will not increase citywide vehicle miles traveled (VMT), as discussed in more detail below, and therefore VMT was manually input as zero. As is also discussed in the Transportation sections, the City developed analysis guidance and thresholds for VMT as part of the 2035 General Plan Update project approved in July 2020. The citywide VMT analysis was then used to model air quality and greenhouse gas impacts within the GP EIR. Consistent with the Office of Planning and Research Technical Advisory on Evaluating Transportation Impacts in CEQA, the analysis found that local-serving non-residential uses led to reductions in citywide VMT, because adding a local-serving center into an existing residential area simply re-routes existing travel from other – typically more distant – locations to a closer location. In other words, although a new commercial center will result in more trips arriving and departing from the project site it will reduce the amount of travel (and therefore the amount of vehicle exhaust) in the City.

The GP EIR concluded that future projects which were consistent with the General Plan and projects which the EIR evaluation found would not increase or would reduce VMT would be less than significant, and would not be required to analyze either VMT or other analyses such as air quality or greenhouse gases which rely on VMT. CalEEMod allows users to manually input VMT specifically to account for projects which result in less VMT than use of the model defaults would calculate. Therefore, CalEEMod default inputs were modified to report zero VMT in order to remove the mobile emissions evaluation.

As discussed, the Project would not be anticipated to increase VMT, since it is providing services in closer proximity to developed residential areas of the City. In addition, as discussed in the Transportation section of this Initial Study, the project is anticipated to result in a lower trip generation than what was assumed in the City’s traffic model for this area.

The proposed Project is consistent with the land use assumptions in the GP EIR and does not require further analysis per the tiering provisions of CEQA. The Project includes reasonable and feasible design measures to reduce emissions, including implementation of the latest Cal-Green and energy efficiency code requirements. The buildings will incorporate several alternative transportation measures like bike storage or racks. The Project complies with General Plan policy related to GHG and the project does not result in any new GHG impacts not previously analyzed in the GP EIR; therefore, impacts are less than significant.

IX. Hazards and Hazardous Materials

There are no hazardous cleanup sites of record within 1,000 feet of the site according to both the State Water Resources Control Envirostor database (<http://geotracker.waterboards.ca.gov/>) and the Department of Toxic Substances Control Envirostor database (<http://www.envirostor.dtsc.ca.gov/public/>). The project is not located on a site where existing hazardous materials have been identified, and the project does not have the potential to expose individuals to hazardous materials.

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	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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
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 or excessive noise for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
g) Expose people or structures either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?				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–g 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 or within two miles of a public or private use airport. Therefore, no further discussion is provided for item e.

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 65962.5³; therefore, no impact will occur.

e) 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. As such, the project will cause a less

³ <http://www.calepa.ca.gov/SiteCleanup/CorteseList/SectionA.htm>

than significant impact to 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 less-than-significant impacts. 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.

g) 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.

X. 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 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 or otherwise substantially degrade surface or ground water quality?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			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 or through the addition of impervious surfaces, in a manner which would:			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
i) result in substantial erosion or siltation on or off-site;			X	
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;			X	
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater systems or provide substantial additional sources of polluted runoff; or			X	
iv) impede or redirect flood flows?				X
d) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	
e) In flood hazard, tsunami, or seiches zones, risk release of pollutants due to project inundation?				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–e listed above. For checklist item a, c (i), d, and e, 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 related to water quality or erosion. 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 checklist items c (ii) and c (iii). 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 without increasing the rate or amount of surface runoff. These same ordinances and standards prevent impacts related to groundwater (items a and d), because developers are required to treat and detain all stormwater onsite using stormwater swales and other methods which slow flows and preserve infiltration. Finally, it is indicated that compliance with the Flood Damage Prevention Ordinance (RMC Ch. 9.80) will prevent significant impacts related to items c (iv) and e. 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 e) because 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 (i), d, e) 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, d) The project does not involve the installation of groundwater wells. The City maintains wells to supplement surface water supplies during multiple dry years, but the effect of groundwater extraction on the aquifer was addressed in the City's Urban Water Master Plan and evaluated in the GP EIR. The proposed project is consistent with the General Plan land use designation, and is thus consistent with the citywide evaluation of water supply. Project impacts related to groundwater extraction are less than significant. Furthermore, all permanent stormwater quality control measures must be designed to comply with the Stormwater Quality Design Manual, which requires the use of bioswales and other onsite detention and infiltration methods. These standards ensure that stormwater will continue to infiltrate into the groundwater aquifer.

c (ii and iii)) The project has been reviewed by City Engineering staff for conformance with City ordinances and standards. The project includes adequate and appropriate facilities to ensure no net increase in the amount or rate of stormwater runoff from the site, and which will adequately convey stormwater flows.

c (iv) and e) The project has been reviewed by City Engineering staff for conformance with City ordinances and standards. The project is not located within either the Federal Emergency Management Agency floodplain or the City's Regulatory Floodplain (defined as the floodplain which will result from full buildout of the City). Therefore, the project will not impede or redirect flood flows, nor will it be inundated. The proposed project is located within an area of flat topography and is not near a waterbody or other feature which could cause a seiche or tsunami. There would be no impact with regard to these criterion.

XI. Land Use and Planning

The project site has a land use designation of Community Commercial (CC) and a zoning designation of Community Commercial with a Special Area overlay (CC/SA). Surrounding properties have commercial and residential land use and zoning designations, as described in the Background section of this Initial Study.

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) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation of an agency adopted for the purpose of avoiding or mitigating an environmental effect?				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 and b 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) As part of project review, staff considered consistency with all City policies and regulations, including those that are intended to avoid an environmental effect, and found the project to be consistent.

XII. 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 GP 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.

XIII. Noise

The project site is currently undeveloped and is surrounded by single-family dwelling units, which typically do not generate substantial noise volumes. At the northeast corner of Blue Oaks Boulevard and Woodcreek Oaks Boulevard there is an existing Walgreens with a drive-through pick-up window, surface parking, landscaping, and lighting improvements which will share internal driveways with the project site. The Project site is bounded by Blue Oaks Boulevard and Woodcreek Oaks, both of these roadways are identified as transportation noise sources in the City’s General Plan Noise Element. According to the General Plan, the project site is within the 65 dB Ldn noise contour for existing roadways and within the 70 dB Ldn noise contour for future roadways (City of Roseville 2035, Figure IX-1 and Figure IX-2).

Would the project result in:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		X		
b) Generation of excessive ground borne vibration of ground borne noise levels?			X	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, 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, 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 c 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 and b. 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, item c has been ruled out from further analysis.

Discussion of Checklist Answers:

a) The City of Roseville General Plan Noise Element includes Policy N1.1, which requires proposed fixed noise sources to be mitigated so as not to exceed the noise level performance standards contained within Sound Level Standards Table 1 in the City’s Municipal Code Chapter 9.24 (Noise Regulation). These standards are included in Table 3 below. Fixed noise sources are defined as noises that come from a specified area, while moving noise sources are from transportation facilities (roadway noise, train noise, etc.); the proposed Project will generate fixed noise.

Table 3: Noise Element Table IX-3

PERFORMANCE STANDARDS FOR NON-TRANSPORTATION NOISE SOURCES OR PROJECTS AFFECTED BY NON-TRANSPORTATION NOISE SOURCES (As Measured at the Property Line of Noise-Sensitive Uses)		
Noise Level Descriptor	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly L_{eq} , dB	50	45
Maximum level, dB	70	65
<p>¹ For municipal power plants consisting primarily of broadband, steady state noise sources, the hourly (Leq) noise standard may be increased up to 10 dB(A), but not exceed 55 dB(A) Hourly Leq dB.</p> <p>Each of the noise levels specified above should be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. Such noises are generally considered by residents to be particularly annoying and are a primary source of noise complaints. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).</p> <p>No standards have been included for interior noise levels. Standard construction practices should, with exterior noise levels identified, result in acceptable interior noise levels.</p>		

The proposed Project includes six (6) freestanding commercial buildings, two (2) of the six (6) buildings are proposed with a drive-through user, the remaining building tenants are unknown at this time (see Figure 3). The Project also includes a 13,200 square foot commercial building with a loading dock proposed on Lot 6, although the specific user is unknown at this time it can be assumed based on the size of the building that a grocery or retail building will be proposed. The Project also includes outdoor dining area on Lot 2, adjacent to the assumed drive-through lane speaker (see Figure 3). An Environmental Noise Assessment (ENA) was prepared for the project by Bollard Acoustical Consultants, Inc. (BAC) and is included as Attachment 6. The assessment evaluates noise from proposed loading dock area, delivery truck and unloading activity noise, drive-through operations, and rooftop mechanical equipment (HVAC). It concluded that the noise generated by on-site truck circulation, drive-through activities, and HVAC systems would not exceed City noise standards. However, the ENA did find that during nighttime hours the potential for noise generated by the truck deliveries could both exceed City noise standards and substantially exceed measured existing ambient noise levels at nearby residential uses. Each of these noise sources and related mitigation measures are addressed separately, below.

On-Site Truck Circulation and Loading Dock Noise

Based on the size of the proposed commercial buildings and their locations as indicated in Figure 3, deliveries to the various uses will likely be conducted at the front or side of buildings using medium-duty trucks and/or side-step vans. An exception to this is Lot 6, where a future loading dock is located on the east side of the building to accommodate for larger trucks (shown in Figure 3). Grocery and retail store buildings of this size (i.e., 13,200 square feet) typically generate light semi-trailer truck activity. As a result, semitruck activity associated with Lot 6 will likely consist of 1-2 semi-trailer truck deliveries a week for a retail store, and approximately 1 per day for a small grocery store use. In either scenario, there would not be more than 1 heavy truck delivery during any given hour. Furthermore, heavy-truck trailer unloading will occur directly from the inside of the trailer while docked in the recessed bay, and sealed rubber gaskets will be provided at the truck docks to reduce noise from those inside loading and unloading activities. The required screen-wall would further reduce the noise generated by heavy truck unloading.

Based on the ENA, the worst-case hourly average noise exposure associated with heavy truck deliveries is predicted to range from 45 to 50 dB Leq at the nearest residential use located east of the loading dock. The predicted range includes the noise reduction that would be provided by the existing 6' masonry wall along the property line and the required screen-wall at the east edge of the loading dock. Based on these recommendations the truck deliveries and loading dock activities would comply with the City of Roseville daytime hourly average (Leq) noise level standard but could exceed the City's nighttime hourly average (Leq) noise level limit. As a result, all heavy truck deliveries should be limited to daytime hours (7:00 a.m. to 10:00 p.m.). In addition, trucks should not be permitted to idle while parked in the loading dock, and any refrigerated trucks should be supplied with external power so the truck engine can be shut off during unloading. This is reflected in **Mitigation Measure NOI-1**.

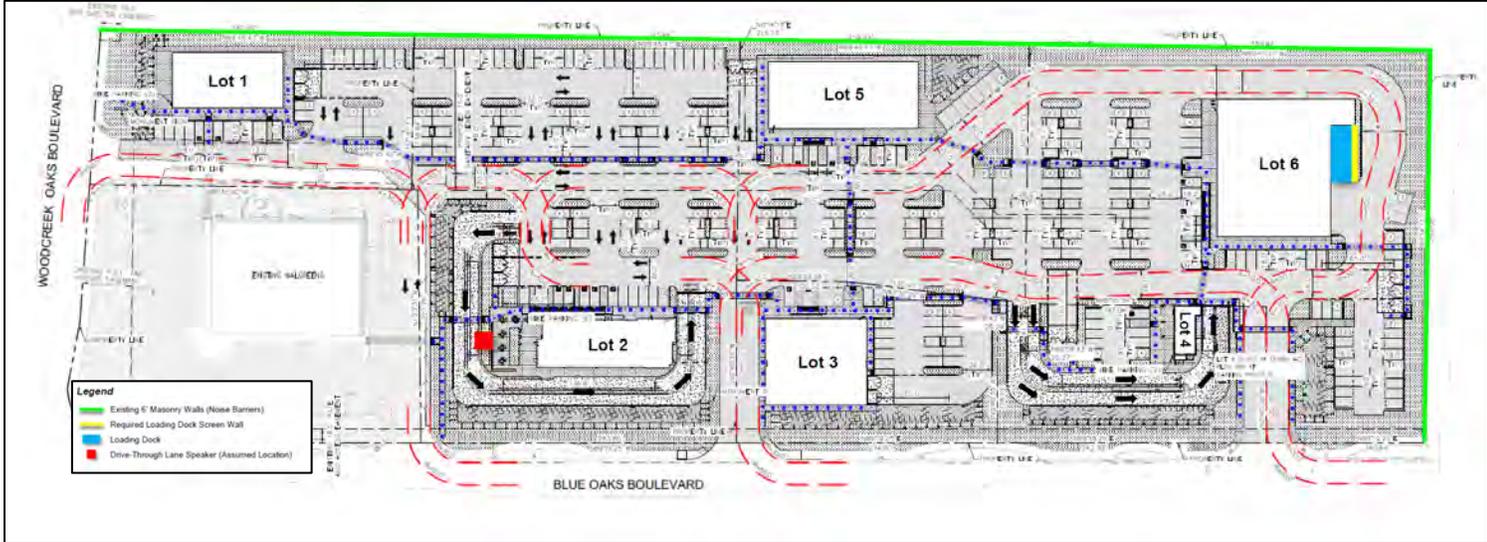
Mitigation Measure NOI-1: Commercial Noise Control

For all commercial uses within 150 feet of residential uses, implement the following or equally effective measures:

- (a) For commercial loading docks and on-site truck circulation areas that are planned to be within 150 feet of sensitive receptors (including backyards), the following measures shall be implemented:
 - (1) Loading docks and on-site truck circulation routes shall be designed to ensure that noise levels do not exceed 70 dB Lmax or 50 dB hourly Leq at the nearest residence. An acoustic analysis shall demonstrate that the loading area design, including any noise attenuation features (e.g., covering, sound walls, orientation) would be adequate to achieve this standard; and,
 - (2) Deliveries shall generally be limited to the hours between 7:00 A.M. and 10:00 P.M. Signs shall be placed on the truck loading areas behind the anchor tenant space and at the rear of the shops building which list the hours for deliveries.
- (b) For all commercial buildings, roof-top HVAC shall be oriented away from residential areas and systems shall not produce noise levels that exceed 50 dB at a distance of 25 feet. In addition, roof-top parapets shall block line-of-sight from noise-sensitive uses to HVAC equipment.
- (c) Setbacks or enhanced barriers (e.g., 6 feet tall) as needed to achieve City standards.

An acoustical analysis shall be conducted to demonstrate that City noise standards would be achieved by these measures. Additional measures shall be implemented, if needed, to meet the standards.

Figure 3: Project Site Plan



Drive-Through Operations

The ENA evaluated expected noise levels from the use of an amplified speaker menu board in the drive-through. The location of the assumed menu board for the building on Lot 2 is shown in Figure 3 above. Lot 4 is proposed with a drive-through as well, but based on the business description of the user, Lot 4 will not be equipped with a drive-through lane menu speaker (only person-to-person ordering). Based on the Project site plan, Lot 2 drive-through lane and speaker will be located approximately 180 and 240 feet (respectively) from the property line of the nearest residential use. Lot 4 drive-through lane will be located approximately 240 feet from the property line of the nearest residential use. The assessment concluded that the Project drive-through operations are predicted to satisfy the applicable average and maximum noise level standards as illustrated in Table 4 below.

Table 4: Project Noise Level Standards

Noise Source	Applicable Noise Level Standard (dB)			
	Daytime (7:00 a.m. to 10:00 p.m.)		Nighttime (10:00 p.m. to 7:00 a.m.)	
	Leq	Lmax	Leq	Lmax
Delivery Truck Activities	55	75	--	--
Drive-Through Menu Speaker ¹	50	70	40	60
Drive-Through Vehicle Passbys	55	75	45	65
Rooftop HVAC Equipment ²	55	--	45	--

¹ Pursuant to footnote in Table 2 of this report, noise level standards shall be reduced by 5 dB for pure tone noise such as noise consisting primarily of speech or music. This downward adjustment would be applicable to drive-through lane speakers.

² Because mechanical equipment operation typically generates sustained, steady-state noise levels, impacts of rooftop mechanical equipment were appropriately assessed relative to the City's hourly average (Leq) noise level standards.

Source: Roseville General Plan 2035 (Table IX-3) and Roseville Municipal Code (Section 9.24.100).

Rooftop Mechanical Equipment (HVAC)

The heating, ventilating, and air conditioning (HVAC) requirements for the buildings of the development will most likely be met using packaged rooftop mounted systems. These units will be completely shielded from public view through the use of rooftop parapets. According to the Project plans, the nearest building rooftop equipment location is approximately 30-feet from the nearest residential property line. When projected to a distance of 30 feet, the resulting HVAC level computes to 44 dB Leq, including shielding provided by the building parapets and existing 6' property line noise barrier. Based on this information the noise impacts associated with the buildings HVAC systems are predicted to satisfy the applicable average and maximum noise level standards as illustrated in Table 4 above.

It should be noted that, excluding Lots 2 and 4, the future tenants of the center are unknown at this time. In the event that a grocery store proposes to occupy any of the lots nearest to the residential property lines (e.g. Lots 1, 5 and 6), additional mechanical equipment may be required for food cold storage. Because the noise generation of such equipment would vary by manufacturer and location, it is not possible to predict noise generation of such equipment at this time. At such a time as a building does require additional mechanical equipment for food cold storage, the mechanical equipment plans should be reviewed by a qualified acoustical consultant to ensure that adequate sound control measures are included to achieve compliance with City's noise standards at the nearest residences. This is reflected in **Mitigation Measure NOI-2**.

Mitigation Measure NOI-2: Commercial Noise Control

Where commercial uses adjoin common residential property lines, and loading docks or truck circulation routes face the residential areas, the following mitigation measures shall be included in the project design:

(a) Where commercial uses adjoin common residential property lines, and loading docks or truck circulation routes face the residential areas, the following mitigation measures shall be included in the project design:

- (1) Loading All heating, cooling and ventilation equipment shall be located within mechanical rooms where possible;
- (2) All heating, cooling and ventilation equipment shall be shielded from view with solid barriers;
- (3) In the event that a grocery store proposes to occupy the lots proposed nearest to the residential property lines (Lots 1, 5 and 6), additional mechanical equipment would be required for food cold storage. Because the noise generation of such equipment would vary by manufacturer and location, it is not possible to predict noise generation of such equipment at this time. At such a time as a building does require additional mechanical equipment for food cold storage, the mechanical equipment plans should be reviewed by a qualified acoustical consultant to ensure that adequate sound control measures are included to achieve compliance with City’s noise standards at the nearest residences.

b) 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. Based on this, the impact is less than significant.

XIV. Population and Housing

The project site is located within the North Industrial Plan Area and has a land use designation of Community Commercial (CC). 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 unplanned 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 people or housing, 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 and b 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. The project is consistent with the land use designation of the site. 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 GP EIR. Therefore, the impact of the project is less than significant.

b) The project site is vacant, but it's been heavily disturbed by past grading activities and is partially developed with frontage improvements and two (2) existing driveways that provide access into the site. At the northeast corner of Blue Oaks Boulevard and Woodcreek Oaks Boulevard there is an existing Walgreens with surface parking, landscaping, and lighting improvements which will share internal driveways with the project site. No housing exists on the project site, and there would be no impact with respect to these criteria.

XV. Public Services

Fire protection, police protection, park services, and library services are provided by the City. The project is located within the Roseville Elementary School District and Roseville Joint Union High 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.

XVI. Recreation

There are no parks or recreation facilities immediately adjacent to the project site. The nearest recreation area is Rickey, Walter, and Doris Park, located approximately 0.15-mile north of the site, located off of Parkside Way and Woodcreek Oaks Blvd.

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	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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 plan area 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 is consistent with the General 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 plan area, and the plan-level impacts of developing those facilities were addressed within the GP EIR. The project will not cause any unforeseen or new impacts related to the construction or expansion of recreational facilities.

XVII. Transportation

As described in the Project description, the Project site is comprised of a single ±8.40-acre parcel, the parcel is an irregular shaped lot. The site is mostly undeveloped with the exception of frontage and landscape improvements along Blue Oaks Boulevard and Woodcreek Oaks Boulevard. Frontage improvements consist of sidewalk, curb and gutter, street trees, and groundcover. Blue Okas Boulevard includes onstreet, striped bicycle lanes and constructed attached and pockets of detached sidewalks. Woodcreek Oaks Boulevard includes onstreet, striped bicycle lanes, and attached sidewalks.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?			X	
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c) Substantially increase hazards due to a geometric design feature(s) (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d) Result in inadequate emergency access?			X	

Thresholds of Significance and Regulatory Setting:

The City has adopted the following plans, ordinances, or policies applicable to checklist item a: Pedestrian Master Plan, Bicycle Master Plan, and Short-Range Transit Plan, and General Plan Circulation Element. The project is evaluated for consistency with these plans and the policies contained within them. For checklist item b, the CEQA Guidelines Section 15064.3 establishes a detailed process for evaluating the significance of transportation impacts. In accordance with this section, the analysis must focus on the generation of vehicle miles traveled (VMT); effects on automobile delay cannot be considered a significant impact. The City developed analysis guidance and thresholds as part of the 2035 General Plan Update project approved in July 2020. The detailed evaluation and justification is contained within the GP EIR.

Future projects consistent with the General Plan will not require further VMT analysis, pursuant to the tiering provisions of CEQA. For projects which are inconsistent, CEQA Guidelines Section 15064.3(b) allows lead agencies discretion to determine, in the context of a particular project, whether to rely on a qualitative analysis or performance-based standards. CEQA Guidelines Section 15064.7(b) allows lead agencies the discretion to select their own thresholds and allow for differences in thresholds based on context.

Quantitative analysis would not be required if it can be demonstrated that the project would generate VMT which is equivalent to or less than what was assumed in the GP EIR. Examples of such projects include:

- Local-serving retail and other local-serving development, which generally reduces existing trip distances by providing services in closer proximity to residential areas, and therefore reduce VMT.
- Multi-family residences, which generally have fewer trips per household than single-family residences, and therefore also produce less VMT per unit.
- Infill projects in developed areas generally have shorter trips, reduced vehicle trips, and therefore less VMT.
- Pedestrian, bicycle, transit, and electric vehicle transportation projects.
- Residential projects in low per-capita household VMT areas and office projects in low per-worker VMT areas (85 percent or less than the regional average) as shown on maps maintained by SACOG or within low VMT areas as shown within Table 4.3-8 of the GP EIR.

When quantitative analysis is required, the threshold of 12.8 VMT/capita may be used for projects not within the scope of the GP EIR, provided the cumulative context of the 2035 General Plan has not changed substantially. Since approval of the 2035 General Plan, the City has not annexed new land, substantially changed roadway

network assumptions, or made any other changes to the 2035 assumptions which would require an update to the City's VMT thresholds contained within the GP EIR. Therefore, the threshold of 12.8 VMT/capita remains appropriate.

The project proposes to use quantitative analysis since the project is a local-serving commercial center which would generally reduce existing trip distances by providing services in closer proximity to residential areas, and therefore reduce VMT.

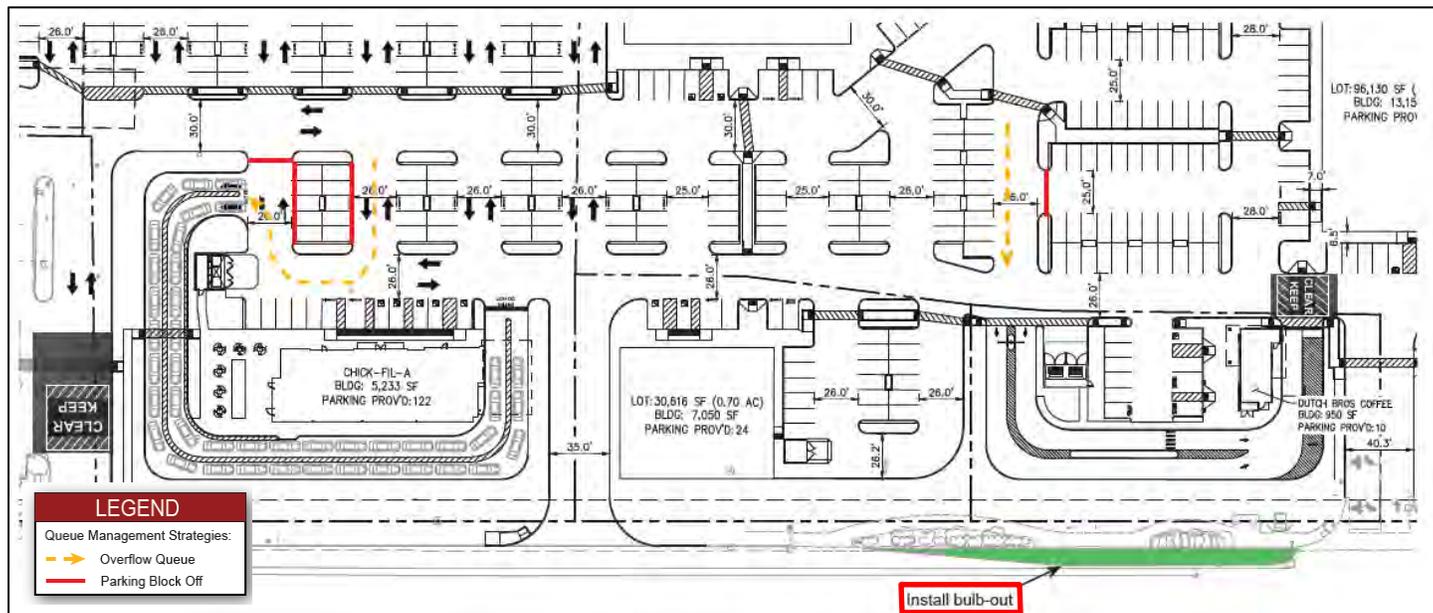
Impacts with regard to items c and d are assessed based on the expert judgment of the City Engineer and City Fire Department, as based upon facts and consistency with the City's Design and Construction Standards.

Discussion of Checklist Answers:

a) 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. Pedestrian facilities have already been constructed adjacent to Blue Oaks Boulevard and Woodcreek Oaks Boulevard. Bicycle facilities have also been constructed adjacent to Blue Oaks Boulevard and Woodcreek Oaks Boulevard, and the project will not decrease the performance or safety of those facilities. The project is consistent with the policies of the Pedestrian Master Plan, Bicycle Master Plan, and Short-Range Transit Plan. In addition, the proposed project is consistent with the underlying land use designations, and does not contribute new, unanticipated trips; a cumulative conditions traffic model is not required. However, it was determined by the City Engineering that a short-term traffic impact study was needed to assess the project's access points, on-site operations, and localized traffic operations. Kimley-Horn prepared a Traffic Evaluation for the proposed project (Attachment 7). The analysis evaluated the project's access points, on-site operations, and localized traffic operations to ensure safe and efficient operations. The study concluded the following improvements would need to be constructed/addressed by the project:

1. The Project shall be conditioned to extend the westbound left-turn storage capacity of Intersection #1 by 250-feet (80-feet storage, 170-feet taper) to properly accommodate traffic demand while allowing for efficient Project vehicle egress from the existing and proposed intersection.
2. The Project shall be conditioned to construct a "bulb-out" or other similar physical feature in the northwest corner of Intersection #4 to prevent vehicles from making an illegal movement westbound through this intersection (see Figure 4).

Figure 4: Suggested Site Enhancements



These improvements have been incorporated as condition of approvals for the Project. Given the Project is consistent with the General Plan land use and the most recent Citywide traffic analysis within the GP EIR, and will not result in any new or unanticipated impacts with respect to the City’s Level of Service policy; impacts to traffic and level of service have been determined to be less than significant.

b) Traffic analyses focus on the number of trips traveling in specified areas during peak periods, in order to quantify impacts as specific intersections. However, there is no direct relationship between the number of trips and the amount of VMT generated by a use. Projects which substantially increase trips to a specific area may in fact decrease VMT in the City. As an example, if a new grocery store is added to an area, customers who go to that store were already going to a grocery store elsewhere, and are most likely to choose the new store because it is closer to home or on their way to another location (e.g. work). So while the store would generate substantial new trips, it would lower Citywide VMT. Unless a project includes unique characteristics, nonresidential projects do not increase VMT; they divert existing trips into a similar or more efficient pathway.

The proposed Project is a non-residential development of a vacant property, surrounded by existing development. The Project does not include any unique characteristics which would draw in regional traffic, or which would prompt longer trips. The Project would locate services and employment in proximity to existing developed areas, and would therefore have a neutral or positive impact on vehicle miles traveled; impacts are less than significant.

c, d) 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.

XVIII. 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 tribal 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. The United Auburn Indian Community (UAIC) is a federally recognized Tribe comprised of both Miwok and Maidu (Nisenan) Tribal members who are traditionally and culturally affiliated with the project area. The UAIC has indicated that "the Tribe has deep spiritual, cultural, and physical ties to their ancestral land and are contemporary stewards of their culture and landscapes. The Tribal community represents a continuity and endurance of their ancestors by maintaining their connection to their history and culture. It is the Tribe's goal to ensure the preservation and continuance of their cultural heritage for current and future generations."

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:

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 of 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) The GP EIR included historic and cultural resources study, which included research on whether any listed or eligible sites had been documented in the project area. No such sites were found. However, standard mitigation measures apply which are designed to reduce impacts to any previously undiscovered resources, should any be found on-site. The measure requires an immediate cessation of work, and contact with the appropriate agencies to address the resource before work can resume. The project will not result in any new impacts beyond those already discussed and disclosed in the GP EIR; project-specific impacts are less than significant.

b) Notice of the proposed project was mailed to tribes which had requested such notice pursuant to Assembly Bill 52 (AB 52). A request for consultation was received from the United Auburn Indian Community (UAIC). On January 31, 2023, City staff received an email correspondence from the tribal representative confirming no resources are known to exist on the site. Thereafter, on February 13, 2023, the UAIC concluded consultation with two (2) recommendations that standard mitigation measures be made a requirement of the project to reduce impacts to resources, should any be found on-site. **Mitigation Measure CUL-1** requires an immediate cessation of work, and contact with the appropriate agencies to address the resource before work can resume. **Mitigation Measure CUL-2** requires the developer to contact the City a minimum of seven (7) days prior to earthwork, so that a UAIC Tribal Representative or Tribal Monitor be present to inspect the Project site. With mitigation, impacts are less than significant.

Mitigation Measure CUL-1: Unanticipated Discoveries

If any suspected TCRs are discovered during ground disturbing construction activities, all work shall cease within 100 feet of the find, or an agreed upon distance based on the project area and nature of the find. The Construction Manager shall immediately notify the City of Roseville Development Services Director by phone and a Tribal Representative from a California Native American tribe that is traditionally and culturally affiliated with a geographic area shall be immediately notified. The Tribal Representative shall determine if the find is a TCR (PRC §21074). The Tribal Representative will make recommendations for further evaluation and treatment as necessary.

When avoidance is infeasible, preservation in place is the preferred option for mitigation of TCRs under CEQA and UAIC protocols, and every effort shall be made to preserve the resources in place, including through project redesign, if feasible. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, or returning objects to a location within the project area where they will not be subject to future impacts. Permanent curation of TCRs will not take place unless approved in writing by UAIC or by the California Native American Tribe that is traditionally and culturally affiliated with the project area.

The contractor shall implement any measures deemed by the CEQA lead agency to be necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not limited to, facilitating the appropriate tribal treatment of the find, as necessary. Treatment that preserves or restores the cultural character and integrity of a TCR may include Tribal Monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil.

Mitigation Measure CUL-2: Post Ground Disturbance

A minimum of seven days prior to beginning earthwork, clearing and grubbing, or other soil disturbing activities, the applicant shall notify lead agency of the proposed earthwork start-date. The lead agency shall contact the United Auburn Indian Community (UAIC) with the proposed earthwork start-date and a UAIC Tribal Representative or Tribal Monitor shall be invited to inspect the project site, including any soil piles, trenches, or other disturbed areas, within the first five days of groundbreaking activity, or as appropriate for the type and size of project. The tribe shall be provided 72 hours to accept or decline observation. The single tribal observer shall be required to

comply with all job site safety requirements and shall sign a waiver of liability prior to entering the job site. Should the tribe choose not to observe any or all of the activity, the City shall deem the mitigation measure completed in good faith without tribal observation as long as the notification was made and documented. During this inspection, a UAIC Tribal Representative or Tribal Monitor may provide an on-site meeting for construction personnel information on TCRs and workers awareness brochure.

If any TCRs are encountered during this initial inspection, or during any subsequent construction activities, work shall be suspended within 100 feet of the find and the measures included in the Inadvertent/Unanticipated Discoveries Mitigation Measure shall be implemented. Preservation in place is the preferred alternative under CEQA and UAIC protocols, and every effort must be made to preserve the resources in place, including through project redesign.

The contractor shall implement any measures deemed by CEQA lead agency to be necessary and feasible to preserve in place, avoid, or minimize significant effects to the resources, including the use of a paid Native American Monitor during ground disturbing activities.

XIX. Utilities and Service Systems

Water and sewer services will be provided by the City of Roseville. The developer will be responsible for extending new lines onto the site in order to serve the project. Storm water will be collected on-site and transferred via pipe into an off-site storm drain system. The project includes several on-site bioretention storm water planters that will collect the project’s storm water. Solid waste will be collected by the City of Roseville’s Refuse Department. The City of Roseville will provide electric service to the site, while natural gas will be provided by PG&E. Comcast will provide cable. The project has been reviewed by the City’s Engineering Division, Environmental Utilities, Roseville Electric and PG&E. Adequate services are available for the project.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c) 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	
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with federal, state, and local management and reduction 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–e listed above.

Discussion of Checklist Answers:

a) The project is consistent with the Plan Area and the GP EIR, and will be required to construct any utilities infrastructure necessary to serve the project, as well as pay fees which fund the operation of the facilities and the construction of major infrastructure. The construction impacts related to building the major infrastructure were disclosed in the GP EIR, and appropriate mitigation was adopted. Minor additional infrastructure will be constructed within the project site to tie the project into the major systems, but these facilities will be constructed in locations where site development is already occurring as part of the overall project; there are no additional substantial impacts specific or particular to the minor infrastructure improvements.

b) 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 GP EIR estimates water demand and supply for ultimate General Plan buildout. The project is consistent with existing land use designations, and is therefore consistent with the assumptions of the UWMP and GP EIR. The UWMP indicates that existing water supply sources are sufficient to meet all near term needs, estimating an annual water demand of 48,762 acre-feet per year (AFY) by the year 2035 and existing surface and recycled water supplies in the amount of 60,400 AFY in normal years. The UWMP establishes some water supply deficit during dry year scenarios, but establishes that mandatory water conservation measures and the use of groundwater to offset reductions in surface water supplies are sufficient to offset the deficit. The project, which is consistent with existing land use designations, would not require new or expanded water supply entitlements.

c) The proposed project would be served by the Pleasant Grove Wastewater Treatment Plant (PGWWTP). 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 Pleasant Grove WWTP has the capacity⁴ to treat 12 million gallons per day (mgd) and is currently treating 7.0⁵ mgd. The Project is consistent with existing land use designations, which is how infrastructure capacity is planned. Therefore, 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 would be less than significant.

d, e) 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 GP EIR, 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. 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 and waste reduction regulations and policies and has found that the project design is in compliance.

XX. Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				X

⁴ Waste Discharge Requirements/Monitoring & Reporting Program/NPDES Permit No. CA0079502, Adopted on 28 March 2014
⁵ Dave Samuelson, City of Roseville Environmental Utilities, Personal communication, July 6, 2016.

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X

Thresholds of Significance and Regulatory Setting:

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

Discussion of Checklist Answers:

a–d) Checklist questions a–d above do not apply, because the project site is not within a Very High Fire Hazard Severity Zone and is not in a CAL FIRE responsibility area.

XXI. 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			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
endangered, threatened or rare species, or eliminate important examples of the major periods of California history or prehistory?				
b) Does the project have impacts which are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

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 GP EIR, and mitigation measures have already been incorporated via the GP EIR. 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, 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:



Escarlet Mar, Associate Planner
City of Roseville, Development Services – Planning Division

Attachments:

1. 2035 General Plan Update Final Environmental Impact Report, certified August 5, 2020, located online at https://www.roseville.ca.us/government/departments/development_services/planning/general_plan_development_guidelines
2. 2021 Housing Element Addendum, adopted August 18, 2021, located online at <https://www.roseville.ca.us/cms/One.aspx?portalId=7964922&pageId=16922203>
3. Longmeadow Initial Study and Mitigated Negative Declaration
4. Mitigation Monitoring & Reporting Program
5. CalEEMod Results
6. Environmental Noise Assessment
7. Kimley-Horn Traffic Evaluation

NOTICE OF MITIGATED NEGATIVE DECLARATION

Project Title/File Number: Longmeadow
File #s: GPA 03-05, RZ 03-03, DA 03-14, SUBD 03-06, & TP 03-30

Project Location: 1478 Blue Oaks Boulevard; Roseville; Placer County

Project Description:

- A **General Plan Amendment** (GPA 03-05) to change the land use from Light Industrial (LI) to Low Density Residential (LDR 3.7), Medium Density Residential (MDR 8.7), Business Professional (BP), Parks and Recreation (PR), and Open Space (OS);
- A **Rezone** (RZ 03-03) to change the zoning from Light Industrial (M1) to Single Family Residential with Development Standards (R1/DS), Small Lot Residential with Development Standards (RS/DS), Business Professional (BP), Parks and Recreation (PR), and Open Space (OS);
- A **Development Agreement** (DA 03-14) to specify the terms of developing the Longmeadow property;
- A **Tentative Subdivision Map** (SUBD 03-06) to divide a 99.8 acre site into 544 residential lots (465 lots if an 8 acre school site is built); and,
- A **Tree Permit** to remove 3 native oak trees and encroach into the protected zone of several others.

Project Applicant: Steve Schnable, Mourier Land Investment Corporation; 1830 Vernon Street, Suite 9; Roseville, CA 95678; Phone: 916-969-2842

Property Owner: Richard Griffin, Roseville Technology Park Associates; 1504 Eureka Road, Suite 220; Roseville, CA 95661; Phone: 916-787-0717

Lead Agency Contact Person: Wendy W. Hartman, Associate Planner: Phone (916) 774-5276

APPROVED BY
PLANNING COMMISSION
CITY OF ROSEVILLE

MAR 11 2004

ATTEST: _____

DECLARATION: The Planning Director has determined that the above project will have no significant effect on the environment and is therefore exempt from the requirement of an Environmental Impact Report. The determination is based on the following findings:

- 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, reduce the number or restrict the range of a rare or endangered plant or animal community, 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.*
- The project will not have the potential to achieve short-term, to the disadvantage of long-term, environmental goals.*
- The project will not have impacts, which are individually limited, but cumulatively considerable.*
- 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 will have a negative or adverse 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.

Written comments shall be submitted during the public comment period, **February 20 through March 11, 2004**. Submit comments to: Roseville Planning Department, 311 Vernon Street, Roseville, CA 95678-2469. Appeal of this environmental determination must be made within 10 days of adoption pursuant to Section 19.80.020 of the Roseville Municipal Code.

The public hearing on this item will be held on **March 11, 2004 at 7:00 p.m.** before the Planning Commission and will be held in the Council Chambers, located at 311 Vernon Street, Roseville, California.

Prepared by: Wendy W. Hartman Date: 2/19/04
Wendy W. Hartman, Associate Planner

Placer County Clerk: Please mail the original of this document back to City Clerk, 311 Vernon Street, Roseville, CA 95678.

INITIAL STUDY & ENVIRONMENTAL CHECKLIST

Project Title/File Number: Longmeadow
File #s: GPA 03-05, RZ 03-03, DA 03-14, SUBD 03-06, & TP 03-30

Project Location: 1478 Blue Oaks Boulevard; Roseville; Placer County

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Lead Agency Contact Person: Wendy W. Hartman, Associate Planner: Phone (916) 774-5276

This initial study has been prepared to identify and assess the anticipated environmental impacts of the above described project applications. The document relies on previous environmental documents (Appendix 1) and site-specific studies prepared to address in detail the effects or impacts associated with the project.

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 EIR, use a previously prepared EIR and supplement that EIR, or prepare a subsequent EIR to analyze the project at hand. 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 the impact will be reduced to a less than significant effect, a mitigated negative declaration shall be prepared.

In reviewing the site specific information provided for this project, the City of Roseville Planning Department has analyzed the potential environmental impacts created by this project and determined that the impacts are considered to be less than significant with mitigation. As demonstrated in the initial study checklist, there are no "project specific significant effects, which are peculiar to the project or site" (CEQA Section 15183) and therefore an additional EIR is not required. Therefore, on the basis of the following initial evaluation, we find that the proposed project could not have a significant effect on the environment, and a **Mitigated Negative Declaration** will be prepared.

Prepared by: Wendy W. Hartman Date: 2/19/04
Wendy Hartman, Associate Planner

ENVIRONMENTAL SETTING

The project site is located at the northeast corner of Woodcreek Oaks Boulevard and Blue Oaks Boulevard in the North Industrial Planning Area (NIPA) of the City of Roseville (see Attachment 1). Immediately to the west of the property is Neighborhood A (Phase 1) of the North Roseville Specific Plan (NRSP), which is predominantly residential along the west side of Woodcreek Oaks Boulevard. To the north of the property is Pleasant Grove Creek and intermittent drainages. To the east is a Light Industrial property that is currently developed with a farmhouse. The City has recently received an application to change the land use and zoning on this property from Light Industrial to Small Lot Residential. The Hewlett Packard Campus is located to the south of the site across Blue Oaks Boulevard.

The subject property is currently designated Light Industrial (LI) on the City's General Plan Land Use Map and is zoned Light Industrial (M1). The applicant is proposing to change the designation of the 99.8 ± acre property to 10-acres of Business Professional (BP), 3-acres of Parks and Recreation (PR), 8.8-acres of Open Space (OS), 31.2- acres of Low Density Residential (144 dwelling units), and 45.75-acres of Medium Density Residential (401 dwelling units; 321 units on 37.75 acres if an 8-acre elementary school is built). The current zoning and land use designation of the project site and surrounding parcels are shown in the following table:

Location	Zoning	General Plan Land Use	Actual Use Of Property
Site	Light Industrial (M1)	Light Industrial (LI)	Vacant
North	Open Space (OS) & Single Family Residential/Special Area (R1/SA)	Open Space (OS) & Low Density Residential (LDR- 0.5)	Open Space & vacant
South (across Blue Oaks Blvd.)	M1	LI	Hewlett Packard Campus
East	M1	LI	Farm house (City is currently reviewing application to Rezone property from Light Industrial to residential)
West (includes properties across Woodcreek Oaks Blvd.)	Public Quasi Public (P/QP), Small Lot Residential (RS), Small Lot Residential/Development Standards-North Roseville (RS/DS-NR), & Attached Housing (R3)	Public Quasi Public (P/QP), LDR-5, Medium Density Residential (MDR-7.7), & High Density Residential (HDR-20)	Substation, single-family residences, vacant property, and Diamond Creek Apartments

The subject property is comprised of gently rolling topography which reaches a highpoint of approximately 124 feet above mean sea level in the southwest portion of the site, and a low point of approximately 100 feet above mean sea level in the northern portion of the site, adjacent to Pleasant Grove Creek. The site naturally drains from south to north, towards Pleasant Grove Creek.

There are several native oak trees on the site with the majority of the trees located along the northern boundary of the site adjacent to Pleasant Grove Creek and the Open Space area. The applicant is requesting approval of a Tree Permit to remove three (3) of the native oak trees and to encroach into the protected zone of several others in order to develop the site.

INITIAL STUDY CHECKLIST

The initial study checklist recommended by the State of California Environmental Quality Act (CEQA) Guidelines is used to determine potential impacts of the proposed project on the physical environment. The checklist provides a list of questions concerning a comprehensive array of environmental issue areas

potentially affected by the project. Explanations to answers are provided in a discussion for each section of questions, as follows:

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project level, indirect, as well as direct, and construction as well as operational impacts.
3. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect is significant if there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Potentially Significant Unless Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level.
5. "Less Than Significant Impact" applies where the impact does not require mitigation or result in a substantial or potentially substantial change of any of the physical conditions within the area affected by the project.
6. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D).
7. Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

CITY OF ROSEVILLE INITIAL STUDY CHECKLIST				
ENVIRONMENTAL ISSUE	LEVEL OF SIGNIFICANCE			
	Potentially Significant	Potentially Significant Unless Mitigated	Less than Significant	No Impact

I. LAND USE AND PLANNING. Would the proposal				
a. Conflict with general plan designation or zoning?				L
b. Conflict with applicable environmental plan or policies adopted by agencies with jurisdiction over the project?				L
c. Be incompatible with existing land use in the vicinity?				L
d. Affect agricultural resources or operations (e.g. impacts to soils or farmlands, or impacts from incompatible land uses?				N

CITY OF ROSEVILLE INITIAL STUDY CHECKLIST				
ENVIRONMENTAL ISSUE	Priority Significant	Potentially Significant Unless Mitigated	LEVEL OF SIGNIFICANCE	
			Less than Significant	No Impact

- e. Disrupt or divide the physical arrangement of an established community (including a low-income or minority community?)

N

Discussion: The City of Roseville General Plan includes goals and policies to promote land use patterns that enhance quality of life and minimize conflicts between land uses. These policies include evaluating noise, air quality, parks and recreation, affordable housing, schools, water, and traffic when contemplating residential land use allocations. The General Plan land use designation as well as the Zoning for the subject property is Light Industrial. The applicant intends to develop most of the site as a residential subdivision with 545 new units and a 3-acre park site. A 10-acre Business Professional parcel is proposed at the southwest corner of the site. The proposal is not consistent with the existing General Plan and Zoning designation. Therefore, the applicant has requested approval to amend the General Plan as well as Rezone the property to allow for a residential subdivision and professional office uses. This analysis compares the impacts of the proposed project (10-acre Business Profession & approximately 77 acres of Residential) against the impacts that were analyzed in the General Plan for development of the entire site (99.8 acres) with a light industrial use.

The proposal to establish residential land use on the subject property represents the introduction of new residential units upon a parcel in the NIPA that is currently not assigned any residential units. Therefore in order to designate the property residential, "new" units must be allocated to the property by the City Council. The applicant has requested the allocation of 545 units for the portion of the property, which is planned for the residential subdivision. Based on the area of land designated for the future residential subdivision (85 ± acres), the proposed density would equate to 3.7 units per acre on the northern portion of the site and 8.7 units per acre on the south portion of the site (see Attachment 2: General Plan Exhibit).

Table II-12 of the City of Roseville General Plan has compatibility guidelines designed to minimize conflicts between land uses. Table II-12 identifies the compatibility of adjacent land uses as either "compatible," "conditionally compatible" or "not compatible." As listed in the table, low and medium density land uses are compatible with each other. Business Professional and Light Industrial uses are conditionally compatible with low and medium density land uses. Where Table II-12 states that land uses are conditionally compatible, it is then incumbent on the City to review the special characteristics of the affected parcels to determine whether or not the proposed land uses are compatible in each case.

The proposed project consists of converting a majority of the 99.8-acre site from industrial to residential. The southwest corner of the site is proposed to be Business Professional. The site is surrounded by residential uses to the west, and across the Open Space area along the northern boundary of the project site is Woodcreek East a low-density residential subdivision. The property to the east has a Light Industrial land use, but is currently developed with a farmhouse and associated out buildings. However, the City has recently received an application to change the land use from Light Industrial to Low Density Residential to allow for a 140-lot subdivision. If the adjacent rezone is approved, the subject property will be surrounded by residential land uses on three sides and will be separated from other industrial land uses by Blue Oaks Boulevard on the south. If the adjacent property to the east remains Light Industrial, the subject property will still be separated by a collector street with a 98-foot wide right-of-way (includes landscape corridor, sidewalk, & bike lane). The North Industrial Area Design Guidelines require a 35-foot wide buffer between residential and

CITY OF ROSEVILLE INITIAL STUDY CHECKLIST				
ENVIRONMENTAL ISSUE	Potentially Significant	LEVEL OF SIGNIFICANCE		
		Potentially Significant Unmitigated	Less Than Significant	Not Impactful

industrial uses. Therefore, adequate buffering between the two land uses will be provided.

Overall the impacts of light industrial development and residential development are similar. Detailed analysis of residential versus industrial impacts is included in other sections of this Initial Study.

Based on the above information, the potential land use impacts associated with the conversion from industrial to residential uses are considered less than significant.

II. POPULATION AND HOUSING. Would the proposal

- a. Cumulatively exceed official regional or local population projections? L
- b. Induce substantial growth in an area either directly or indirectly (e.g. through projects in an undeveloped area or extension of major infrastructure)? L
- c. Displace existing housing, especially affordable housing? L

Discussion: The project is located in a developed area where backbone infrastructure already exists that is sufficient to serve the proposed project.

The proposal does not induce growth and does not displace any existing housing. Therefore, the project has a less than significant impact on population or housing.

III. GEOLOGIC PROBLEMS. Would the proposal result in or expose people to potential impacts involving:

- a. Fault rupture? N
- b. Seismic ground shaking? N
- c. Seismic ground failure, including liquefaction? N
- d. Seiche, tsunami, or volcanic hazard? N
- e. Landslides or mudflows? N
- f. Erosion, changes in topography or unstable soil conditions from excavation, grading, or fill? L
- g. Subsidence of the land? L
- h. Expansive soils? L
- i. Unique geologic or physical features? L

Discussion: The General Plan EIR assumed and analyzed the impacts of development of the property with an industrial user which would result in grading activities that will disrupt, displace, compact and overcover soils associated with site preparation (grading and trenching for utilities) and for the

CITY OF ROSEVILLE INITIAL STUDY CHECKLIST				
ENVIRONMENTAL ISSUE	LEVEL OF SIGNIFICANCE			
	Potentially Significant	Potentially Significant unless Mitigated	Less Than Significant	No Impact

construction of the buildings and parking areas. The proposed amendments to change the land use and zoning on the subject property from Light Industrial to Residential and Business Professional and develop the property with homes and offices, will still result in similar grading activities as assumed and analyzed for the industrial development. The proposed project does not change the conclusions regarding the environmental impacts previously described in the General Plan EIR, and therefore the potential impacts associated with geology are considered less than significant.

The proposal is not a geologic-related project, and does not result in or expose people to potential geologic impacts. Additionally, the Roseville General Plan EIR finds such impacts to be less than significant since new buildings and structures are required to comply with all applicable building codes. Construction plans will be reviewed by the City of Roseville Building Department before a building permit is issued and the Engineering Division will review and approve all grading plans to insure that all grading and structures would withstand shrink-swell potentials and earthquake activity in this area.

Based on the above information, the impacts associated with development of the site under current or proposed land use and zoning with respect to grading and geology are considered less than significant.

IV. WATER. Would the proposal result in:	
a. Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?	L
b. Exposure of people or property to water related hazards such as flooding?	L
c. Discharge into surface water or other alteration of surface water quality (e.g. temperature, dissolved oxygen, or turbidity)?	L
d. Changes in the amount of surface water in any water body?	L
e. Changes in currents, or the course or direction of water movements?	L
f. Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or through substantial loss of groundwater recharge capability?	L
g. Altered direction or rate of flow of groundwater?	L
h. Impacts to groundwater quality?	L
i. Substantial reduction in the amount of groundwater otherwise available for public water supplies?	L

CITY OF ROSEVILLE INITIAL STUDY CHECKLIST				
ENVIRONMENTAL ISSUE	Potentially Significant	LEVEL OF SIGNIFICANCE		
		Potentially Significant Unmitigated	Less Than Significant	No Impact

Discussion: Similar to the discussion above for Geology, the General Plan EIR assumed that the subject property would be developed with an industrial user which would result in the overcovering of the site with paving and buildings which will have a less than significant effect on the absorption rate of water on-site and the drainage pattern on the site. In addition, it was assumed that there may be minor amounts of wind and/or water erosion associated with construction of an industrial facility. However standard erosion control measures would be included as conditions of approval for the project and enforced during construction. The proposed project does not change the conclusions regarding the environmental impacts previously described in the General Plan EIR, and therefore, the potential impacts associated with water are considered less than significant.

V. AIR QUALITY. Would the proposal:

- a. Violate any air quality standard or contribute to an existing or projected air quality violation? L
- b. Expose sensitive receptors to pollutants? L
- c. Alter air movement, moisture, or temperature, or cause any change in climate? L
- d. Create objectionable odors? L

Discussion: This project alone does not have the potential to significantly degrade air quality. However, the incremental impacts associated with this project considered cumulatively with the incremental impacts of other projects will degrade air quality. The General Plan EIR finds that the significant adverse air quality impacts cannot be mitigated to a less than significant level even with the mitigation measures proposed. Addressing the unmitigatable cumulative impacts to air quality, the General Plan EIR adopted findings of overriding consideration. The project is consistent with the impacts identified in and evaluated in the General Plan EIR. However CEQA requires that reductions in adverse project impacts be made, where it is feasible to do so.

Short-term impacts to air quality can be expected in association with construction activities. These impacts are primarily associated with grading activities and the increased potential for dust and wind driven erosion of soils. Particulate matter resulting from construction dust will be reduced to a less than significant impact by implementing standard dust control measures on the job site as part of an erosion control plan. Vehicle exhaust produced during project construction, could temporarily contribute to the deterioration of ambient air quality. These impacts are considered to be less than significant. The grading permit and on-site inspection by the Public Works Department will ensure appropriate dust control measures, such as watering are done to reduce short-term air quality impacts to less than significant levels.

Long-term impacts to air quality associated with this project are attributed to non point source emissions primarily vehicle trips to and from the site. The State regulates vehicle emissions, however, the City currently has a Transportation Systems Management (TSM) Ordinance in place and is expanding City transit services to reduce vehicle trips within the City.

The project does not have the potential to create objectionable odors nor does it have the potential to change air movement, moisture, or temperature either locally or regionally.

CITY OF ROSEVILLE INITIAL STUDY CHECKLIST				
ENVIRONMENTAL ISSUE	LEVEL OF SIGNIFICANCE			
	Adversely Significant	Potentially Significant	Less than Significant	Not Significant

Based on the above information, air quality impacts are considered to be less than significant.

VI. TRANSPORTATION/CIRCULATION: Would the proposal result in:

- a. Increased vehicle trips or traffic congestion? L
- b. Hazards to safety from design features (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)? L
- c. Inadequate emergency access or access to nearby uses? L
- d. Insufficient parking capacity on-site or off-site? L
- e. Hazards or barriers for pedestrians or bicyclists? L
- f. Conflicts with adopted policies supporting alternative transportation (e.g. bus turnouts, bicycle racks)? L
- g. Rail, waterborne or air traffic impacts? N

Discussion: A long-term traffic analysis has been prepared for the project by DKS Associates, Inc (dated November 19, 2003) and is available for review in the Roseville Planning Department. The traffic study analyzed the long-term and short-term impacts associated with the project under several different scenarios (with and without an elementary school and with and without the West Roseville Specific Plan). The study also included the impacts of the adjacent Fiddymont 44 property, which the City has received a request to change the zoning and land use from industrial to residential. The study compared the trip generation of the proposed project under the above mentioned scenarios against the trip generation of developing the site with a light industrial use. The study concluded that the proposed project would have fewer daily and p.m. peak hour trips than a light industrial project (7,213 daily residential and BP trips vs. 11, 927 daily light industrial trips). As a result, the proposed project will have a less than significant impact on the environment.

VII. BIOLOGICAL RESOURCES: Would the proposal result in impacts to:

- a. Endangered, threatened or rare species or their habitats (including but not limited to plants, fish, insects, animals, and birds)? L
- b. Locally designated species (e.g. heritage trees)? L
- c. Locally designated natural communities (e.g. oak forest, native grassland, etc.)? L
- d. Wetland habitat (e.g. marsh, riparian, vernal pools)? L
- e. Wildlife dispersal or migration corridors? L

Discussion: Presently, all of the subject property is designated Light Industrial, even though a portion of the property is considered watershed of the Pleasant Grove Creek. The General Plan EIR assumed

CITY OF ROSEVILLE INITIAL STUDY CHECKLIST				
ENVIRONMENTAL ISSUE	LEVEL OF SIGNIFICANCE			
	Potentially Significant	Potentially Significant - Less Mitigated	Less Than Significant	Not Significant

that the subject property would be developed with an industrial use, and therefore, biological resources could be impacted. In 1999, the property owner received approval of a Parcel Map to divide the 99.8-acre site into four lots for light industrial uses (PM 97-07). The owner included a wetland delineation with the application that indicated there were approximately 6.5 acres of land within the 100-year floodplain and 0.52 acres of seasonal wetlands, drainage swales, and vernal pools located elsewhere on the site. Although there was not any buildings associated with the Parcel Map request (only roadway and utility infrastructure), the property owner obtained approval of a Nationwide 26 Permit from the Army Corps of Engineers and a Section 7 Biological Opinion from the U.S. Fish and Wildlife Department to fill the 0.52 acres of wetlands. The portion of the property within the 100-year flood plain was required to be placed in an open space preserve. The property owner purchased credits from Wildlands Inc and filled the 0.52 acres of seasonal wetlands during the summer of 2001. The area within the 100-year flood plain was incorporated into the Operations and Management Plan of the Woodcreek East Open Space Preserve in 1999.

The proposed project and land use change is consistent with the requirements of the existing wetland permit and the preserve areas will be designated as Open Space.

There are several native oak trees located on the subject property. The City's Tree Preservation Ordinance regulates activities affecting native oak trees with a diameter at breast height (DBH) of six inches or greater. An arborist report has been prepared that addresses the projects impacts to native oak trees. The proposed development of the site proposes removal of three native oak trees and encroachment into the protected zone radius of several others. The City's Tree Preservation Ordinance requires that replacement be provided on an inch for inch basis for any oak trees approved for removal. The applicant is proposing to mitigate the removal of the oak trees through on-site planting and the payment of in-lieu fees. The proposed mitigation is consistent with the City's Tree Preservation Ordinance. Projects that provide replacement consistent with the City's Tree Preservation Ordinance are considered to have less-than- significant impacts to trees.

Based on the above information, impacts to biological resources are considered to be less than significant.

VIII. ENERGY AND MINERAL RESOURCES: Would the proposal result in impacts to:

- a. Conflicts with adopted energy conservation plans? N
- b. Use non-renewable resources in a wasteful and inefficient manner? N
- c. Result in the loss of availability of a known mineral resource that would be of future value? N

Discussion: The project has no additional impacts beyond those analyzed in the General Plan EIR for the existing land use on energy or mineral resources.

IX. HAZARDS: Would the proposal involve:

- a. A risk of accidental explosion or release of hazardous substances (including, but not limited to: oil, pesticides, chemicals or radiation)? L

CITY OF ROSEVILLE INITIAL STUDY CHECKLIST				
ENVIRONMENTAL ISSUE	LEVEL OF SIGNIFICANCE			
	Essentially Significant	Probably Significant Impact Mitigation	Less Than Significant	No Impact

- b. Possible interference with an emergency response plan or emergency evacuation plan? L
- c. The creation of any health hazard or potential health hazard? L
- d. Exposure of people to existing sources of potential health hazards? L
- e. Increased fire hazard in areas with flammable brush? L

Discussion: Additional households could increase the risk of improper disposal of hazardous materials. Household hazardous waste impacts are, however, a less than significant impact due to the implementation of a household hazardous waste program, according to the General Plan 2010 EIR.

The project is located within an area currently receiving City emergency services and the project will cause a less than significant impact to the City's Emergency Response or Management Plans. Based on the information above, hazard-related impacts are considered less than significant.

X. NOISE: Would the proposal result in:

- a. Increases in existing noise levels? L
- b. Exposure of people to severe noise levels? M

Discussion: A Noise Impact study has been prepared for the project by Brown-Buntin Associates (dated January 16, 2004) and is available for review at the Planning Department. The report analyzes the noise impact on the proposed project from Blue Oaks Boulevard and Woodcreek Oaks Boulevard. The City of Roseville General Plan establishes interior and exterior noise level standards that must be complied with when allocating residential land use. The exterior noise level standard for sensitive receptors, such as the proposed residential development, is 60 ldn or 65 ldn with mitigation measures implemented (i.e. sound wall). The noise analysis indicates that the impact on the lots adjacent to Blue Oaks Boulevard and Woodcreek Oaks Boulevard will be significant because the sound level is anticipated to exceed 60 ldn. In order to reduce exterior noise level impacts to 60 dB a mitigation measure is provided that requires sound walls to be constructed along the property line of lots that are adjacent to Blue Oaks Boulevard and Woodcreek Oaks Boulevard.

Mitigation Measure XI.a: The developer shall construct a two-foot tall berm with a six-foot tall sound wall along the southern property line of lots 37 through 51 in Village 2. The wall shall be engineered to accommodate an eight-foot tall wall. A six-foot tall sound wall shall be constructed along the western property lines of Lots 95-97 and 102-103 in Village 1 and Lots 94-107 in village 2.

The noise impact study also calculated anticipated interior sound levels for rooms of the homes adjacent to Blue Oaks Boulevard and Woodcreek Oaks Boulevard. The interior sound level standard established by the City of Roseville General Plan is 45 ldn. The noise analysis indicates that standard construction materials and techniques will be adequate to meet the City's interior noise level standards.

CITY OF ROSEVILLE INITIAL STUDY CHECKLIST				
ENVIRONMENTAL ISSUE	LEVEL OF SIGNIFICANCE			
	Potentially Significant	Probably Significant	Less than Significant	No Impact

The proposed construction in association with the project (e.g. earthwork) could expose persons to ground-born vibrations, however, these activities are temporary in nature and are not anticipated to result in any unusual or excessive ground-born vibration or noise levels. Based on this, ground-born vibrations (should they occur) are not expected to create significant impacts.

Residents of the proposed project site as well as neighboring uses may experience short-term increases in noise levels during construction. Noise levels during construction may exceed those levels deemed generally acceptable in the Roseville General Plan Noise Element. However, noise impacts are not expected to be significant because construction will be short-term and limited to the extent practical, to daytime hours (7:00 a.m. to 7:00 p.m., Mondays through Fridays 8 a.m. to 8 p.m. on weekends), pursuant to Roseville Municipal Code (Section 9.24 090E). As specified in the Noise Ordinance, construction outside these hours will only occur after reasonable measures have been taken to minimize noise impacts on nearby uses. Because the project would comply with the City of Roseville Noise Ordinance as well as General Plan polices regulating construction noise (i.e. Policy NA-10) related impacts are considered less than significant.

The proposed project site is not located within an airport land use plan area nor is it located within two miles of an airport or within the vicinity of a private airstrip. Therefore, no impact would occur relative to exposing people to excessive airport related noise levels.

Because the project would comply with the provisions of the City's General Plan and Noise Ordinance with implementation of the mitigation measures, impacts related to noise are considered less than significant

XI. PUBLIC SERVICES: Would the proposal have an effect upon or result in a need for new or altered government services in any of following areas.

- a. Fire protection? L
- b. Police protection? L
- c. Schools? L
- d. Maintenance of public facilities, including roads? L
- e. Other governmental services? L

Discussion: Residents may require the services of the Roseville Fire Department in the event of an emergency. Currently, the nearest fire station, Station #5, is located at Pleasant Grove Boulevard, east of Woodcreek Oaks Boulevard (at Mahany Park). Future secondary service will be provided by Fire Station # 7 located off of Pleasant Grove Boulevard and Highway 65. This station is expected to be completed in 2005. In addition, the Fire Department is pursuing the ability to locate Fire Station #8 in the near vicinity of the project site. This station (once constructed) would then provide primary service to the site.

The development of this project will require adequate water pressure in the water lines, and will need to 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 that is used for purchasing capital facilities for the Fire Department.

CITY OF ROSEVILLE INITIAL STUDY CHECKLIST				
ENVIRONMENTAL ISSUE	Potential Significant Impacts	LEVEL OF SIGNIFICANCE		
		Potentially Significant Mitigated	Less Than Significant	No Impact

In accordance with the terms of the project Development Agreement, the landowner will be required to form a services CFD to help offset the cost of providing police and fire service. In addition, the Development Agreement requires the landowner to pay an Interim Finance Fee, Community Benefit Fee, and Storm Drain Fee. As a result of these measures, the potential impacts to public services are considered less than significant.

The proposed project will however, introduce a new school-aged population that was previously not anticipated in the General Plan EIR. As a result, the proposed project creates the need for additional school facilities that were not planned for. To mitigate for these potential impacts the applicant has entered into separate agreements with both the Roseville City School District and the Roseville Joint Union High School District. The Roseville City School District Agreement provides an option for the School District to purchase eight-acres of the Longmeadow site adjacent to Woodcreek Oaks Boulevard and south of the proposed park site in order to construct a new elementary school. These agreements will ensure that the potential impacts associated with the proposal are mitigated to a less than significant level by the applicant through the use of specific school fees and land purchase options.

Based on incorporation of the measures listed above the proposed project will not have a significant effect upon or create any additional need for public services (i.e. fire protection, police services, schools). The impacts associated with this project upon public services would be considered less than significant.

XII. UTILITIES AND SERVICES SYSTEMS. Would the proposal result in a need for new systems or supplies, or substantial alteration to the following utilities?

- a. Power or natural gas? L
- b. Communication systems (e.g., telephone, cable or fiber optic systems)? L
- c. Local or regional water treatment or distribution facilities? L
- d. Sewer or septic tanks? L
- e. Storm water drainage? L
- f. Solid waste disposal? L
- g. Local or regional water supplies? L

Discussion: The various utility departments have reviewed the project to ensure that the project would not have a greater impact on existing and planned infrastructure improvements than a light industrial project. It has been determined that the proposed project would have an equal or slightly lesser demand upon infrastructure than a light industrial project would have. Since the proposed project is consistent with the impacts and demands assumed and analyzed for a light industrial development, the potential impacts to utilities is considered less than significant.

CITY OF ROSEVILLE INITIAL STUDY CHECKLIST				
ENVIRONMENTAL ISSUE	LEVEL OF SIGNIFICANCE			
	Potentially Significant	Potentially Significant Unless Mitigated	Less than Significant	Not Significant

XIII. AESTHETICS: Would the proposal:

- a. Affect a scenic vista, or scenic highway? N
- b. Have a demonstrable negative aesthetic effect? L
- c. Create light or glare? L

Discussion: The proposal does not obstruct or impact any scenic vista or scenic highway. The Planning Commission will review the Tentative Map and associated entitlements for conformance with City standards including the Zoning Ordinance, Subdivision Ordinance and Community Design Guidelines. This discretionary review will reduce any potential aesthetic impacts associated with the project to a less than significant level. Based on the information presented above, aesthetic impacts are considered to be less than significant.

Light and glare will increase above the existing undeveloped condition. Typical residential lighting within the project will produce new light, however the amount of light produced and its impact on adjacent uses is considered to be less than significant.

XIV. CULTURAL RESOURCES: Would the proposal:

- a. Disturb paleontological resources? N
- b. Disturb archaeological resources? N
- c. Affect historical resources? N
- d. Have the potential to cause a physical change, which would affect unique ethnic cultural values? N
- e. Restrict existing religious or sacred uses within the potential impact area? N

Discussion: No cultural resources are known to exist on the project site. Therefore, the impacts to potential cultural resources are considered less than significant.

XV. RECREATION: Would the proposal:

- a. Increase the demand for neighborhood or regional parks or other recreational facilities? L
- b. Affect existing recreational opportunities? L

Discussion: The proposal to change the land use and zoning on a portion of the subject property from Light Industrial to Low and Medium Density Residential will generate additional demand for recreational opportunities beyond those assumed in the General Plan EIR, thereby, potentially impacting the recreational facilities in Roseville. To mitigate for the increased demand for additional recreational opportunities, the proposed project includes the designation of a portion of the property for a future public park site. In accordance with the policies of the City's General Plan, the project is required to dedicate nine acres of parkland for each 1,000 people. Based on the anticipated number

CITY OF ROSEVILLE INITIAL STUDY CHECKLIST				
ENVIRONMENTAL ISSUE	LEVEL OF SIGNIFICANCE			
	Potentially Significant	Potentially Significant Mitigation	Less Than Significant	No Impact

of residential units that are planned in the future residential subdivision, the project would be required to dedicate approximately 12.43 acres of parkland (10.6 acres with the school site alternative). As shown on the proposed Tentative Subdivision Map (Attachment 4), a three-acre site has been designated for the development of a future park site. In addition the project is dedicating 8.8 acres of Open Space to the City. As described in the Development Agreement, the applicant will need to pay in-lieu fees to satisfy their General Plan parkland dedication requirement as well as pay for the ongoing maintenance requirement for the three-acre park site.

In addition to the parkland dedication requirement, the developer will also be responsible for paying the City's Neighborhood and Citywide Park Fees which are used to develop local and Citywide parks within the City. With these mitigation requirements, the project will not significantly impact the existing and planned park facilities.

XVI. MANDATORY FINDINGS OF SIGNIFICANCE

- a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? L
- b. Does the project have the potential to achieve short-term, to the disadvantage of long-term environmental goals? L
- c. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) L
- d. Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly? M

Discussion: Long-term environmental goals are not impacted by the proposed project. The cumulative impacts do not change the conclusions drawn or the findings of the 2010 General Plan EIR. The project does not have the potential to degrade the quality of the environment or reduce the habitat of any wildlife species. With implementation of the proposed mitigation measures, the project does not have the potential to create adverse effects on human beings.

Appendix

Appendix 1 Previous Environmental Documents

Attachments

1. Vicinity Map
2. General Plan Exhibit
3. Rezone Exhibit
4. Tentative Subdivision Map
5. Tentative Subdivision Map Alternative with School Site
6. Traffic Study (available for review at the Planning Department)
7. Arborist Report (available for review at the Planning Department)
8. Noise Study (available for review at the Planning Department)

Appendix 1

PREVIOUS ENVIRONMENTAL DOCUMENTS

The City has determined that an Initial Study shall be prepared in order to determine whether the potential exists for unmitigatable impacts resulting from the proposed project. Relevant analysis from the General Plan certified EIR, and other project-specific studies and reports that have been generated to date were used as the database for the Initial Study. The decision to prepare the Initial Study utilizing the analysis contained in the General Plan EIR and project-specific analysis summarized herein is sustained by Sections 15168 and 15183 of the CEQA Guidelines.

Section 15183 states that "projects which are consistent with the development density established by existing zoning, community plan or general plan policies 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 site." Thus, if an impact is not peculiar to the project or site, has been addressed as a significant effect in the prior EIR, or can be substantially mitigated by the imposition of uniformly applied development policies or standards then an additional EIR need not be prepared for the project solely on the basis of that impact.

Section 15168 relating to program EIRs indicates that where subsequent activities involve site specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity, to determine whether the environmental effects of the operation were covered in the earlier program EIR. A program EIR is intended to provide the basis in an Initial Study for determining whether the later activity may have any significant effects. It can also be incorporated by reference to deal with regional influences, secondary effects, cumulative impacts, broad alternatives, and other factors that apply to the program as a whole.

The following is a list of documents that were relied upon in the preparation of the Initial Study:

- General Plan 2010 EIR;
- Environmental Noise Analysis, dated January 16, 2004, prepared by Brown-Buntin Associates;
- Traffic Impact Analysis, dated November 19, 2003, prepared by DKS Associates;
- U.S. Army Corps of Engineers Nationwide 26 Permit, dated November 24, 1998;
- U.S. Fish and Wildlife Service Section 7 Biological Opinion, dated November 6, 1998; and
- Operations and Management Plan for the Roseville Technology Park Open Space Preserve, dated October, 8, 2002.

Provided below is a summary of the General Plan EIR:

General Plan EIR

The General Plan 2010 (GP) was adopted November 18, 1992 by Resolution #92-321. The GP did not, with the exception of the establishment of a 1,000 dwelling unit pool, allocate land uses beyond those identified in the previous General Plan. The focus of the revision was to update policies and to integrate the concepts developed through Roseville's specific plans, into citywide policy (page I-4 of the GP). No changes to land use allocations or granted entitlements were proposed in conjunction with the GP update.

Each element of the GP references and provides policies relating to specific plans. The specific plans are viewed as the primary mechanism for implementing the goals and policies of the GP. The plans are consistent with, and incorporated by reference into, the Land Use Element of the GP (page II-59 of the GP). Specific plan land uses are reflected on the GP land use map. The specific plans establish detailed policies and implementation programs for portions of the City, consistent with the goals and policies established in the GP.

The GP EIR (SCH #92072064) was certified November 18, 1992 by Resolution #92-320 and is one of the previous environmental documents used in preparation of this Initial Study. The GP EIR assessed three development scenarios – Market, Market/Specific Plan build out, and GP build out.

The City Council adopted a Statement of Overriding Considerations when they certified the GP EIR, identifying the following impacts as significant and unavoidable

- Flood hazard
- Construction air emissions (ozone)
- Railroad noise
- Conversion of open space outside of infill area
- Jobs/housing imbalance
- Loss of annual grasslands
- Loss of riparian woodlands
- Loss of intermittent drainage and other seasonal wetland habitat
- Risk of hazardous materials-related emergencies due to rail operations
- Growth inducement
- Vehicular air emissions (ozone)
- Vehicle noise
- Noise from fixed sources
- Affordable housing
- Increased traffic/degraded LOS at five key intersections (under 2010 Market/Specific Plan only)
- Loss of oak trees and oak woodlands
- Loss of vernal pools
- Habitat fragmentation and loss of wildlife habitat
- Cumulative impacts affecting issues such as air quality, land use, traffic, biological, public services and utilities, and water

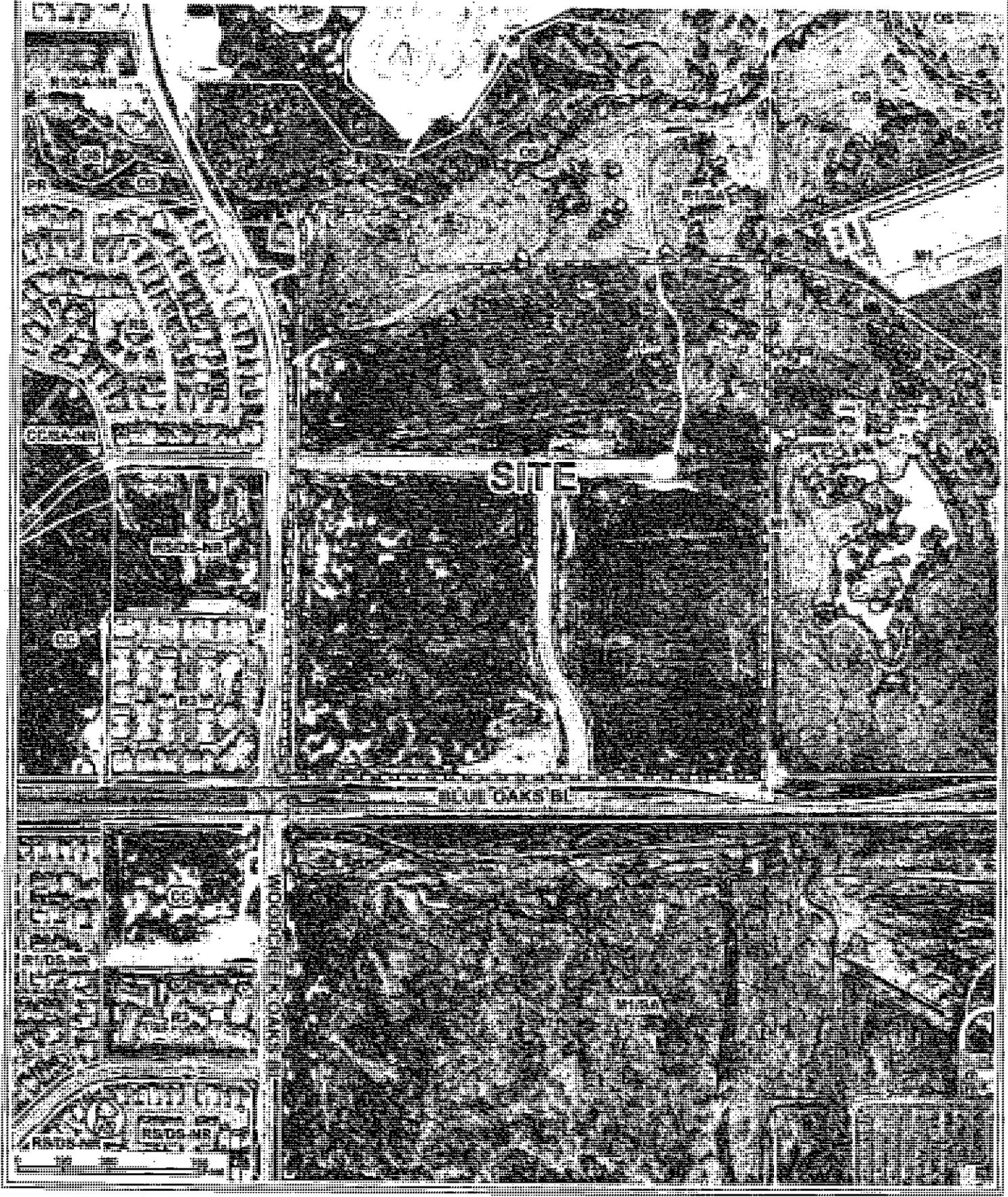
The above stated documents are available for review Monday through Friday, 8 a.m. to 5 p.m. at the Roseville Planning Department, 311 Vernon Street, Roseville, CA 95678.

GPA 03-05
RZ 03-03
SUBD 03-06
DA 03-14
TP 03-30

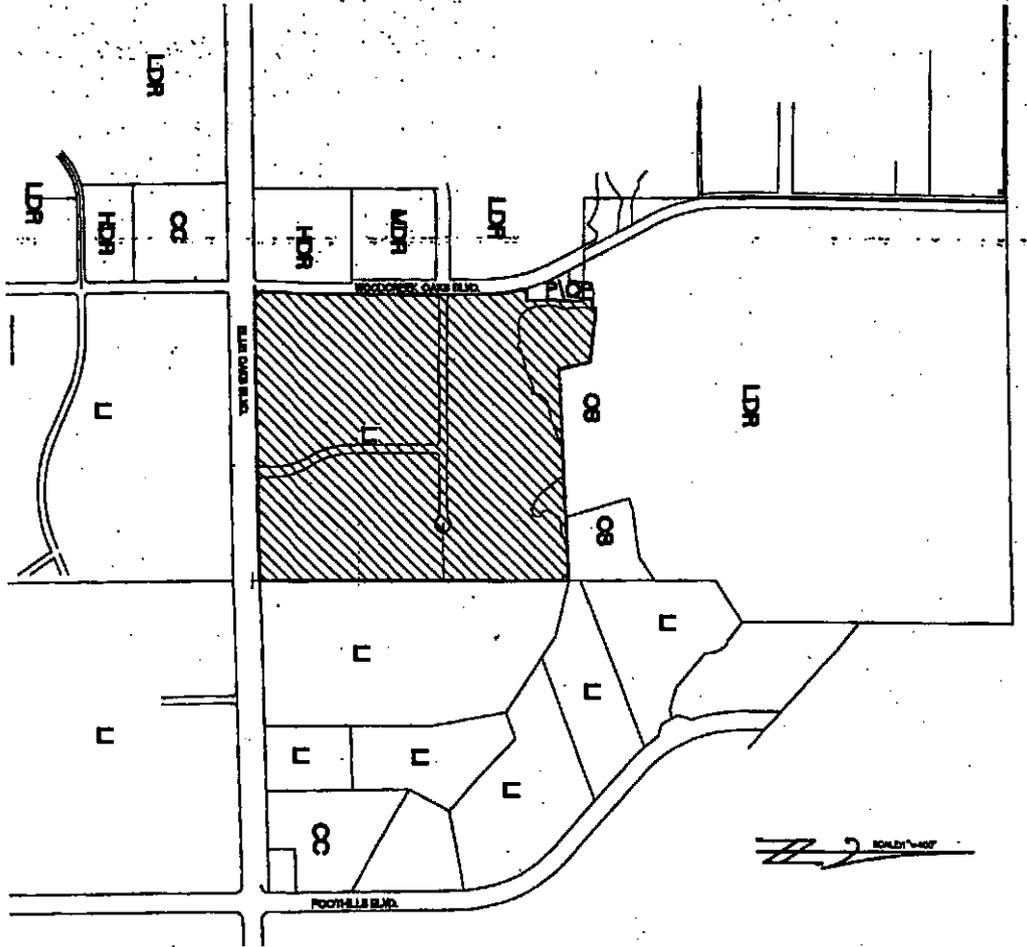
Longmeadow

Attachment 1

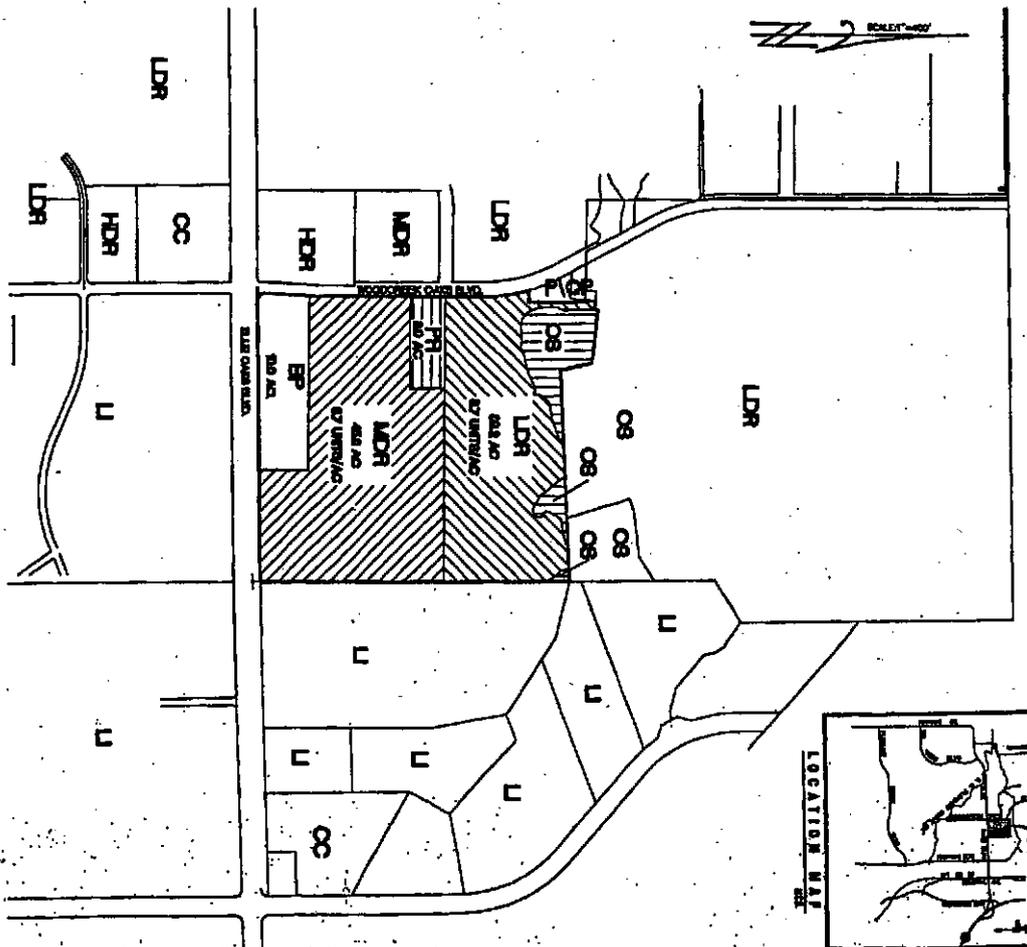
1510 Blue Oaks Blvd.



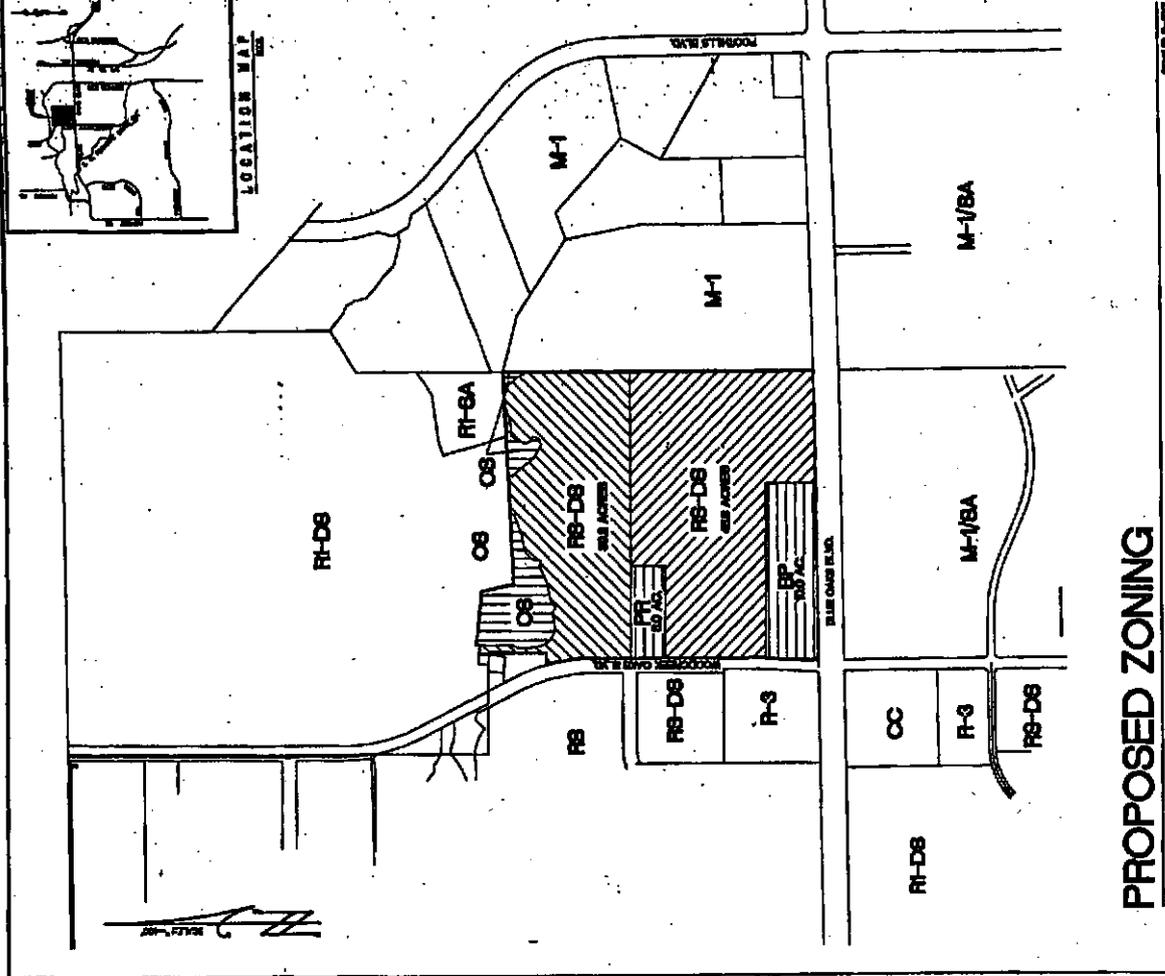
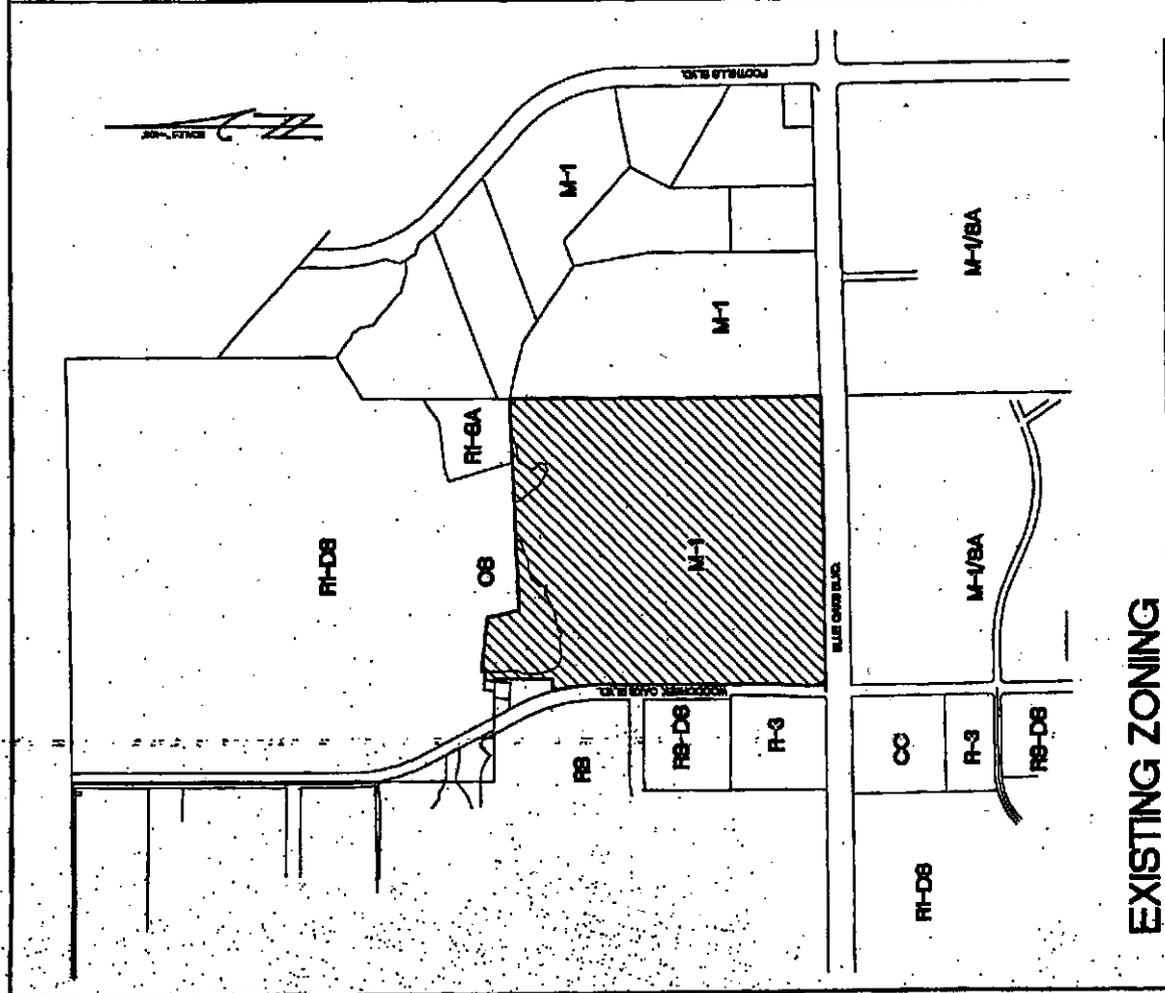
EXISTING LAND USE



PROPOSED LAND USE



DATE: 05/11/03	SCALE: 1" = 100'	PROJECT: GENERAL PLAN AMENDMENT EXPERT
BY: [Signature]	DATE: MAY 2003	PROJECT: LONGMEADOW
 BAKER-WILLIAMS ENGINEERING GROUP Engineers / Surveyors / Land Planners / Geotechnical / Environmental / Planning / GIS Services 4200 Avenida Devel, Suite 100 - Costa Mesa, CA 92626 (949) 261-4200 - fax (949) 261-4201 - www.bakerwilliams.com		
CITY OF ROSENDALE CALIFORNIA		



DATE	DESCRIPTION

DATE	DESCRIPTION

BAKER-WILLIAMS ENGINEERING GROUP
 Engineering / Planning / Land Planning / Environmental Planning / GIS Services
 2020 Alameda Drive, Suite 200, Oakland, CA 94612
 510.438.7700

REZONE EXHIBIT
LONGMEADOW
 CITY OF ROSENILLE

DATE: 11/11/11
 SCALE: AS SHOWN
 SHEET NO. 1 OF 1



DEVELOPMENT SERVICES DEPARTMENT – PLANNING DIVISION

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

MITIGATION MONITORING AND REPORTING PROGRAM

Project Title/File Number:	NIPA PCL 35 – Blue Oaks Retail Center Phase 2
Project Location:	1480 Blue Oaks Boulevard, Roseville, Placer County, CA; APN 482-340-012-000
Project Description:	The applicant requests a Conditional Use Permit, Design Review Permit, and a Tentative Subdivision Map for a ±8.40-acre commercial center. The project would include six (6) freestanding commercial buildings ranging between 950 and 13,200 square feet in size; two (2) of the commercial buildings are proposed with a drive-through user (i.e., a Chick-fil-A and Dutch Brothers), the remaining building tenants are unknown at this time. A conditional use permit for the two (2) drive-through food pad users is proposed since the property is contiguous to residential zoned properties. The Design Review Permit would establish the design and colors of both the Chick-fil-A (Lot 2) and Dutch Brothers (Lot 4) buildings. At a later date, the unknown tenants (i.e., Lots 1, 3, 5, 6) will be required to obtain subsequent design review approvals prior to building permit issuance. The tentative subdivision map as proposed would create a total of six (6) parcels.
Environmental Document	Mitigated Negative Declaration
Project Applicant:	Andi Panagopoulos, Cunningham Engineering
Property Owner:	Roseville Blue Oaks Partners, LLC
Lead Agency Contact Person:	Escarlet Mar, Associate Planner; Phone (916) 774-5247

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
<p>NOI-1: Commercial Noise Control For all commercial uses within 150 feet of residential uses, implement the following or equally effective measures: (a) For commercial loading docks and on-site truck circulation areas that are planned to be within 150 feet of sensitive receptors (including backyards), the following measures shall be implemented: (1) Loading docks and on-site truck circulation routes shall be designed to ensure that noise levels do not exceed 70 dB Lmax or 50 dB hourly Leq at the nearest residence. An acoustic analysis shall demonstrate that the loading area design, including any noise attenuation features (e.g., covering, sound walls, orientation) would be adequate to achieve this standard; and, (2) Deliveries shall generally be limited to the hours between 7:00 A.M. and 10:00 P.M. Signs shall be placed on the truck loading areas behind the anchor tenant space and at the rear of the shops building which list the hours for deliveries. (b) For all commercial buildings, roof-top HVAC shall be oriented away from residential areas and systems shall not produce noise levels that exceed 50 dB at a distance of 25 feet. In addition, roof-top parapets shall block line-of-sight from noise-sensitive uses to HVAC equipment. (c) Setbacks or enhanced barriers (e.g., 6 feet tall) as needed to achieve City standards.</p> <p>An acoustical analysis shall be conducted to demonstrate that City noise standards would be achieved by these measures. Additional measures shall be implemented, if needed, to meet the standards.</p>	<p>Project plans will be reviewed for compliance. The applicants shall submit site-specific acoustical analyses to the Chief Building Inspector for review.</p>	<p>Pre-Construction: Prior to issuance of Improvement Plans and/or Building Permits</p> <p>Add as note on Improvement Plans and Building Plans.</p>	<p>Engineering will review Improvement Plans for compliance with wall and noise requirements.</p> <p>Building will review Building Plans for compliance with HVAC requirements.</p>	<p>An Acoustical Study</p>	
<p>NOI-2: Commercial Noise Control Where commercial uses adjoin common residential property lines, and loading docks or truck circulation routes face the residential areas, the following mitigation measures shall be included in the project design: (a) Where commercial uses adjoin common residential property lines, and loading docks or truck circulation routes face the residential areas, the following mitigation measures shall be included in the project design: (1) Loading All heating, cooling and ventilation equipment shall be located within mechanical rooms where possible; (2) All heating, cooling and ventilation equipment shall be shielded from view with solid barriers; (3) In the event that a grocery store proposes to occupy the lots proposed nearest to the residential property lines (Lots 1, 5 and 6), additional mechanical equipment would be required for food cold storage. Because the noise generation of such equipment would vary by manufacturer and location, it is not possible to predict noise generation of such equipment at this time. At such a time as a building does require additional mechanical equipment for food cold storage, the mechanical equipment plans should be reviewed by a qualified acoustical consultant to ensure that adequate sound control measures are included to achieve compliance with City's noise standards at the nearest residences.</p>	<p>These measures shall be included on building plans. The Chief Building Inspector shall review plans for inclusion of these measures prior to issuance of building permits. The Code Enforcement Inspector shall respond to complaints.</p>	<p>Prior to approval of building permits.</p> <p>Add as note on Building Plans.</p>	<p>The Chief Building Inspector shall ensure that appropriate noise control measures are reflected in the building plans. The Building Official shall ensure that construction contractors comply with the measures. The Code Enforcement Inspector shall enforce the City's Noise Ordinance regulations.</p>	<p>An Acoustical Study</p>	
<p>CUL-1: Unanticipated Discoveries – If any suspected TCRs are discovered during ground disturbing construction activities, all work shall cease within 100 feet of the find, or an agreed upon distance based on the project area and nature of the find. The Construction Manager shall immediately notify the City of Roseville Development Services Director by phone and a Tribal Representative from a California Native American tribe that is traditionally and culturally affiliated with a geographic area shall be immediately notified. The Tribal Representative shall determine if the find is a TCR (PRC §21074). The Tribal Representative will make recommendations for further evaluation and treatment as necessary.</p> <p>When avoidance is infeasible, preservation in place is the preferred option for mitigation of TCRs under CEQA and UAIC protocols, and every effort shall be made to preserve the resources in place, including through project redesign, if feasible. Culturally appropriate</p>	<p>This condition shall be reflected in all construction and building plans, and construction site workers shall be advised by the site manager of this measure.</p>	<p>Construction: Measure applies if resources are discovered during construction.</p> <p>Add as note on Improvement Plans and Building Plans.</p>	<p>Engineering and Building</p>	<p>None</p>	

<p>treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, or returning objects to a location within the project area where they will not be subject to future impacts. Permanent curation of TCRs will not take place unless approved in writing by UAIC or by the California Native American Tribe that is traditionally and culturally affiliated with the project area.</p> <p>The contractor shall implement any measures deemed by the CEQA lead agency to be necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not limited to, facilitating the appropriate tribal treatment of the find, as necessary. Treatment that preserves or restores the cultural character and integrity of a TCR may include Tribal Monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil.</p>					
<p>CUL-2: Post Ground Disturbance – A minimum of seven days prior to beginning earthwork, clearing and grubbing, or other soil disturbing activities, the applicant shall notify lead agency of the proposed earthwork start-date. The lead agency shall contact the United Auburn Indian Community (UAIC) with the proposed earthwork start-date and a UAIC Tribal Representative or Tribal Monitor shall be invited to inspect the project site, including any soil piles, trenches, or other disturbed areas, within the first five days of groundbreaking activity, or as appropriate for the type and size of project. The tribe shall be provided 72 hours to accept or decline observation. The single tribal observer shall be required to comply with all job site safety requirements and shall sign a waiver of liability prior to entering the job site. Should the tribe choose not to observe any or all of the activity, the City shall deem the mitigation measure completed in good faith without tribal observation as long as the notification was made and documented. During this inspection, a UAIC Tribal Representative or Tribal Monitor may provide an on-site meeting for construction personnel information on TCRs and workers awareness brochure.</p> <p>If any TCRs are encountered during this initial inspection, or during any subsequent construction activities, work shall be suspended within 100 feet of the find and the measures included in the Inadvertent/Unanticipated Discoveries Mitigation Measure shall be implemented. Preservation in place is the preferred alternative under CEQA and UAIC protocols, and every effort must be made to preserve the resources in place, including through project redesign.</p> <p>The contractor shall implement any measures deemed by CEQA lead agency to be necessary and feasible to preserve in place, avoid, or minimize significant effects to the resources, including the use of a paid Native American Monitor during ground disturbing activities.</p>					



MITIGATION VERIFICATION SUBMITTAL COVER SHEET

Project Title/Planning File #
Project Address
Property Owner
Planning Division Contact

SUMMARY OF VERIFICATION MATERIALS INCLUDED IN THIS SUBMITTAL

Table with 3 columns: Mitigation Measure, Supporting Attachments Included, Date Complete. Contains 8 empty rows for data entry.

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.

Blue Oaks Retail Center Phase 2 Summary Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.4. Operations Emissions Compared Against Thresholds

6. Climate Risk Detailed Report

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

7. Health and Equity Details

7.3. Overall Health & Equity Scores

7.5. Evaluation Scorecard

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Blue Oaks Retail Center Phase 2
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	7.80
Location	1480 Blue Oaks Blvd, Roseville, CA 95747, USA
County	Placer-Sacramento
City	Roseville
Air District	Placer County APCD
Air Basin	Sacramento Valley
TAZ	428
EDFZ	15
Electric Utility	Roseville Electric
Gas Utility	Pacific Gas & Electric

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Fast Food Restaurant with Drive Thru	5.30	1000sqft	0.12	5,300	30,700	—	—	—

Fast Food Restaurant with Drive Thru	1.00	1000sqft	0.02	1,000	30,700	—	—	—
Strip Mall	33.3	1000sqft	0.76	33,300	30,700	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.56	1.31	12.6	11.8	0.02	0.60	5.39	5.99	0.55	2.59	3.14	—	1,800	1,800	0.07	0.04	1.14
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.75	46.1	6.27	7.65	0.01	0.29	0.18	0.47	0.26	0.04	0.31	—	1,631	1,631	0.06	0.04	0.03
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.25	0.84	2.01	2.46	< 0.005	0.09	0.09	0.18	0.08	0.03	0.11	—	503	503	0.02	0.01	0.15
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.05	0.15	0.37	0.45	< 0.005	0.02	0.02	0.03	0.02	0.01	0.02	—	83.2	83.2	< 0.005	< 0.005	0.02

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.33	1.21	0.24	1.91	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	66.3	1,007	1,074	6.72	0.03	10.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02	0.92	0.23	0.19	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	66.3	1,000	1,067	6.72	0.03	10.1
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.18	1.06	0.23	1.04	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	66.3	1,004	1,070	6.72	0.03	10.1
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.03	0.19	0.04	0.19	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	11.0	166	177	1.11	< 0.005	1.66

6. Climate Risk Detailed Report

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

7. Health and Equity Details

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	14.0
Healthy Places Index Score for Project Location (b)	95.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

Environmental Noise Assessment

Blue Oaks Retail Center

Roseville, California

BAC Job # 2022-159

Prepared For:

Roseville Blue Oaks Partners, LLC

Attn: Curt Burwell
30 East 23rd Street, 10th Floor
New York, NY 10010

Prepared By:

Bollard Acoustical Consultants, Inc.



Dario Gotchet, Principal Consultant

November 30, 2022



Introduction

The Blue Oaks Retail Center (project) is located north of Blue Oaks Boulevard and east of Woodcreek Oaks Boulevard in Roseville, California. The project consists of 6 lots containing retail/commercial development, including two drive-through restaurants. The project area with aerial imagery is shown in Figure 1. The project site plan is presented as Figure 2.

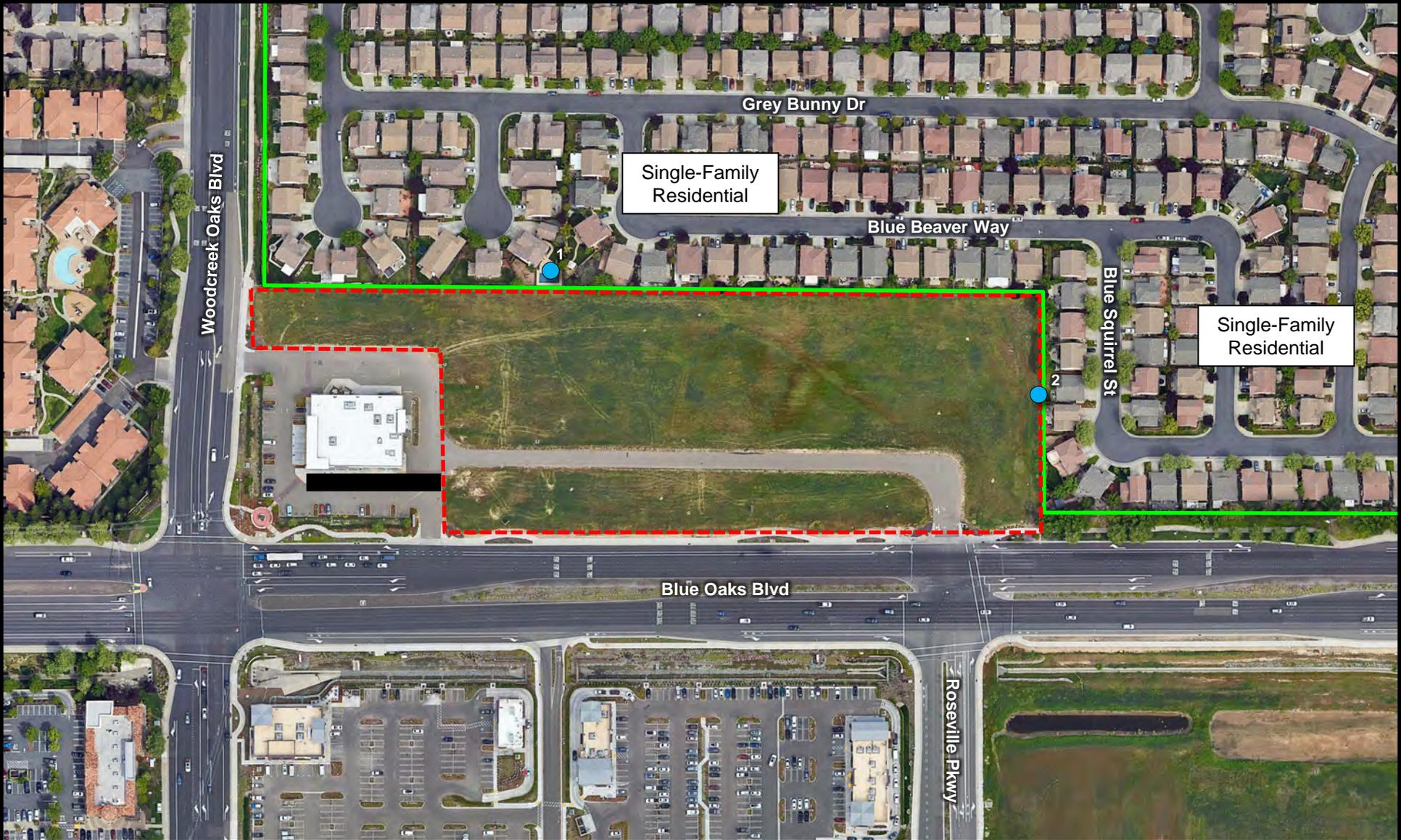
Due to the proximity of the project to existing adjacent noise-sensitive uses (single-family residential), Bollard Acoustical Consultants, Inc. (BAC) was retained to prepare an assessment of potential noise impacts associated with the project. Specifically, the purposes of this assessment are to quantify noise levels associated with project on-site operations, to assess the state of compliance of those noise levels with applicable City of Roseville noise criteria, and if necessary, to recommend measures to reduce those noise levels to acceptable limits at the nearest existing noise-sensitive uses.

Noise Fundamentals and Terminology

Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard, and thus are called sound. Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. Another useful aspect of the decibel scale is that changes in levels (dB) correspond closely to human perception of relative loudness. Appendix A contains definitions of Acoustical Terminology. Figure 3 shows common noise levels associated with various sources.

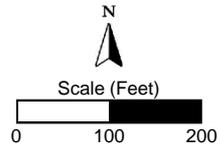
The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by weighing the frequency response of a sound level meter by means of the standardized A-weighting network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels in decibels.

Community noise is commonly described in terms of the “ambient” noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}) over a given time period (usually one hour). The L_{eq} is the foundation of the Day-Night Average Level noise descriptor, DNL or L_{dn} , and shows very good correlation with community response to noise.



Legend

- Project Boundary (Approximate)
- Existing 6' Masonry Walls (Noise Barriers)
- Long-Term Noise Measurement Locations

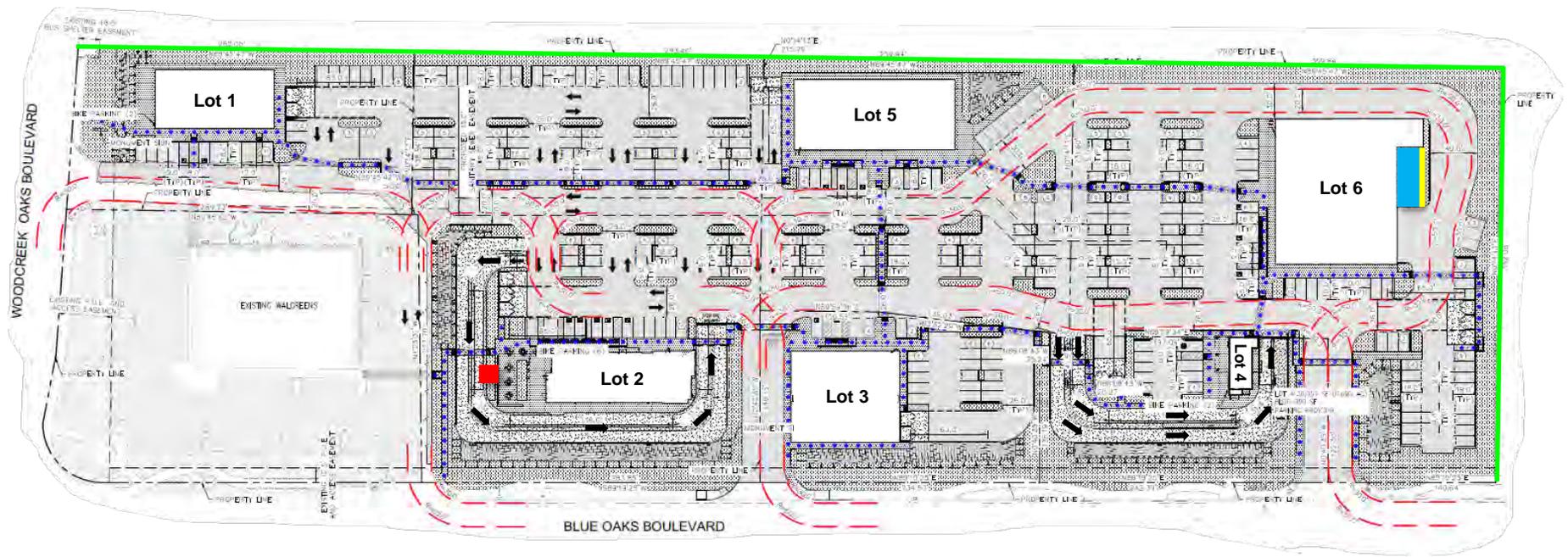


Blue Oaks Retail Center
Roseville, California

Project Area

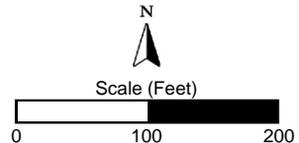
Figure 1





Legend

- Existing 6' Masonry Walls (Noise Barriers)
- Required Loading Dock Screen Wall
- Loading Dock
- Drive-Through Lane Speaker (Assumed Location)



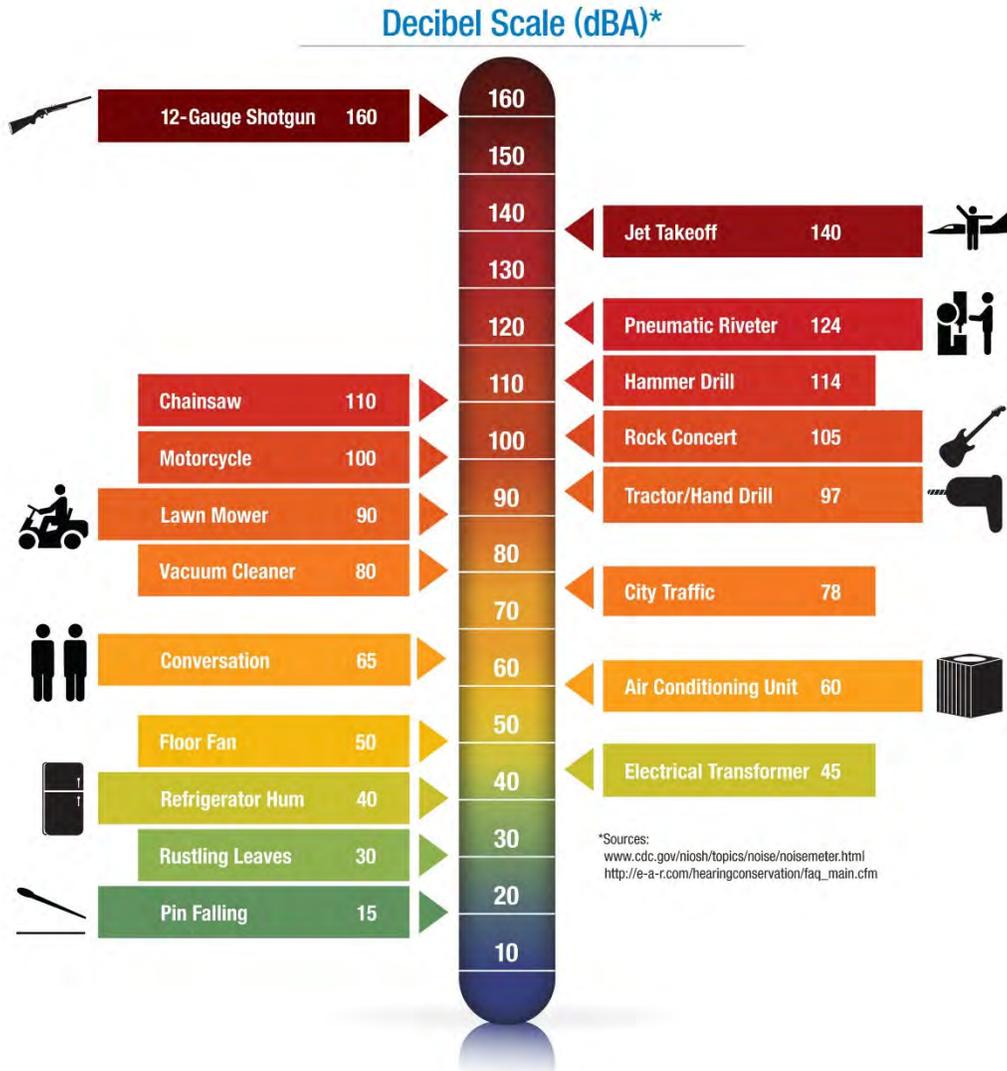
Blue Oaks Retail Center
Roseville, California

Project Site Plan

Figure 2



Figure 3
Typical A-Weighted Sound Levels of Common Noise Sources



The Day-Night Average Level (DNL or L_{dn}) is based upon the average noise level over a 24-hour day, with a +10-decibel weighting applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because DNL represents a 24-hour average, it tends to disguise short-term variations in the noise environment. DNL-based noise standards are commonly used to assess noise impacts associated with traffic, railroad, and aircraft noise sources.

Existing Ambient Noise Environment within Project Vicinity

The existing ambient noise environment in the immediate project vicinity is defined primarily by traffic on Blue Oaks Boulevard and Woodcreek Oaks Boulevard, and by adjacent commercial activities. To generally quantify the existing ambient noise level environment within the project vicinity, BAC conducted long-term (72-hour) noise level measurements at two (2) locations November 11-13, 2022. The noise survey locations are shown in Figure 1. Photographs of the noise level survey locations are provided in Appendix B.

Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meters were used for the ambient noise level survey. The meters were calibrated immediately before and after use with an LDL Model CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4). The results of the long-term ambient noise level survey are shown numerically and graphically in Appendices C and D (respectively) and are summarized below in Table 1.

Table 1
Summary of Long-Term Ambient Noise Measurement Results – November 11-13, 2022¹

Site Description ²	Date	DNL (dB)	Average Measured Hourly Noise Levels (dB) ³			
			Daytime ⁴		Nighttime ⁵	
			Leq	L _{max}	Leq	L _{max}
Site 1: Backyard of residence at 125 Bright Eyes Ct	11/11/22	59	53 (47-57)	67 (60-82)	52 (47-58)	65 (57-82)
	11/12/22	54	49 (45-54)	67 (57-79)	48 (43-51)	62 (58-67)
	11/13/22	54	50 (44-53)	65 (53-77)	47 (39-52)	58 (51-68)
Site 2: Project property adjacent to residence at 1593 Blue Squirrel St	11/11/22	62	59 (55-63)	74 (66-85)	55 (49-60)	70 (63-81)
	11/12/22	60	57 (55-58)	70 (66-75)	53 (46-57)	67 (63-75)
	11/13/22	60	58 (52-65)	73 (64-90)	51 (45-55)	67 (62-76)

¹ Detailed summaries of the noise monitoring results are provided in Appendices C and D.
² Long-term ambient noise monitoring locations are identified on Figure 1.
³ Data presented in terms of: Average (Low-High).
⁴ Daytime: 7:00 a.m. to 10:00 p.m.
⁵ Nighttime: 10:00 p.m. to 7:00 a.m.

Source: Bollard Acoustical Consultants, Inc. 2022.

Ambient noise measurement site 1 was placed in the backyard of the residence located at 125 Bright Eyes Ct. However, because permission was not granted for placement of a noise meter in a residence backyard to the east of the project site, ambient noise measurement site 2 was located on the project site adjacent to the residence at 1593 Blue Squirrel St. As indicated in Table 1, average measured hourly noise levels were generally consistent at each site throughout the monitoring period.

Criteria for Acceptable Noise Exposure

Roseville General Plan and Municipal Code

The Roseville General Plan 2035 and Municipal Code establish identical noise level standards for non-transportation noise sources, such as those proposed by project on-site operations. The City's noise level limits are reproduced below in Table 2.

Table 2
Performance Standards for Non-Transportation Sources
(As Measured at the Property Line of Noise-Sensitive Uses)

Noise Level Descriptor (dBA)	Noise Level (dBA)	
	Daytime (7:00 a.m. to 10:00 p.m.)	Nighttime (10:00 p.m. to 7:00 a.m.)
Hourly average, L_{eq}	50	45
Maximum, L_{max}	70	65
<p>-For municipal power plants consisting primarily of broadband, steady state noise sources, the hourly (L_{eq}) noise standard may be increased up to 10 dBA, but not exceed 55 dBA L_{eq}.</p> <p>-Each of the noise level standards specified above shall be reduced by 5 dB for pure tone noises, noise consisting primarily of speech or music, or for recurring impulsive noises. Such noises are generally considered by residents to be particularly annoying and are a primary source of noise complaints. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).</p> <p>-No standards have been included for interior noise levels. Standard construction practices should, with exterior noise levels identified, result in acceptable interior noise levels.</p>		

Source: Roseville General Plan 2035 (Table IX-3) and Roseville Municipal Code (Section 9.24.100).

Noise Standards Applicable to the Project

The primary noise sources associated with the project have been identified as delivery truck activities, drive-through lane operations, parking lot movements, and rooftop mechanical equipment (HVAC).

According to the provided project description (dated June 29, 2022), the project proposes a total of 6 lots within the development. These lots are identified as Lots 1-6 in Figure 2. It is our understanding that Lots 1, 3, 5 and 6 are dedicated for future retail/commercial tenants, and that Lots 2 and 4 will contain businesses with drive-through lanes (Chick-fil-A and Dutch Bros. Coffee, respectively). The expected hours of operation for the Chick-fil-A business (Lot 2) will be 7:00 a.m. to 10:00 p.m. (i.e., daytime hours only). The Dutch Bros. Coffee business (Lot 4) is proposing 24-hour operations. The hours of operations for the remaining retail/commercial tenants of the development (Lots 1, 3, 5 and 6) are not known at this time. For the purposes of this analysis, it is assumed that all delivery truck activities within the development (i.e., loading dock operations and on-site truck circulation) will be restricted to daytime hours only (7:00 a.m. to 10:00 p.m.).

Finally, the footnote in Table 2 states that each of the noise level limits shall be reduced by 5 dB for noises consisting of speech or music, which would be applicable to drive-through lane menu speaker posts at Lots 2 and 4. Based on the information above, the City of Roseville noise level standards applied to the project are provided in Table 3.

Table 3
Noise Level Standards Applied to the Project

Noise Source	Applicable Noise Level Standard (dB)			
	Daytime (7:00 a.m. to 10:00 p.m.)		Nighttime (10:00 p.m. to 7:00 a.m.)	
	L _{eq}	L _{max}	L _{eq}	L _{max}
Delivery Truck Activities	55	75	--	--
Drive-Through Menu Speaker ¹	50	70	40	60
Drive-Through Vehicle Passbys	55	75	45	65
Rooftop HVAC Equipment ²	55	--	45	--

¹ Pursuant to footnote in Table 2 of this report, noise level standards shall be reduced by 5 dB for pure tone noise such as noise consisting primarily of speech or music. This downward adjustment would be applicable to drive-through lane speakers.

² Because mechanical equipment operation typically generates sustained, steady-state noise levels, impacts of rooftop mechanical equipment were appropriately assessed relative to the City's hourly average (L_{eq}) noise level standards.

Source: Roseville General Plan 2035 (Table IX-3) and Roseville Municipal Code (Section 9.24.100).

The City's noise level standards are to be applied at the property lines of noise-sensitive uses. As a result, the noise level limits shown in Table 3 were applied at the property lines of the nearest residential uses to the north and east of the project. Satisfaction with the City's noise level standards at the closest residential uses would ensure compliance with the noise level criteria at residential uses located farther away.

Evaluation of Project-Generated Noise Levels

As mentioned previously, the primary noise sources associated with the project have been identified as delivery truck activities, drive-through lane operations, and rooftop mechanical equipment (HVAC). Predicted noise levels resulting from each of these sources at the nearest residential uses are evaluated in the following sections.

Predicted project-generated noise levels at the nearest existing residential uses include consideration of the screening that would be provided by existing 6' masonry walls. The locations of the existing 6' noise barriers are illustrated in Figures 1 and 2. Photographs of the existing noise barriers are provided in Appendix B. It is estimated that the existing 6' sound walls would provide approximately 6 dB of project-generated noise level reduction at the nearest existing residential uses.

Delivery Truck and Unloading Activity Noise

Given the size of the proposed commercial buildings and based on the proposed site design as indicated in Figure 2, deliveries to the various uses will likely be conducted at the front or side of buildings using medium-duty trucks and/or side-step vans. An exception to this is Lot 6, where a future loading dock is located on the east side of the building to accommodate larger trucks (shown in Figure 2). It is the understanding of BAC that the City of Roseville Planning Division is

requiring the project to construct a screen wall adjacent to the loading dock to reduce the impacts of truck deliveries (also shown in Figure 2).

Medium-Duty Trucks/Van Deliveries to Businesses at Lots 1-5

Deliveries by medium-duty trucks/vans to the various commercial uses within the project site would be fairly brief as well as intermittent. In addition, the noise generation of those vans is considerably lower than heavy trucks and would be partially screened by intervening commercial buildings and completely screened by the existing property line masonry noise barriers. As a result, noise generated by medium-duty trucks/vans at the businesses at Lots 1-5 is not anticipated to exceed the Table 3 standards or result in adverse noise impacts during daytime hours (7:00 a.m. to 10:00 p.m.). Given the sensitivity of the existing residential uses which border the project site to the north and east, such deliveries should be restricted during nighttime hours (10:00 p.m. to 7:00 a.m.). With the nighttime restriction on deliveries, adverse noise impacts associated with medium-duty trucks/van deliveries to the project site are not anticipated.

Heavy Truck Deliveries to Business at Lot 6

The specific use for the proposed business at Lot 6 has not been determined at the time of writing this report. However, grocery and retail store buildings of this size (13,150 sf.) typically generate light semi-trailer truck activity once initial store stocking has been completed. As a result, semi-truck activity associated with Lot 6 will likely consist of 1-2 semi-trailer truck deliveries a week for a retail store, and approximately 1 per day for a small grocery store use. In either case, there would not be more than 1 heavy truck delivery at Lot 6 during any given hour.

Heavy-truck trailer unloading will occur directly from the inside of the trailer while docked in the recessed bay, and sealed rubber gaskets will be provided at the truck docks to reduce noise from those inside loading and unloading activities. The required screen-wall would further reduce the noise generated by heavy truck unloading.

Based on BAC file data for commercial loading dock operations, the worst-case hourly average noise exposure associated with heavy truck deliveries is predicted to range from 45 to 50 dB L_{eq} at the nearest residential use located east of the loading dock. The predicted range includes the noise reduction that would be provided by the existing 6' masonry property line noise barrier as well as the required screen-wall at the east edge of the loading dock. This range of levels would comply with the City of Roseville daytime hourly average (L_{eq}) noise level standard but could exceed the City's nighttime hourly average (L_{eq}) noise level limit. As a result, all heavy truck deliveries should be limited to daytime hours (7:00 a.m. to 10:00 p.m.). In addition, trucks should not be permitted to idle while parked in the loading dock, and any refrigerated trucks should be supplied with external power so the truck engine can be shut off during unloading. With inclusion of these noise control measures, adverse noise impacts associated with periodic daytime heavy truck deliveries to the Lot 6 store are not anticipated.

Because the heavy trucks will be travelling very slowly as they approach the loading dock and while on-site, maximum (L_{max}) noise levels associated with such passbys are anticipated to be satisfactory relative to the City's daytime maximum (L_{max}) noise standard. It is further expected

that maximum (L_{max}) noise levels associated with heavy truck passbys will be below or within the range of measured existing maximum (L_{max}) daytime noise levels at the nearest residential uses, including consideration of shielding provided by the existing 6' property line sound walls. Although brief periods of elevated noise exposure would be generated during the airbrake release and backing of the heavy truck into the loading dock, that noise would be shielded by both the existing property line noise barrier and loading dock screen-wall. Given the infrequent arrival of heavy trucks to the loading dock, and the limitation of those trucks to daytime hours (7:00 a.m. to 10:00 p.m.), impacts associated with maximum (L_{max}) noise levels associated with heavy truck deliveries at Lot 6 are not anticipated.

Drive-Through Operations

As mentioned previously, Lots 2 and 4 of the development will contain businesses with drive-through lanes (Chick-fil-A and Dutch Bros. Coffee, respectively). It is the understanding of BAC that the Chick-fil-A at Lot 2 will have a drive-through menu speaker. However, the project description states that the Dutch Bros. Coffee at Lot 2 will not be equipped with a drive-through lane menu speaker (only person-to-person ordering). The assumed location of the Chick-fil-A drive-through menu speaker, which is based on the experience of BAC in previous drive-through projects, is illustrated in Figure 2.

To quantify the noise emissions of project drive-through speaker usage and vehicle passages, noise level measurement data from similar drive-thru facilities collected by BAC in the greater Sacramento region in recent years were utilized. That data is presented below in Table 4.

Table 4
Reference Drive-Through Noise Levels

Noise Source	Measured Noise Levels (dB)	
	Average (L_{eq})	Maximum (L_{max})
Speaker ¹	63 dB at 10 feet	67 dB at 10 feet
Vehicles ²	60 dB at 5 feet	70 dB at 5 feet
¹ Speaker noise level data obtained from measurements conducted at a drive-through restaurant located at 2845 Bell Road in Auburn, California in 2018. ² Vehicle noise level data obtained from previous BAC drive-through noise studies.		

The Chick-fil-A drive-through lane and speaker maintain a separation of approximately 180 and 240 feet (respectively) from the property line of the nearest residential use (north). The Dutch Bros. Coffee drive-through lane maintains a separation of approximately 240 feet from the property line of the nearest residential use (north). When projected to distances of 180 and 240 feet, hourly average and maximum noise levels associated with continuous Chick-fil-A drive-through lane usage would range from 24 to 29 dB L_{eq} and 33 to 34 dB L_{max} , including consideration of shielding provided by the existing 6' property line masonry sound wall. When projected to a distance of 240 feet, hourly average and maximum noise levels associated with continuous Dutch Bros. Coffee drive-through lane usage would be 20 dB L_{eq} and 30 dB L_{max} , including consideration of shielding provided by the existing 6' property line masonry sound wall.

The predicted average (L_{eq}) and maximum (L_{max}) noise levels presented above would satisfy the City's noise standards (Table 3) and be well below measured existing ambient noise levels at the nearest residences, including consideration of shielding provided by the existing 6' property line sound walls. As a result, no adverse noise impacts are predicted for the proposed drive-through usage at the nearest residences during either daytime or nighttime hours.

Rooftop Mechanical Equipment (HVAC)

The heating, ventilating, and air conditioning (HVAC) requirements for the buildings of the development will most likely be met using packaged rooftop mounted systems. These units would be completely shielded from view of neighboring residential uses by the rooftop parapets.

Reference noise level data for packaged rooftop HVAC units indicate that a 12.5-ton packaged unit can be expected to generate an A-weighted sound power level of approximately 85 dB. Because mechanical equipment operation typically generates sustained, steady-state noise levels, impacts of rooftop mechanical equipment were appropriately assessed relative to the City's hourly average (L_{eq}) noise level standards.

The nearest building rooftop equipment locations maintain a separation of approximately 30 feet from the property lines of the nearest residential use. When projected to a distance of 30 feet, the resulting HVAC level computes to 44 dB L_{eq} , including shielding provided by the building parapets and existing 6' property line noise barrier. Because the predicted worst-case HVAC equipment noise level of 44 dB L_{eq} would satisfy City's daytime and nighttime hourly average (L_{eq}) noise standards provided in Table 3 and generate noise levels below or within the range of measured existing ambient noise levels in the project vicinity (shown in Table 1), noise impacts are not identified for this aspect of the project.

It should be noted that, excluding Lots 2 and 4, the future tenants of the development are unknown at this time. In the event that a grocery store proposes to occupy the lots proposed nearest to the residential property lines (Lots 1, 5 and 6), additional mechanical equipment would be required for food cold storage. Because the noise generation of such equipment would vary by manufacturer and location, it is not possible to predict noise generation of such equipment at this time. At such a time as a building does require additional mechanical equipment for food cold storage, the mechanical equipment plans should be reviewed by a qualified acoustical consultant to ensure that adequate sound control measures are included to achieve compliance with City's noise standards at the nearest residences.

Combined Noise from All Sources

Given the different locations from which project-related noise would be generated (loading dock, building rooftops & drive-through lanes), the noise generated at one location would not appreciably combine with noise generated at other locations. For example, noise generated by the drive-through operations would be so low as to be inaudible at the residences located behind the buildings on Lots 5 and 6, so the only sound which would be appreciably audible at those residences would be infrequent truck deliveries. As a result, the cumulative effect of all project noise sources is not predicted to be appreciably different from the noise generation of the

individual noise sources. Therefore, noise generated by combined sources is expected to satisfy the City's noise criteria and not result in adverse noise impacts provided all truck deliveries are limited to daytime hours (7:00 a.m. to 10:00 p.m.).

Conclusions & Recommendations

Truck deliveries, drive-through activities, and rooftop mechanical equipment (HVAC) operations associated with the proposed project would generate noise levels which are expected to satisfy the City's daytime noise standards at the existing residential uses located immediately north and east of the project site. As a result, no restrictions on daytime operations or additional noise mitigation measures would be warranted for the proposed operations of the Blue Oaks Retail Center during daytime hours. During nighttime hours, however, noise generated by truck deliveries could both exceed City noise standards and substantially exceed measured existing ambient noise levels at nearby residential uses. As a result, the following specific recommendations are provided:

1. All truck deliveries to the development, including heavy trucks and medium-duty trucks/side-step vans, shall be limited to daytime hours only (7:00 a.m. to 10:00 p.m.).
2. At such a time as the loading dock is constructed at the Lot 6 building, the screen-wall required by the City of Roseville adjacent to the loading dock should be constructed to a height sufficient to intercept line of sight between unloading activities and the nearest residences to the north and east.
3. All roof-top mechanical equipment shall be located as far as practical from the existing residences to the north and east, and completely screened from view of those residences by the rooftop parapet.
4. In the event that a grocery store proposes to occupy the lots proposed nearest to the residential property lines (Lots 1, 5 and 6), thereby requiring additional mechanical equipment that would be required for food cold storage, the mechanical equipment plans should be reviewed by a qualified acoustical consultant to ensure that adequate sound control measures are included to achieve compliance with City of Roseville noise standards at the nearest residences.

These conclusions are based on the site plan shown on Figure 2, BAC measurement data and the operations assumptions contained herein. Deviations from the above-mentioned resources and/or assumptions could cause actual noise levels to differ from those predicted in this assessment.

This concludes BAC's environmental noise assessment of on-site operations at the Blue Oaks Retail Center located in Roseville, California. Please contact BAC at (530) 537-2328 or dariog@bacnoise.com with any questions regarding this assessment.

Appendix A Acoustical Terminology

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
Attenuation	The reduction of an acoustic signal.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound. A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.
IIC	Impact Insulation Class (IIC): A single-number representation of a floor/ceiling partition's impact generated noise insulation performance. The field-measured version of this number is the FIIC.
L_{dn}	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
L_{max}	The highest root-mean-square (RMS) sound level measured over a given period of time.
Loudness	A subjective term for the sensation of the magnitude of sound.
Masking	The amount (or the process) by which the threshold of audibility is for one sound is raised by the presence of another (masking) sound.
Noise	Unwanted sound.
Peak Noise	The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the "Maximum" level, which is the highest RMS level.
RT₆₀	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
STC	Sound Transmission Class (STC): A single-number representation of a partition's noise insulation performance. This number is based on laboratory-measured, 16-band (1/3-octave) transmission loss (TL) data of the subject partition. The field-measured version of this number is the FSTC.





A



B



C



D

Legend

- A: Site 1: Backyard of residence at 125 Bright Eyes Ct, facing south towards 6' sound wall and project site
- B: Site 1: Measured height of existing property line sound wall (6+ feet)
- C: Site 2: On project site adjacent to backyard of residence at 1593 Blue Squirrel St, facing south towards Blue Oaks Blvd
- D: Site 2: Facing north along existing 6' property line sound wall

Blue Oaks Retail Center
Roseville, California

Noise Survey Photographs

Appendix C-1
Long-Term Ambient Noise Monitoring Results - Site 1
Blue Oaks Retail Center - Roseville, California
Friday, November 11, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM	51	63	49	46
1:00 AM	50	63	48	44
2:00 AM	47	57	45	42
3:00 AM	48	62	46	42
4:00 AM	49	60	47	43
5:00 AM	51	61	50	47
6:00 AM	58	82	55	52
7:00 AM	56	69	55	52
8:00 AM	50	60	50	47
9:00 AM	57	72	47	44
10:00 AM	48	65	45	42
11:00 AM	48	64	47	44
12:00 PM	50	64	49	46
1:00 PM	51	69	49	46
2:00 PM	48	63	47	43
3:00 PM	49	73	47	43
4:00 PM	47	65	45	41
5:00 PM	49	61	48	45
6:00 PM	57	82	52	48
7:00 PM	55	73	54	50
8:00 PM	54	64	53	50
9:00 PM	54	67	53	51
10:00 PM	54	69	53	50
11:00 PM	52	63	52	48

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	57	47	53	58	47	52
Lmax (Maximum)	82	60	67	82	57	65
L50 (Median)	55	45	49	55	45	49
L90 (Background)	52	41	46	52	42	46

Computed DNL, dB	59
% Daytime Energy	65%
% Nighttime Energy	35%

GPS Coordinates	38°47'48.11"N
	121°19'36.70"W

Appendix C-2
Long-Term Ambient Noise Monitoring Results - Site 1
Blue Oaks Retail Center - Roseville, California
Saturday, November 12, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM	51	62	50	47
1:00 AM	51	62	49	45
2:00 AM	46	58	45	42
3:00 AM	46	62	44	41
4:00 AM	45	62	44	41
5:00 AM	48	67	46	43
6:00 AM	48	63	47	44
7:00 AM	47	57	46	43
8:00 AM	48	68	45	43
9:00 AM	48	66	46	43
10:00 AM	48	64	47	44
11:00 AM	49	63	48	45
12:00 PM	51	71	49	45
1:00 PM	50	67	48	46
2:00 PM	49	70	46	42
3:00 PM	48	66	46	42
4:00 PM	46	59	45	41
5:00 PM	54	79	48	43
6:00 PM	49	61	49	45
7:00 PM	50	65	49	44
8:00 PM	50	79	44	40
9:00 PM	45	63	44	40
10:00 PM	45	64	43	40
11:00 PM	43	58	42	40

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	54	45	49	51	43	48
Lmax (Maximum)	79	57	67	67	58	62
L50 (Median)	49	44	47	50	42	46
L90 (Background)	46	40	43	47	40	42

Computed DNL, dB	54
% Daytime Energy	70%
% Nighttime Energy	30%

GPS Coordinates	38°47'48.11"N
	121°19'36.70"W

Appendix C-3
Long-Term Ambient Noise Monitoring Results - Site 1
Blue Oaks Retail Center - Roseville, California
Sunday, November 13, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM	41	55	39	36
1:00 AM	40	52	39	36
2:00 AM	39	53	38	36
3:00 AM	41	60	40	37
4:00 AM	41	51	39	36
5:00 AM	44	53	42	39
6:00 AM	47	68	44	42
7:00 AM	46	66	45	43
8:00 AM	50	77	45	43
9:00 AM	46	58	46	44
10:00 AM	48	70	46	44
11:00 AM	49	58	48	46
12:00 PM	47	61	47	44
1:00 PM	47	72	45	44
2:00 PM	46	63	44	42
3:00 PM	44	53	44	41
4:00 PM	46	65	45	41
5:00 PM	48	64	47	44
6:00 PM	53	74	51	47
7:00 PM	53	63	52	47
8:00 PM	53	68	52	48
9:00 PM	53	66	52	49
10:00 PM	52	65	51	48
11:00 PM	51	65	49	45

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	53	44	50	52	39	47
Lmax (Maximum)	77	53	65	68	51	58
L50 (Median)	52	44	47	51	38	42
L90 (Background)	49	41	44	48	36	39

Computed DNL, dB	54
% Daytime Energy	76%
% Nighttime Energy	24%

GPS Coordinates	38°47'48.11"N
	121°19'36.70"W

Appendix C-4
Long-Term Ambient Noise Monitoring Results - Site 2
Blue Oaks Retail Center - Roseville, California
Friday, November 11, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM	51	67	46	40
1:00 AM	50	69	42	36
2:00 AM	49	64	45	35
3:00 AM	49	70	41	36
4:00 AM	51	63	45	36
5:00 AM	55	73	51	42
6:00 AM	60	81	58	52
7:00 AM	61	71	59	52
8:00 AM	58	68	57	50
9:00 AM	57	69	55	48
10:00 AM	55	72	53	47
11:00 AM	57	78	55	46
12:00 PM	56	66	55	46
1:00 PM	58	74	56	48
2:00 PM	58	73	56	49
3:00 PM	58	78	57	50
4:00 PM	57	78	56	48
5:00 PM	61	85	59	51
6:00 PM	63	83	61	54
7:00 PM	62	77	61	54
8:00 PM	59	69	58	50
9:00 PM	60	69	59	53
10:00 PM	58	72	56	48
11:00 PM	55	73	53	45

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	63	55	59	60	49	55
Lmax (Maximum)	85	66	74	81	63	70
L50 (Median)	61	53	57	58	41	49
L90 (Background)	54	46	50	52	35	41

Computed DNL, dB	62
% Daytime Energy	81%
% Nighttime Energy	19%

GPS Coordinates	38°47'46.22"N
	121°19'27.51"W

Appendix C-5
Long-Term Ambient Noise Monitoring Results - Site 2
Blue Oaks Retail Center - Roseville, California
Saturday, November 12, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM	53	68	48	40
1:00 AM	51	65	45	38
2:00 AM	47	63	41	35
3:00 AM	46	65	41	33
4:00 AM	47	64	38	34
5:00 AM	51	64	47	40
6:00 AM	54	66	51	44
7:00 AM	55	67	53	47
8:00 AM	56	66	54	46
9:00 AM	58	73	56	48
10:00 AM	58	68	56	48
11:00 AM	58	66	57	48
12:00 PM	58	69	56	47
1:00 PM	57	68	56	47
2:00 PM	56	68	54	45
3:00 PM	57	71	56	47
4:00 PM	56	72	55	46
5:00 PM	57	72	56	46
6:00 PM	58	68	57	48
7:00 PM	57	69	55	46
8:00 PM	58	74	55	47
9:00 PM	57	75	54	48
10:00 PM	57	75	55	48
11:00 PM	55	73	52	46

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	58	55	57	57	46	53
Lmax (Maximum)	75	66	70	75	63	67
L50 (Median)	57	53	55	55	38	46
L90 (Background)	48	45	47	48	33	40

Computed DNL, dB	60
% Daytime Energy	82%
% Nighttime Energy	18%

GPS Coordinates	38°47'46.22"N
	121°19'27.51"W

Appendix C-6
Long-Term Ambient Noise Monitoring Results - Site 2
Blue Oaks Retail Center - Roseville, California
Sunday, November 13, 2022

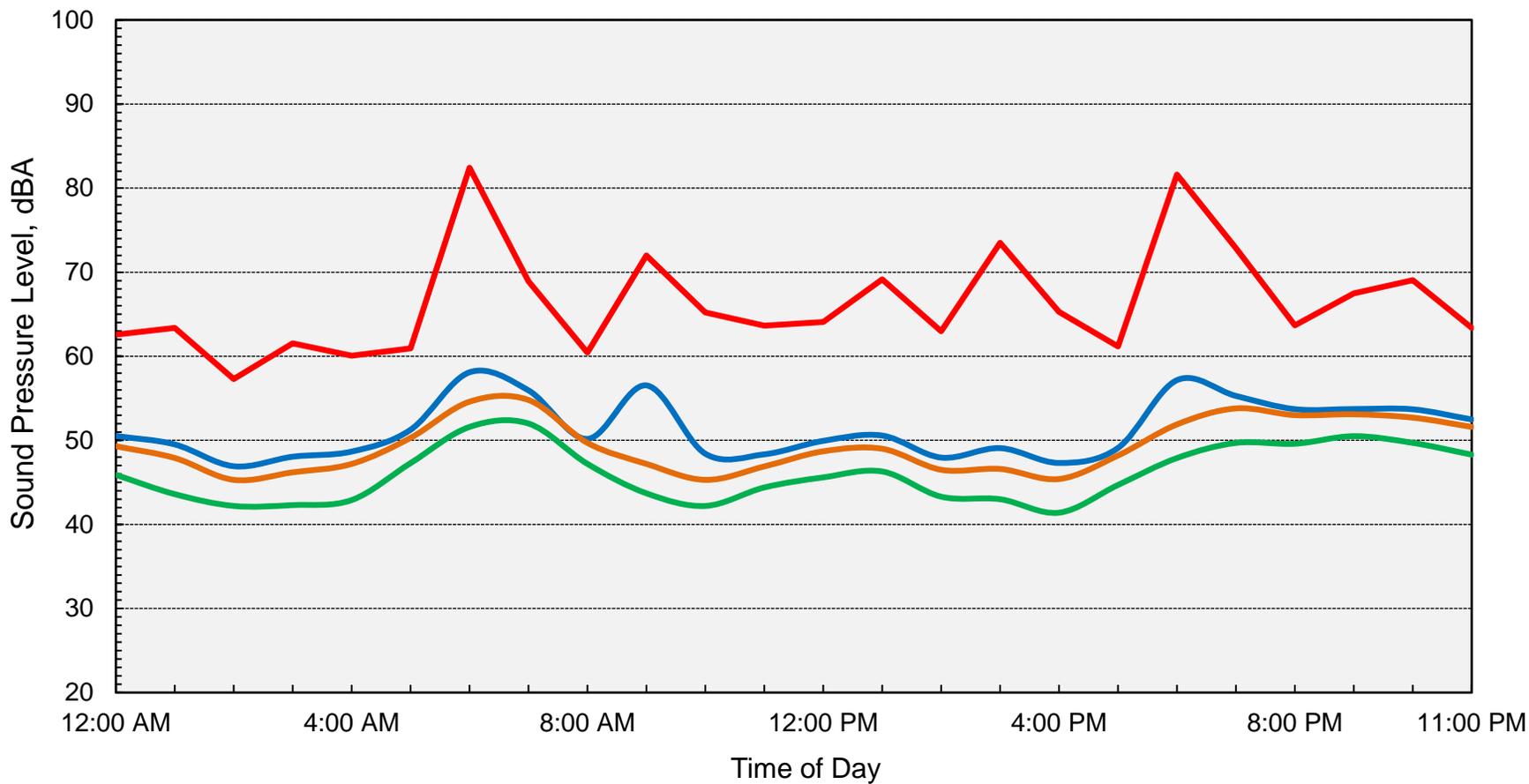
Hour	Leq	Lmax	L50	L90
12:00 AM	52	67	48	41
1:00 AM	50	63	44	38
2:00 AM	48	66	43	37
3:00 AM	45	65	39	36
4:00 AM	47	62	41	36
5:00 AM	50	68	46	39
6:00 AM	53	76	49	44
7:00 AM	54	65	52	47
8:00 AM	52	64	51	45
9:00 AM	54	66	52	48
10:00 AM	55	74	54	49
11:00 AM	56	72	54	49
12:00 PM	54	64	53	47
1:00 PM	54	67	53	47
2:00 PM	56	79	54	47
3:00 PM	56	71	55	48
4:00 PM	59	75	58	50
5:00 PM	65	90	58	52
6:00 PM	62	81	60	54
7:00 PM	59	67	58	52
8:00 PM	59	75	57	51
9:00 PM	57	80	54	47
10:00 PM	55	65	51	45
11:00 PM	53	68	48	41

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	65	52	58	55	45	51
Lmax (Maximum)	90	64	73	76	62	67
L50 (Median)	60	51	55	51	39	45
L90 (Background)	54	45	49	45	36	39

Computed DNL, dB	60
% Daytime Energy	89%
% Nighttime Energy	11%

GPS Coordinates	38°47'46.22"N
	121°19'27.51"W

Appendix D-1
Long-Term Ambient Noise Monitoring Results - Site 1
Blue Oaks Retail Center - Roseville, California
Friday, November 11, 2022

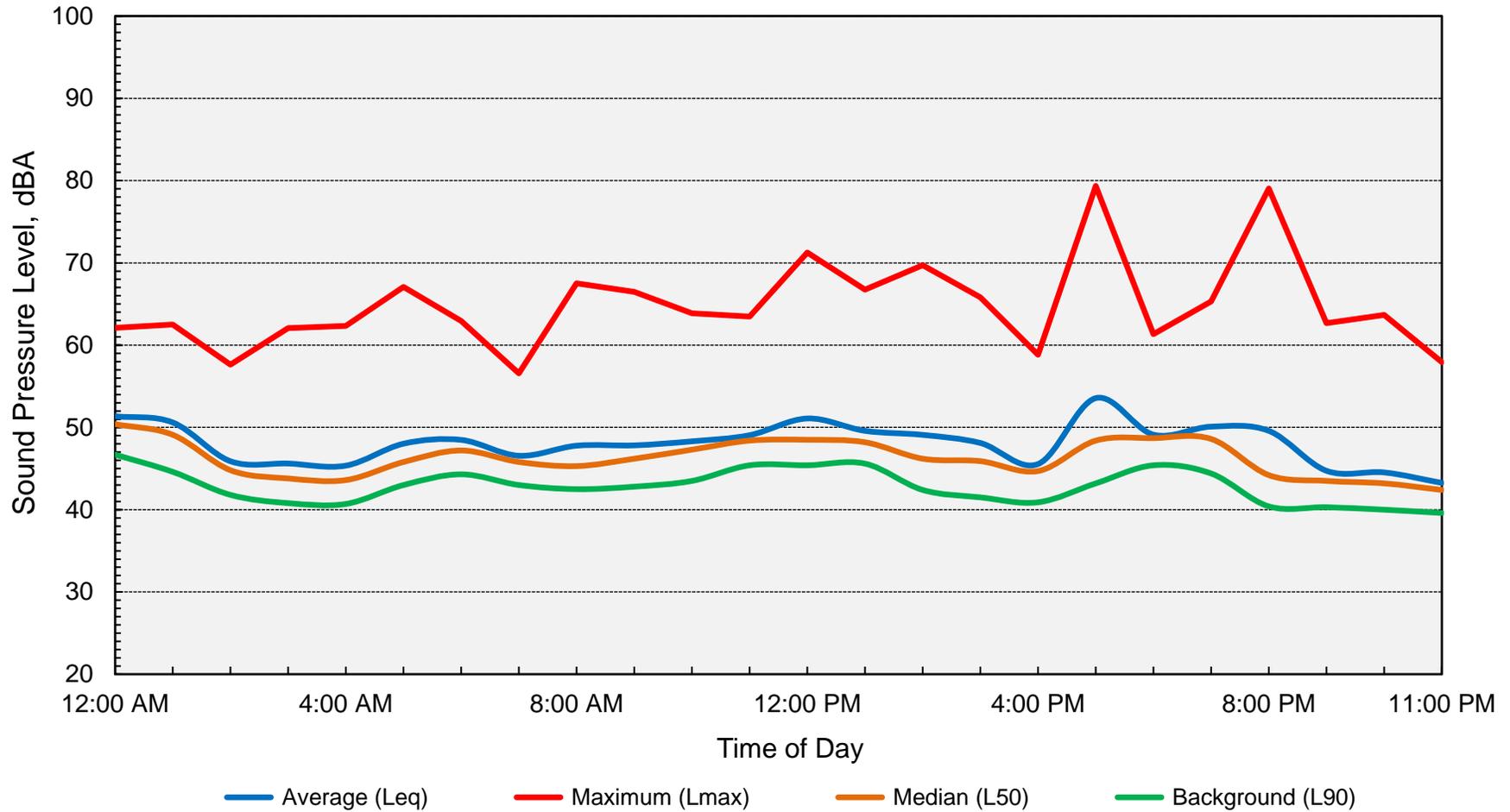


— Average (Leq) — Maximum (Lmax) — Median (L50) — Background (L90)

Computed DNL = 59 dB

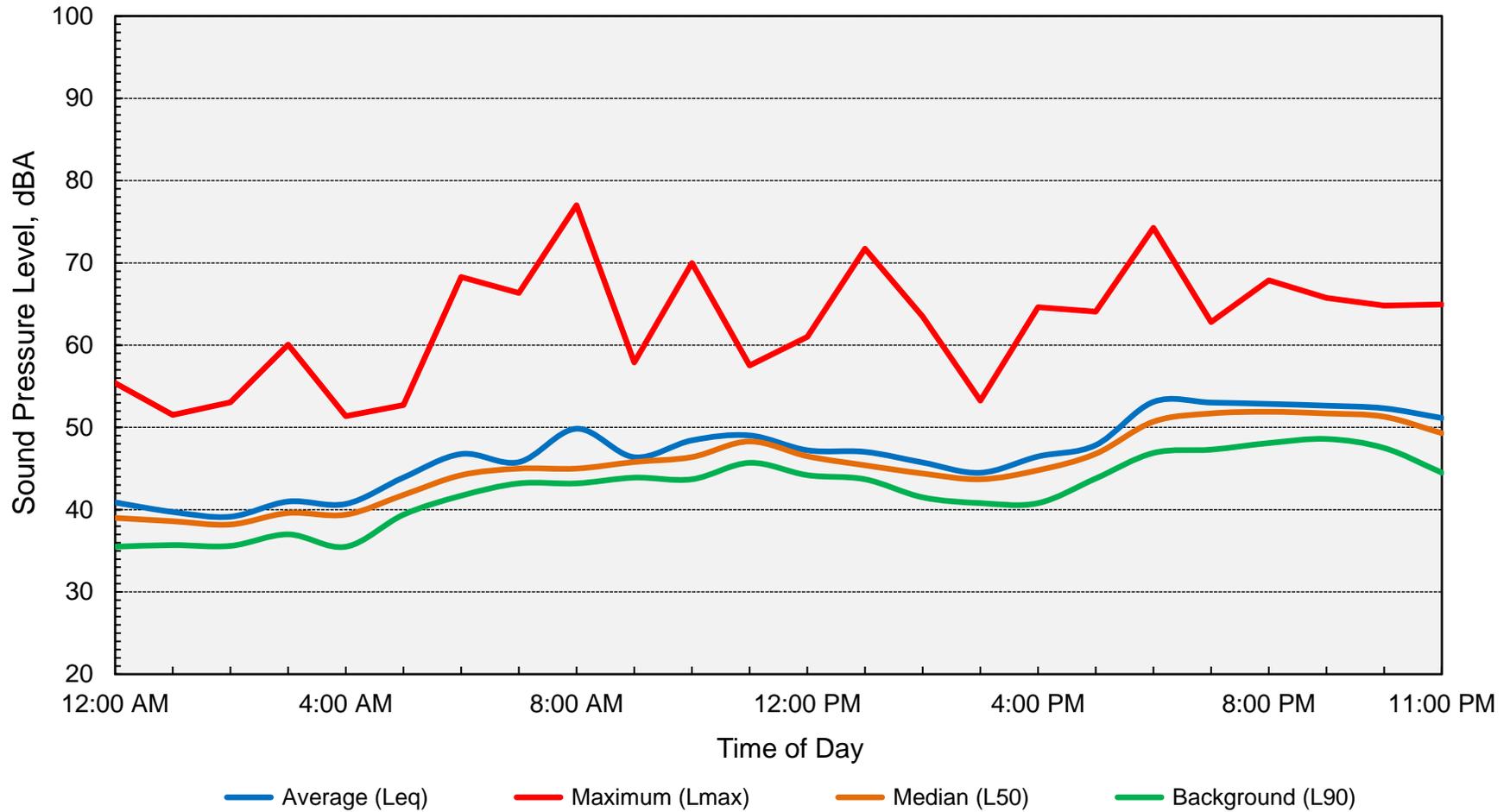


Appendix D-2
Long-Term Ambient Noise Monitoring Results - Site 1
Blue Oaks Retail Center - Roseville, California
Saturday, November 12, 2022



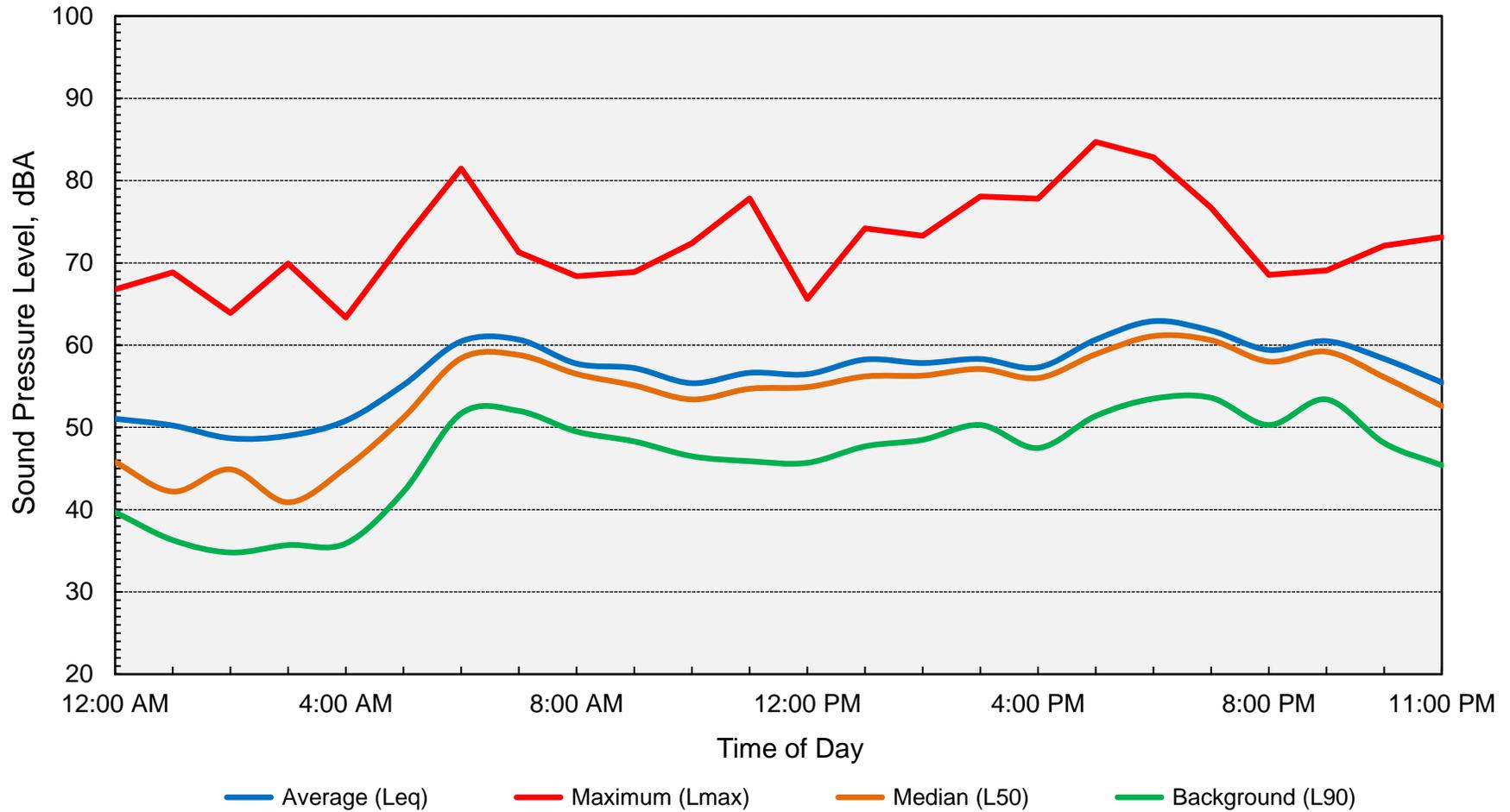
Computed DNL = 54 dB

Appendix D-3
Long-Term Ambient Noise Monitoring Results - Site 1
Blue Oaks Retail Center - Roseville, California
Sunday, November 13, 2022



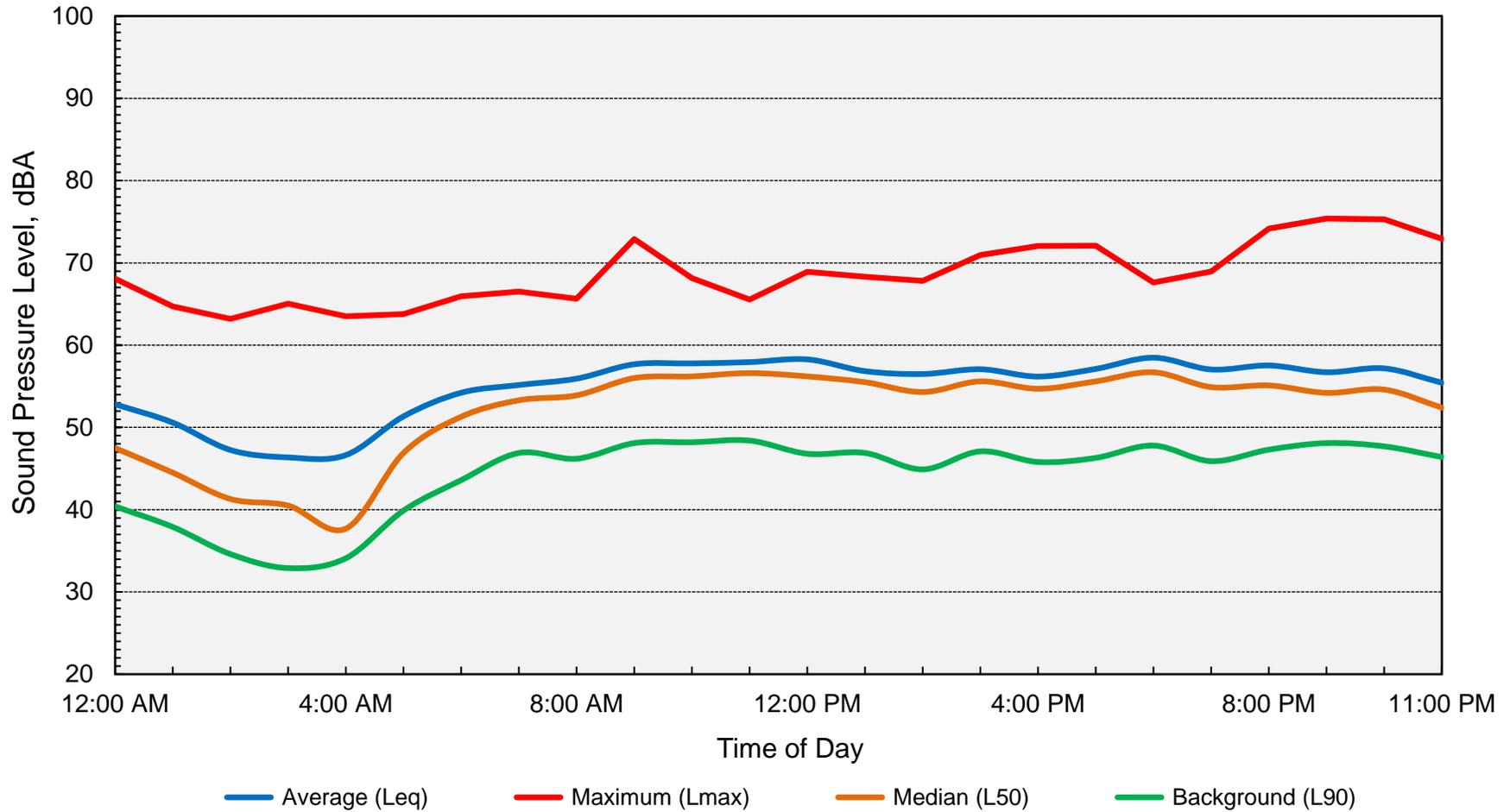
Computed DNL = 54 dB

Appendix D-4
Long-Term Ambient Noise Monitoring Results - Site 2
Blue Oaks Retail Center - Roseville, California
Friday, November 11, 2022



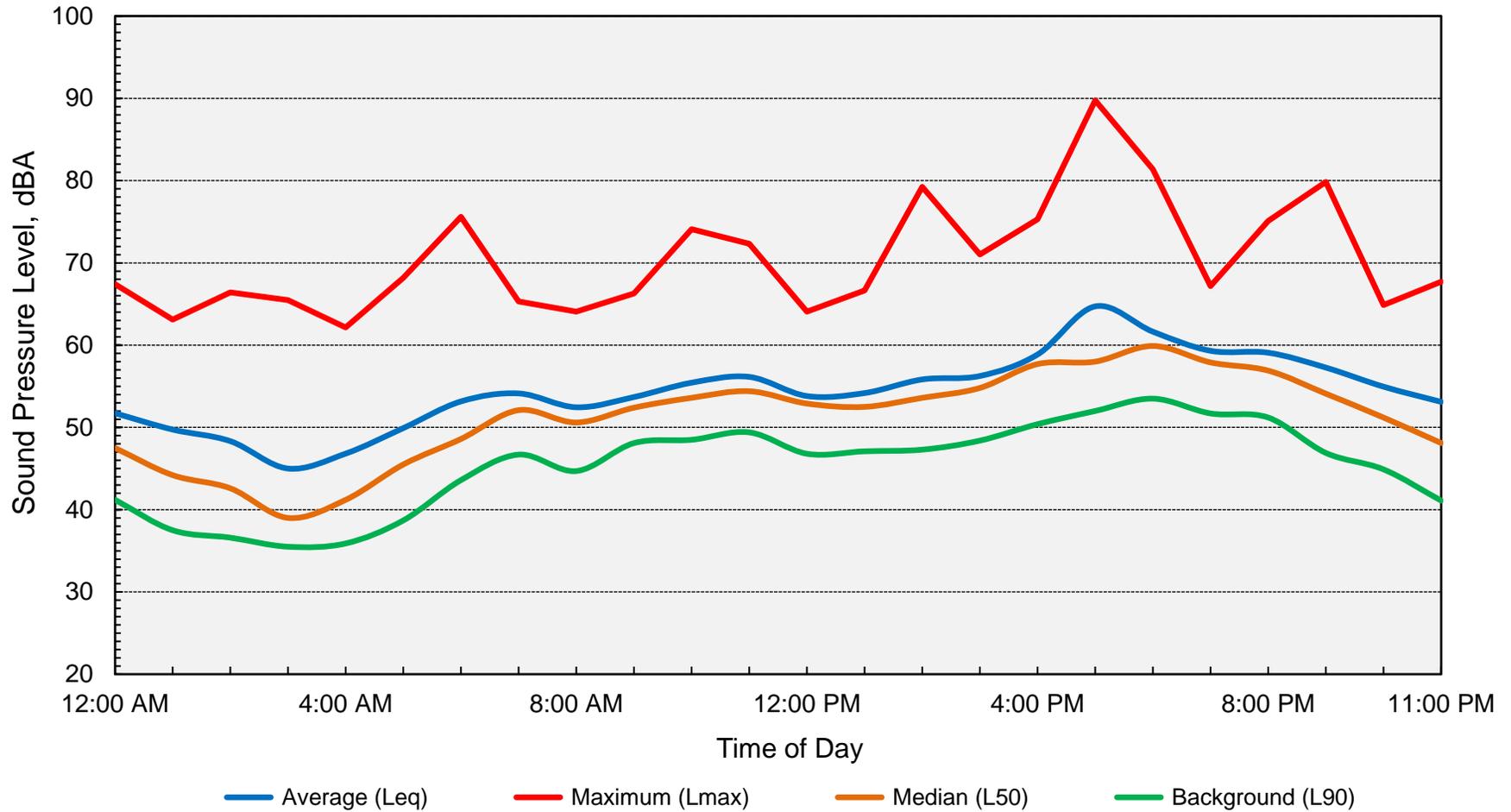
Computed DNL = 62 dB

Appendix D-5
Long-Term Ambient Noise Monitoring Results - Site 2
Blue Oaks Retail Center - Roseville, California
Saturday, November 12, 2022



Computed DNL = 60 dB

Appendix D-6
Long-Term Ambient Noise Monitoring Results - Site 2
Blue Oaks Retail Center - Roseville, California
Sunday, November 13, 2022



Computed DNL = 60 dB

Memorandum

To: Jack Varozza, P.E., QSD/P
Senior Engineer, City of Roseville

From: Stephen Dillon, EIT
Matt Weir, P.E., T.E., PTOE, RSP₁

Re: *Traffic Evaluation*
Blue Oaks Shopping Center
Roseville, California

Date: October 10, 2022

Per your request and authorization, we have prepared this traffic evaluation for the above referenced project. Please note that the parameters of this study were discussed during our recent project coordination meeting¹ after which we prepared a revised scoping memorandum² that you subsequently approved³.

Project Understanding

Kimley-Horn understands that a mixed-use shopping center is proposed on the vacant parcel generally located in the northeast quadrant of the Blue Oaks Boulevard intersection with Woodcreek Oaks Boulevard (see **Exhibit 1**). According to the project site plan⁴ (**Exhibit 2**), the proposed project consists of four (4) retail buildings totaling approximately 33,000-square foot (sf), as well as a Chick-fil-A restaurant with drive-through and a Dutch Bros Coffee restaurant with drive-through. Access to the project site is proposed to be accomplished from one new access point on Blue Oaks Boulevard, and via three existing driveways currently used by the existing Walgreens. This traffic evaluation is understood to be required due to the following project site and area characteristics:

- The proposed Chick-fil-A and Dutch Bros Coffee establishments are each known to be high traffic generators that have the propensity to experience extensive drive-through queuing
- The existing Blue Oaks Boulevard intersections in the vicinity of the project site currently experience peak-hour delays and queuing
- The existing continuous westbound Blue Oaks Boulevard auxiliary lane along the project's frontage (between Roseville Parkway and Woodcreek Oaks Boulevard) itself creates a variety of conflicts that would be exacerbated by the proposed project. You have noted motorists who access the lane "early" to turn right at the downstream Woodcreek Oaks Boulevard intersection, bicyclists who legally ride in the Class II bike lane positioned between the outside through lane and this auxiliary lane, and motorists illegally continuing straight into this lane from the westbound right-turn lane at Roseville Parkway.

Based on this information, a "Short-Term Traffic Impact Study⁵" has been prepared, as supplemented by additional Scope of Services aspects you have specifically noted. The primary purposes of this analysis are to evaluate the proposed project's access points, on-site operations, and localized traffic operations to ensure safe and efficient operations.

¹ Teleconference with City of Roseville, August 24, 2022.

² *Trip Generation/Distribution and Study Parameters Memorandum - Blue Oaks Shopping Center*, Kimley-Horn, August 26, 2022.

³ Email from Jack Varozza, City of Roseville, August 31, 2022.

⁴ Blue Oaks Shopping Center (Roseville) Site Plan, Kimley-Horn, May 2022.

⁵ Section 4 Traffic Impact Studies, *City of Roseville Design Standards*, City of Roseville, January 2020.

Data Collection

We collected the following data from the City to aid in the completion of this evaluation:

- Weekday, PM (4-6) peak-period intersection turning movement traffic volumes from the City's Intelligent Transportation System (ITS) for three (3) weekdays (Tuesday, Wednesday, and Thursday) from July 26-28, 2022, at the seven (7) Blue Oaks Boulevard signalized intersections between and inclusive of Diamond Creek Boulevard and the SR-65 Southbound Ramp/Washington Boulevard
- Recent speed survey data for Blue Oaks Boulevard in the vicinity of the project site
- Synchro network files for the general project area, including existing signal timing parameters

Kimley-Horn supplemented the City's ITS traffic count data with concurrently and manually collected (via traffic count subconsultant) counts consisting of the following:

- Three weekdays' (Tuesday, Wednesday, and Thursday) data was collected and averaged to establish weekday, PM (4-6) peak-period intersection turning movement traffic volumes (maximum observed vehicle queuing for one), at the following locations:
 - Blue Oaks Boulevard unsignalized (right-in/right-out) driveway intersection with the existing Walgreens
 - Woodcreek Oaks Boulevard unsignalized (right-in/right-out) intersection with the existing Walgreens
 - Blue Oaks Boulevard signalized intersection with Woodcreek Oaks Boulevard (maximum observed vehicle queues, by lane, along the Blue Oaks Boulevard approaches only)
- Three weekdays' (Tuesday, Wednesday, and Thursday) data was collected and averaged to establish weekday, PM (4-6) peak-period bicycle and pedestrian turning movement counts at the Blue Oaks Boulevard intersections with Woodcreek Oaks Boulevard and Roseville Parkway
- Three weekdays' (Tuesday, Wednesday, and Thursday) data was observed and noted to establish weekday, PM (4-6) peak-period vehicle travel characteristics of westbound Blue Oaks Boulevard vehicles who turn right, downstream onto northbound Woodcreek Oaks Boulevard identified as one of the following:
 - a) Entered right-turn lane in dashed bike lane area near Walgreens' driveway
 - b) Entered continuous auxiliary lane after Roseville Parkway intersection, but before dashed bike lane; or
 - c) Continued straight into continuous auxiliary lane from the right-turn lane at Roseville Parkway signal (proceeded illegally through intersection rather than turning right)

We also completed a field visit to observe study intersection lane configurations, vehicle storage lengths, existing traffic control, speed limits, lane utilization, adjacent land uses, and other readily apparent features for the study facilities that were deemed by Kimley-Horn to be relevant to the Scope of Services. In conjunction with this field visit, Kimley-Horn also collected/conducted the following:

- Conducted a "floating car" travel time study along Blue Oaks Boulevard, in both directions, between and including, Diamond Creek Boulevard and SR-65 SB Ramp/Washington Boulevard (seven signalized and coordinated intersections) to establish baseline conditions. Travel time runs were collected during the weekday, PM (4-6) peak-period. A minimum of four (4) runs in each direction were conducted during the peak period.

Using the above data obtained and collected, Kimley-Horn developed a weekday, PM peak-hour SimTraffic micro-simulation model of the Blue Oaks Boulevard corridor consisting of the seven (7) Blue Oaks Boulevard signalized intersections between and inclusive of Diamond Creek Boulevard and the SR-65 Southbound Ramp/Washington Boulevard. The volumes used to create this model were the average of

the 3 weekday counts (from July 26-28, 2022) noted above. Furthermore, this model was validated to existing conditions.

Lastly, we manually collected (via traffic count subconsultant) unique local site weekday, PM (4-6) peak-period trip generation data for the existing Chick-fil-A restaurant located at 912 Pleasant Grove Boulevard. Three weekdays’ (Tuesday, Wednesday, and Thursday) data was collected and averaged to establish a weekday, PM peak-period trip generation rate for use in this analysis. In conjunction with this Chick-fil-A data collection and additionally at the Dutch Bros Coffee located at 715 Sunrise Avenue, observations were included to assist with quantifying the drive-through facilities’ operations (i.e., maximum and average vehicle queues). These observations were conducted as follows:

- Two Saturdays from 11 AM to 1 PM
- One weekday from 11 AM to 1 PM, and 4 to 6 PM

During these observation periods, we recorded the average space occupied per vehicle within the queues, as well as the “average service flow rate” at the Chick-fil-A and Dutch Bros Coffee restaurants.

Assessment of Proposed Project

Trip Generation

The number of trips anticipated to be generated by the proposed project was derived using data included in *Trip Generation Manual, 11th Edition*, published by the Institute of Transportation Engineers (ITE), and locally collected data for similar uses. The anticipated trip generation characteristics for the proposed project are depicted in **Table 1**. Data collected at the local sites are included in **Attachment A**. As shown in **Table 1**, the proposed project is anticipated to generate 515 new weekday, PM peak-hour trips.

Table 1 – Proposed Project Trip Generation

Land Use (ITE Code)	Size (KSF)	PM Peak-Hour				
		Total Trips	In		Out	
			%	Trips	%	Trips
Strip Retail Plaza (<40k) (822) ¹	33.3	219	50%	110	50%	109
Chick-fil-A ²	5.23	334	53%	177	47%	157
Dutch Bros Coffee ³	0.95	316	50%	158	50%	158
Internal Capture Between Uses (7%)		-61		-31		-30
Subtotal (Driveway) Trips:		808		414		394
<i>Strip Retail Plaza (<40k) Pass-by (10%)</i>		-22		-11		-11
<i>Chick-fil-A Pass-by (50%)</i>		-167		-88		-79
<i>Dutch Bros Coffee Pass-by (33%)</i>		-104		-52		-52
Net New (External) Trips:		515		263		252

KSF = 1,000-square feet

Sources: ¹Trip Generation Manual, 11th Edition

²Trip Generation based on data collected at 912 Pleasant Grove Boulevard location between 4-6 PM from July 26-28, 2022

³Trip Generation based on data collected for Douglas Boulevard Coffee Kiosk Traffic Evaluation, July 19, 2018

Project Trip Distribution and Assignment

The project trips were distributed to the adjacent transportation networks based on existing traffic patterns and engineering judgement (see **Exhibit 3**). Special attention was given to the anticipated project trips’ use of the site access driveways based on the site plan’s indicated drive-through entrances and exits, and the various turn restrictions at the access driveway intersections. The project trip assignment at the study intersections and driveways is depicted in **Exhibit 4**.

Evaluation Parameters and Study Facilities

A peak-hour intersection operations analysis (delay and queuing) was conducted for the weekday, PM peak-hour for the following scenarios:

- A. Existing (2022) Conditions
- B. Existing (2022) plus Proposed Project Conditions

The peak hour operations analysis was completed for the following intersections:

1. Blue Oaks Boulevard @ Woodcreek Oaks Boulevard
2. Blue Oaks Boulevard @ Walgreens Driveway* (right-in/right-out)
3. *Blue Oaks Boulevard @ Site Driveway* (right-in/right-out) - proposed*
4. Blue Oaks Boulevard @ Roseville Parkway
5. Woodcreek Oaks Boulevard @ Walgreens Driveway* (right-in/right-out)

**Right-in/Right-out driveways are included in the technical analyses primarily for the purpose of assessing the offsite roadways' queuing potential to adversely affect ingress and/or egress at these locations. As such, delay is not reported for these intersections, rather their anticipated operations resulting from the signalized intersections' delay and queuing is included in this evaluation.*

Peak-hour operations analyses were determined for the weekday, PM peak-hour for the scenarios listed above. Operations for each scenario were determined using methods defined in the *Highway Capacity Manual* using micro-simulation (SimTraffic® traffic analysis software). **Exhibit 5** details the study intersections' geometries. **Exhibit 6** and **Exhibit 7** detail the weekday PM peak-hour volumes both without (Existing (2022) Conditions) and with the addition of the project (Existing (2022) plus Project Proposed Project Conditions), respectively. Traffic count data sheets are provided in **Attachment B**.

Traffic Evaluation

As previously noted, the purpose of this analysis was to evaluate the proposed project's access points and surrounding intersections to quantify the amount of vehicular delay and queuing that is anticipated to result from the addition of the project. An additional purpose was to assess the amount of (additional) storage and/or treatments necessary to ensure efficient operations in the vicinity of and within the project site.

Signalized Intersection Delay and Queuing

Microsimulation (SimTraffic®) was used to enable the quantification of vehicular delay and queuing at the signalized study intersections. **Table 2** summarizes delay and **Table 3** summarizes select movements' queuing at the signalized study intersections both without (Existing (2022) Conditions) and with the addition of the project (Existing (2022) plus Project Proposed Project Conditions). All technical analysis worksheets are provided in **Attachment C**.

Table 2 – Signalized Intersection Delay

ID	Intersection	Control	Peak Hour	Existing (2022)	Existing (2022) plus Project
				Delay [sec]	Delay [sec]
1	Blue Oaks Boulevard and Woodcreek Oaks Boulevard	Signal	PM	32.2	37.4
4	Blue Oaks Boulevard and Roseville Parkway	Signal	PM	10.5	23.2

Table 3 – Intersection Queuing

Intersection / Analysis Scenario	Movement	Available Storage (ft)	PM Peak-Hour			
			95th % Queue (ft)	Max Queue (ft)	Average Queue (ft)	
#1, Blue Oaks Boulevard and Woodcreek Oaks Boulevard	EBL	255	Existing (2022)	115	150	60
			Existing (2022) plus Proposed Project	185	210	120
	WBR	-	Existing (2022)	110	145	60
			Existing (2022) plus Proposed Project	140	210	70
	WBT	-	Existing (2022)	395	395	280
			Existing (2022) plus Proposed Project	405	405	385
	WBL	240	Existing (2022)	285	285	180
			Existing (2022) plus Proposed Project	315	315	220
	NBT	-	Existing (2022)	85	115	40
			Existing (2022) plus Proposed Project	110	135	60
	SBL	270	Existing (2022)	110	130	70
			Existing (2022) plus Proposed Project	120	140	75
#4, Blue Oaks Boulevard and Roseville Parkway	EBL	225	Existing (2022)	15	25	5
			Existing (2022) plus Proposed Project	100	125	50
	EBT	-	Existing (2022)	160	205	80
			Existing (2022) plus Proposed Project	215	270	120
	WBR	410	Existing (2022)	10	15	5
			Existing (2022) plus Proposed Project	100	205	25
	WBT	-	Existing (2022)	255	325	95
			Existing (2022) plus Proposed Project	470	525	270

Note: Cell shaded orange where queue exceeds capacity by >1 vehicle length (25 feet)

As indicated in **Table 2** and as reasonably anticipated, both signalized study intersections experience an increase in delay resulting from the addition of the Project. Intersection #1 (Blue Oaks Boulevard and Woodcreek Oaks Boulevard) sees an overall increase in intersection delay of 5.2 seconds with the addition of the Project. This additional delay can largely be attributed to in the 7-8 second increase in delay experienced by vehicles on the Blue Oaks Boulevard (eastbound and westbound) through movements, an increase anticipated to be largely indiscernible. Intersection #4 (Blue Oaks Boulevard and Roseville Parkway) sees an increase in intersection delay of 12.7 seconds with the addition of the Project. This additional delay is directly attributable to the introduction of Project trips using the modified southbound approach as a full-access driveway onto Blue Oaks Boulevard, a condition consistent with the intent behind the existing intersection configuration at this location (intersection stub to serve future site development). Similar to Intersection #1, the increased demand on the southbound Intersection #5 approach results in added delay on the Blue Oaks Boulevard (eastbound and westbound) through movements, an increase anticipated to be largely indiscernible.

The queuing results presented in **Table 3** show moderate increases in queue length on movements with Project trips assigned. The Intersection #1 (Blue Oaks Blvd @ Woodcreek Oaks Blvd) westbound through movement queue extends beyond Intersection #2 (Blue Oaks Boulevard and Walgreens Driveway) under both Existing (2022) and Existing (2022) plus Proposed Project conditions. Intersection #3 (Blue Oaks Boulevard and Site Driveway) is anticipated to be located approximately 650-feet east of Intersection #1, at a location greater than the maximum observed westbound Intersection #1 queue under “plus Proposed Project” conditions. This queuing dynamic in relation to the site’s Blue Oaks Boulevard driveways is depicted in **Exhibit 8**. The Intersection #1 (Blue Oaks Boulevard and Woodcreek Oaks Boulevard) westbound left-turn movement queue exceeds available capacity under both Existing (2022) and Existing (2022) plus Proposed Project conditions, with the plus Project condition contributing just over one vehicle to the reported queue length. It is recommended that the applicant be responsible for extending the Intersection #1 dual westbound left-turn pockets an additional 250-feet (80-feet of storage, 170-feet of taper) to a point that places the entry beyond the documented 95th-percentile queue for the adjacent westbound through lanes. This improvement is shown in **Exhibit 9**.

Internal Circulation Review

The drive-through queuing data collected as part of this project was used to assess the configuration and operations of the proposed Chick-fil-A restaurant and Dutch Bros Coffee restaurant at the Blue Oaks Boulevard project site. This evaluation included consideration of the expected maximum number of vehicles in each drive-through lane (assuming typical operations and not a “grand opening” type condition). We calculated approximately how many vehicles would fit in each drive-through lane. We also reviewed internal circulation including drive-aisle widths, placement of refuse dumpsters, pedestrian linkages, dead-end parking aisles, internal movements (e.g., reverse u-turns exiting both drive-throughs), and driveway throat depths.

As previously noted, in an effort to appropriately assess the provided drive-through capacity for both Chick-fil-A and Dutch Bros within this development, drive-through operations and queuing data was collected at existing restaurants already operating within the general project vicinity. Specific details on the facility locations and collection windows are outlined in the above Data Collection section of this memorandum. **Table 4** below presents summary information from the aforementioned data collection effort.

Table 4 – Maximum Observed Drive-Through Vehicle Queues

Restaurant (Location)	Maximum Observed Vehicle Queue				Project Restaurant Drive-Through Capacity ¹
	7/23/2022	7/27/2022	7/30/2022	Overall Max	
Chick-fil-A (912 Pleasant Grove Boulevard)	36	31	30	36	43
Dutch Bros (715 Sunrise Avenue)	19	16	18	19	21

¹Proposed Project Site Plan, Kimley-Horn, May 2022

As shown in **Table 4**, both the Project Chick-fil-A and Dutch Bros restaurants provide contained drive-through queuing capacity for more vehicles than the observed maximum drive-through queues at operational restaurants within the Roseville area.

As we anticipate the existing restaurants to have similar operational characteristics to the Project restaurants, it is reasonable to conclude there is a high probability both Project facilities are providing appropriate capacity to handle drive-through demand. **Exhibit 9** shows potential queue management staging strategies in the event that drive-through capacity at the Project restaurants proves insufficient to handle demand.

Minimum Required Throat Depth (MRTD)

The MRTD was calculated for the three unsignalized site access driveway locations (Intersections #2, #3, and #5) and signalized site access (Intersection #4). **Table 5** summarizes the findings of the MRTD evaluation based on the City’s guidelines⁵ and plus Project queueing reports available in **Attachment C**.

Table 5 – MRTD for Site Access Driveways

ID	Driveway	Peak Hour	Approach Volume	ConflVol (Right)	RT Out	RT%	Minimum Required Throat Depth (MRTD)	Available Storage
2	Walgreens Driveway @ Blue Oaks Boulevard	PM	66	2434	66	100%	100	45
3	Site Driveway @ Blue Oaks Boulevard	PM	103	2509	103	100%	125	130
4*	Site Driveway/Roseville Parkway @ Blue Oaks Boulevard	PM	277	-	-	-	165	125
5	Walgreens Driveway @ Woodcreek Oaks Boulevard	PM	72	415	72	100%	75	45

*Intersection 4 results reported from Simtraffic reports

The proposed available throat depth for Intersections #2 and #5 is observed to be approximately 45-feet, the proposed available throat depth for Intersection #3 is observed to be approximately 130-feet, and the proposed available throat depth for Intersection #4 is observed to be approximately 125-feet. As shown in **Table 5**, the MRTD during the PM peak-hour is calculated to be 100-feet for Intersection #2, 125-feet for Intersection #3, 165-feet for Intersection #4, and 75-feet for Intersection #5. Thus, only Intersection #3 satisfies the MRTD during the weekday PM peak-hour. In order to sufficiently preserve on-site traffic operations, it is recommended that “Keep Clear” pavement striping be added at Intersection #2 and Intersection #4 as shown on **Exhibit 9**. Because of the unique site layout and the anticipated predominant movements, not providing the MRTD distance at Intersection #2 and Intersection #5 is not anticipated to significantly affect on-site operations or inhibit access into the Project site from Blue Oaks Boulevard or Woodcreek Oaks Boulevard.

Sight Distance

A site visit was completed on July 27, 2022, during which we evaluated sight distance for the proposed driveway location (Intersection #3) based on observed horizontal and vertical geometric conditions. This evaluation was performed in accordance with the guidelines presented in Section 7 of the *Design Standards* published by the City of Roseville⁶. The posted speed limit on Blue Oaks Boulevard is 45 MPH for which 495-feet of corner sight distance is required. A “floating car” travel time study conducted on July 27, 2022, identified the average free flow speed along Blue Oaks Boulevard as 41.1 MPH during the PM peak-hour. Nevertheless, consistent with the current posted speed limit (45 MPH), the observed sight distance at this proposed driveway location was determined to be sufficient based on the City’s standards. As the existing geometry of Blue Oaks Boulevard in the vicinity of the Project site is straight and flat and no obstructive signage or landscaping appears to be proposed on the Project site plan, no sight distance issues are anticipated.

Emergency Vehicle and Refuse Service Access

The site plan (**Exhibit 2**) was qualitatively reviewed for emergency vehicle and refuse service access. The Project site appears to include adequate access to buildings to accommodate emergency vehicles. Adequate access and circulation are provided for refuse services to access the onsite refuse locations depicted in **Exhibit 2**.

⁶ Section 7 Streets (Table 7-6), *City of Roseville Design Standards*, City of Roseville, January 2020.

Offsite/Frontage Considerations

As previously noted, data was collected to establish vehicle travel characteristics of westbound Blue Oaks Boulevard vehicles moving through the Roseville Parkway intersection who turn right downstream onto northbound Woodcreek Oaks Boulevard. The findings of this evaluation indicate that there are few illegal movements westbound through the Roseville Parkway intersection from the approaching right-turn only lane into the site. Nevertheless, in a manner similar to the commercial center frontage opposite Blue Oaks Boulevard from the Project, it is recommended that the applicant construct a “bulb-out” or other similar physical feature in the northwest corner of Intersection #4 (Blue Oaks Boulevard and Roseville Parkway/Site Driveway) to prevent vehicles from making said illegal movement. This enhancement is shown in **Exhibit 9**. The addition of this feature would not alter the operations as documented herein.

Conclusions

The following are the primary conclusions based on the analyses discussed herein:

- *Increased signalized study intersection delay (Intersections #1 and #4) will not adversely affect the Blue Oaks Boulevard corridor* – the reported increase in delay at both signalized intersections in the “plus Proposed Project” scenario is consistent with anticipated effects and is not expected to result in discernable deteriorations in operation.
- *The proposed Site Driveway onto Blue Oaks Boulevard (Intersection #3) is located beyond the back of westbound queue at Intersection #1* – the location and spacing of the proposed Site Driveway will allow for efficient ingress and egress operations and will not be impacted by westbound Blue Oaks Boulevard queueing at Intersection #1.
- *Both Project restaurants (Chick-fil-A and Dutch Bros) provide sufficient drive-through queue capacity* – the drive-throughs at both restaurants are anticipated to contain queuing based on operational data collected from existing sites within the general Roseville area.
- *City of Roseville MRTD standards are not achieved at all site access driveways along Blue Oaks Boulevard and Woodcreek Oaks Boulevard (Intersections #2, #3, #4, and #5)* – sufficient MRTD is provided at Intersection #3. While provided MRTD at Intersection #2, Intersection #4, and Intersection #5 does not meet City standards, it is not anticipated to significantly impact on-site operations in conjunction with recommended striping shown in **Exhibit 9**.
- *Adequate emergency vehicle and refuse service access is provided.*
- *Offsite/frontage improvements are recommended for the Blue Oaks Boulevard intersection with Woodcreek Oaks Boulevard westbound left-turn pocket* – the Project shall be conditioned to extend the westbound left-turn storage capacity of Intersection #1 by 250-feet (80-foot storage, 170-foot taper) to properly accommodate traffic demand while allowing for efficient Project vehicle egress from Intersection #3 around the calculated Intersection #1 westbound queue.
- *Offsite/frontage improvements are recommended at the northwest corner of the Blue Oaks Boulevard intersection with Roseville Parkway* – the Project shall be conditioned to construct a “bulb-out” or other similar physical feature in the northwest corner of Intersection #4 to prevent vehicles from making an illegal movement westbound through this intersection.

Attachments

- Exhibit 1** – Project Vicinity Map
- Exhibit 2** – Preliminary Site Plan
- Exhibit 3** – Project Trip Distribution
- Exhibit 4** – Project Trip Assignment
- Exhibit 5** – Study Intersections, Traffic Control, and Lane Geometries
- Exhibit 6** – Existing (2022) PM Peak-Hour Volumes
- Exhibit 7** – Existing (2022) plus Proposed Project PM Peak-Hour Volumes
- Exhibit 8** – Intersection #1 Westbound Queue Diagram
- Exhibit 9** – Suggested Site Enhancements

- Attachment A** – Trip Generation Data (Local Sites)
- Attachment B** – Traffic Count Data Sheets
- Attachment C** – Analysis Worksheets

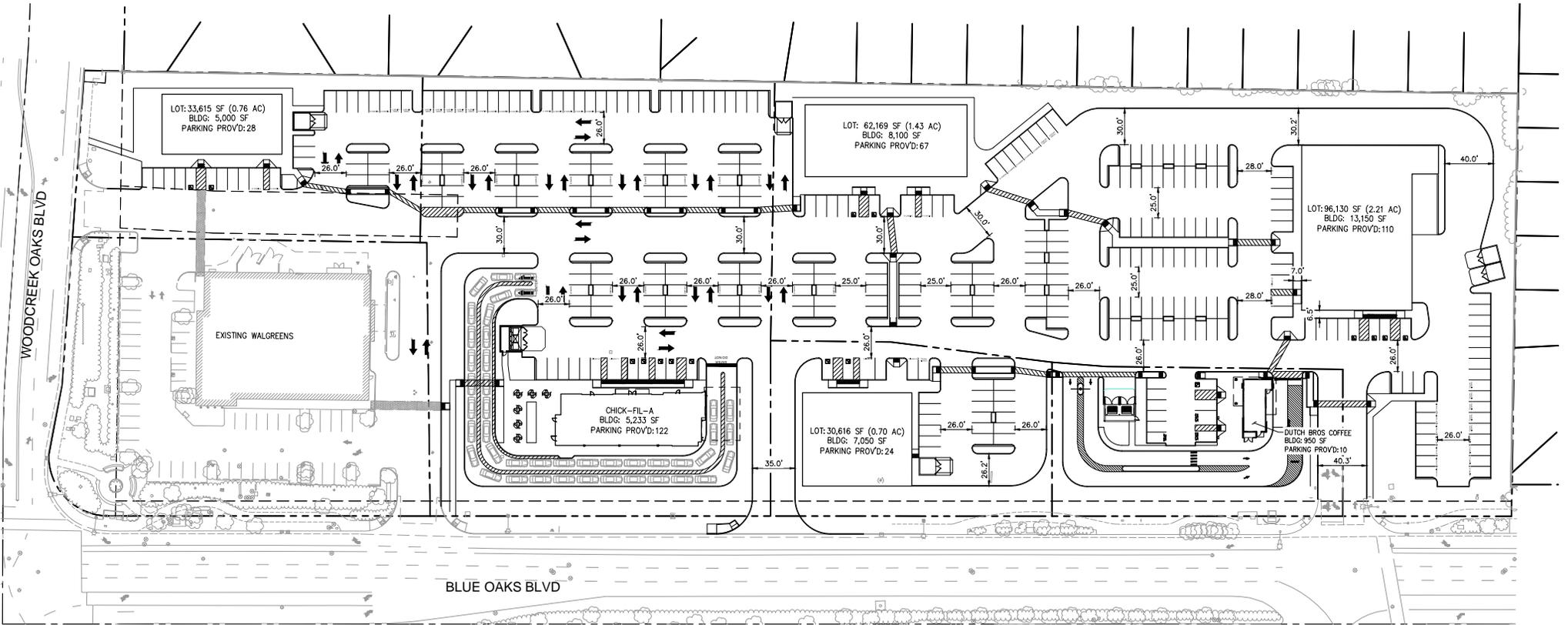


NOT TO SCALE



LEGEND	
#	Existing Study Intersection
#	Future Study Intersection
■	Project Location

Blue Oaks Shopping Center



Site Plan Source: Kimley-Horn, May 2022



NOT TO SCALE



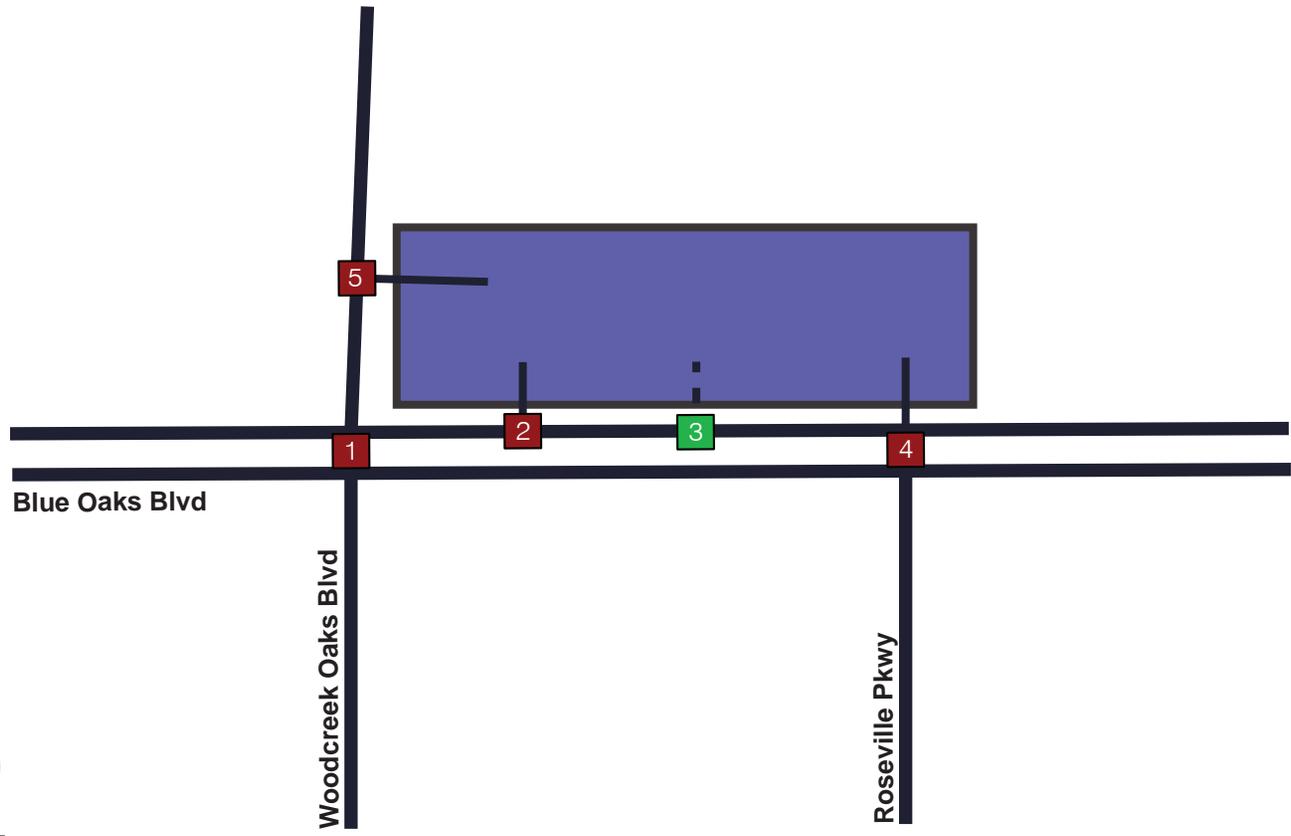
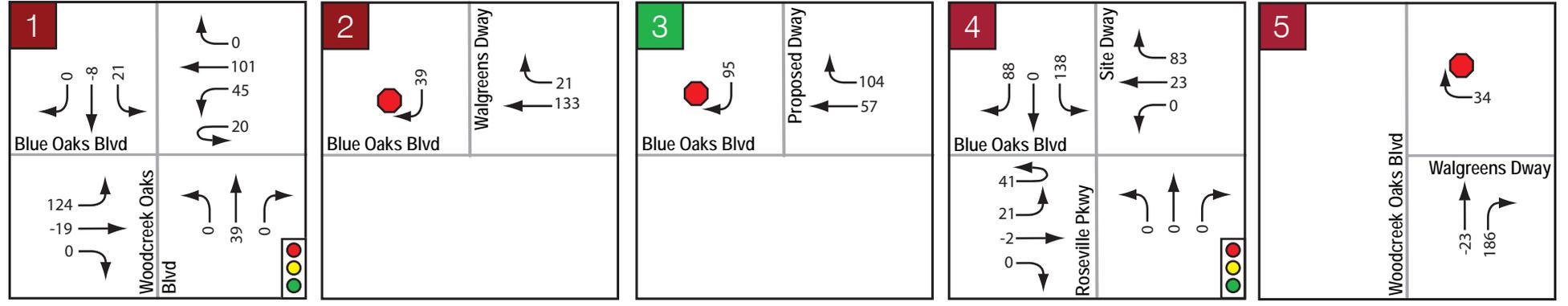
NOT TO SCALE



LEGEND

- # Existing Study Intersection
- # Future Study Intersection
- Project Location
- XX% Trip Distribution

Project Trip Assignment



LEGEND

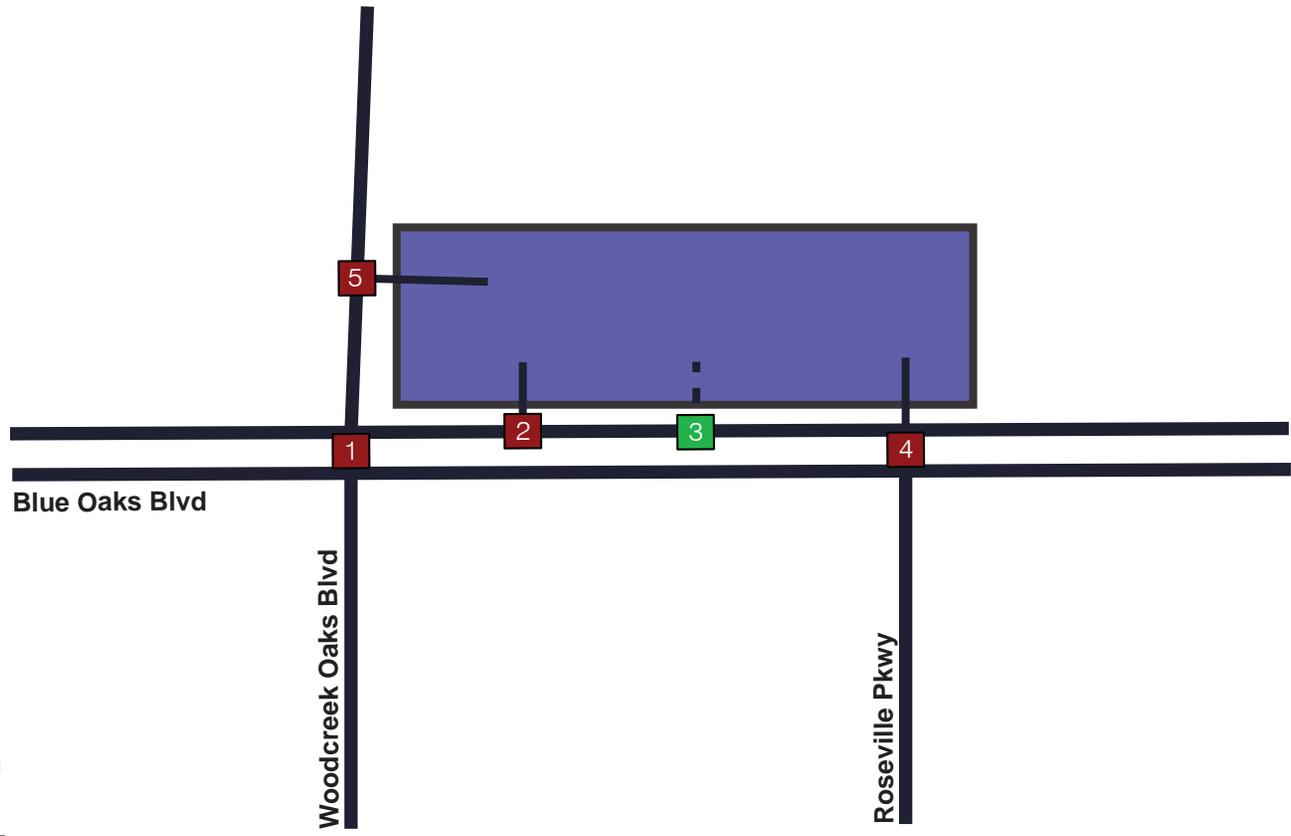
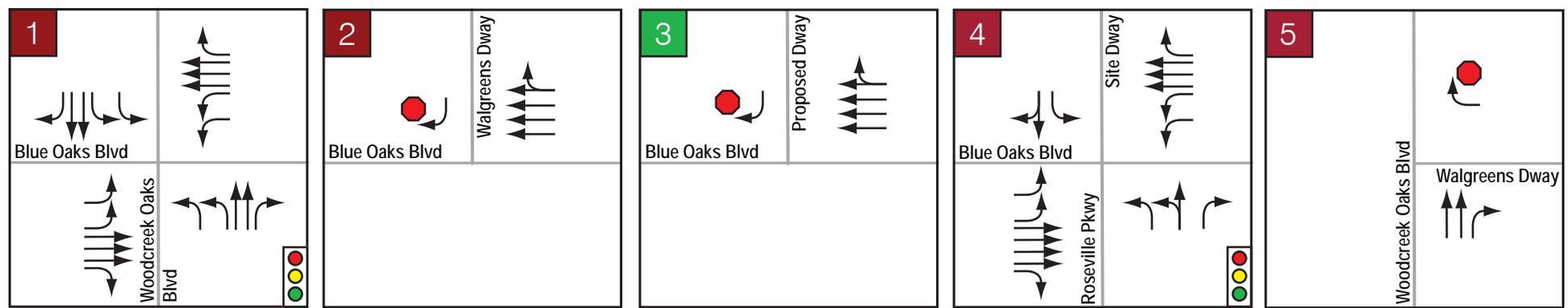
- # Existing Study Intersection
- # Future Study Intersection
- Project Location
- Signalized Control
- Stop Control
- XX Peak-Hour Project Trips*



NOT TO SCALE

*Net project trips after Diverted/Pass-by trips are applied

Study Intersections, Traffic Control, and Lane Geometries



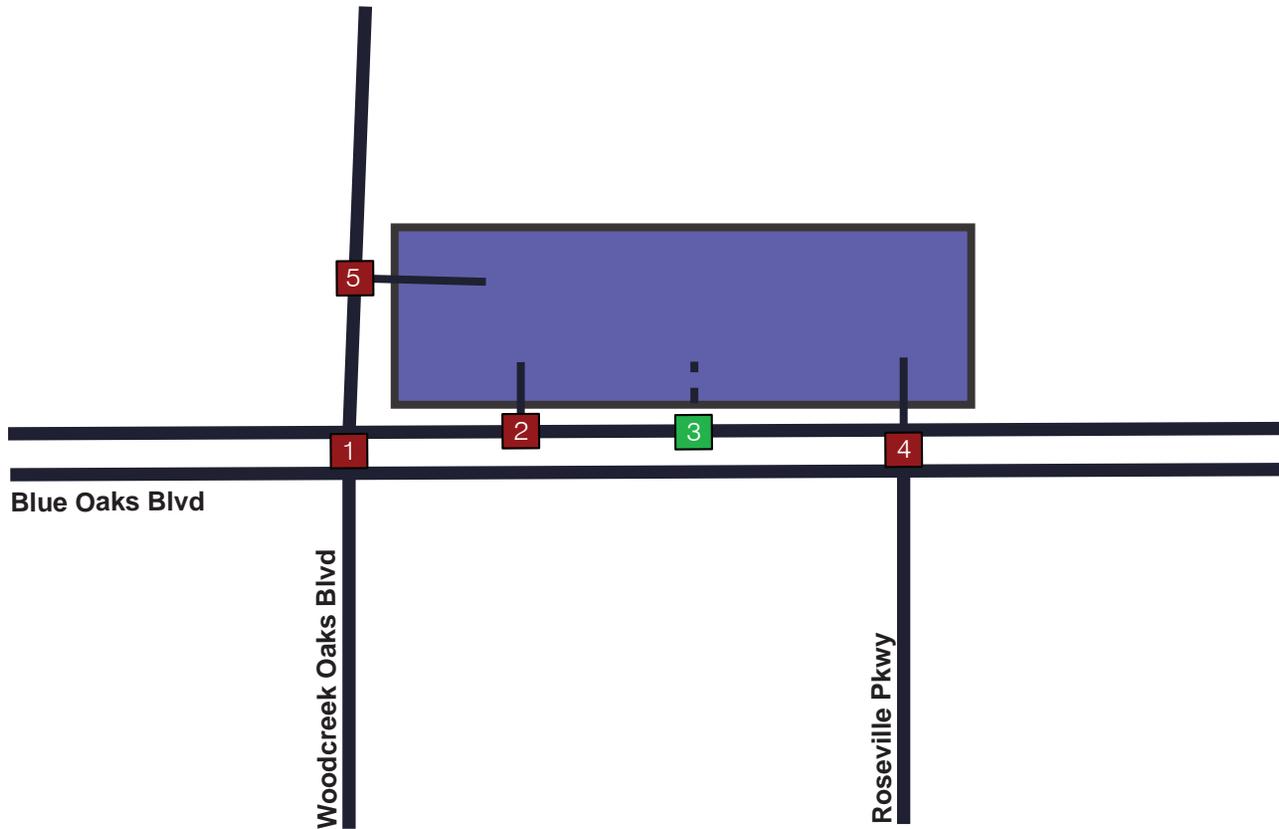
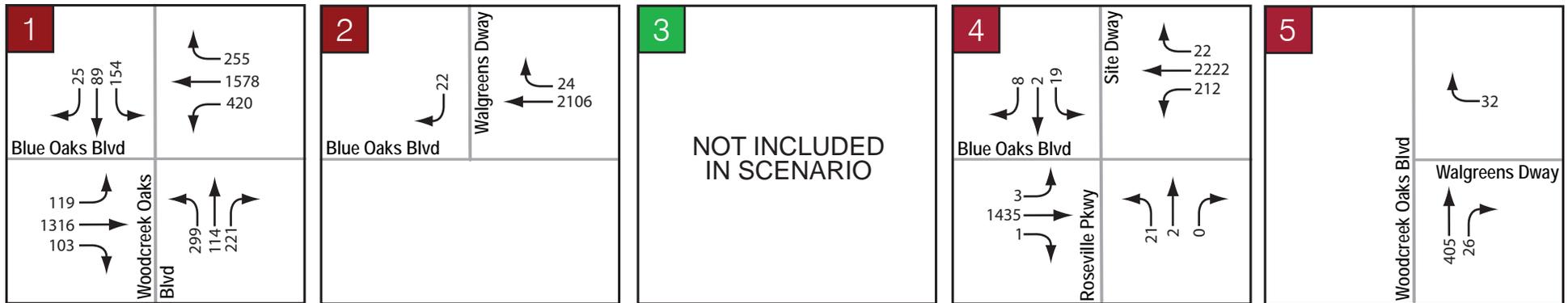
LEGEND

- # Existing Study Intersection
- # Future Study Intersection
- Project Location
- Signalized Control
- Stop Control



NOT TO SCALE

Existing (2022) PM Peak Hour Traffic Volumes

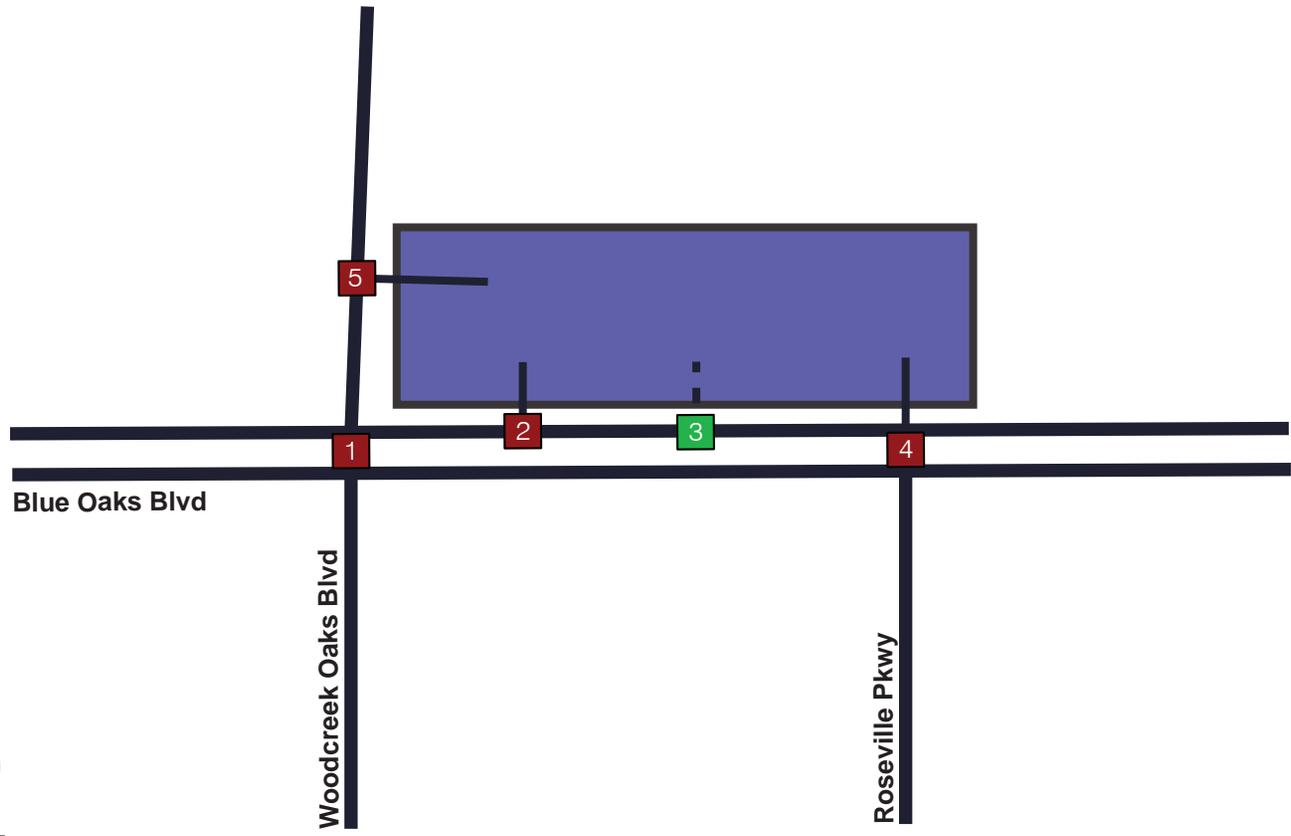
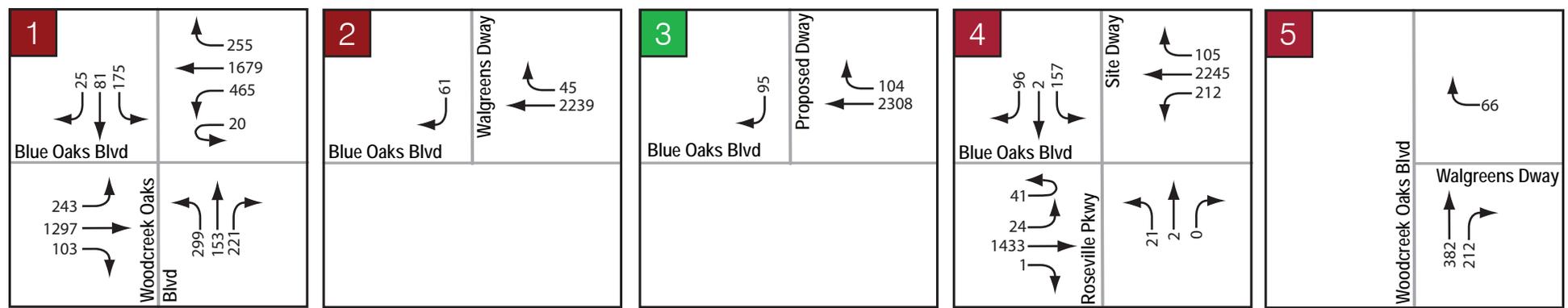


LEGEND	
#	Existing Study Intersection
#	Future Study Intersection
[Blue Box]	Project Location
XX	PM Peak-Hour Turning Movement Volumes



NOT TO SCALE

Existing (2022) plus Proposed Project PM Peak Hour Traffic Volumes



LEGEND

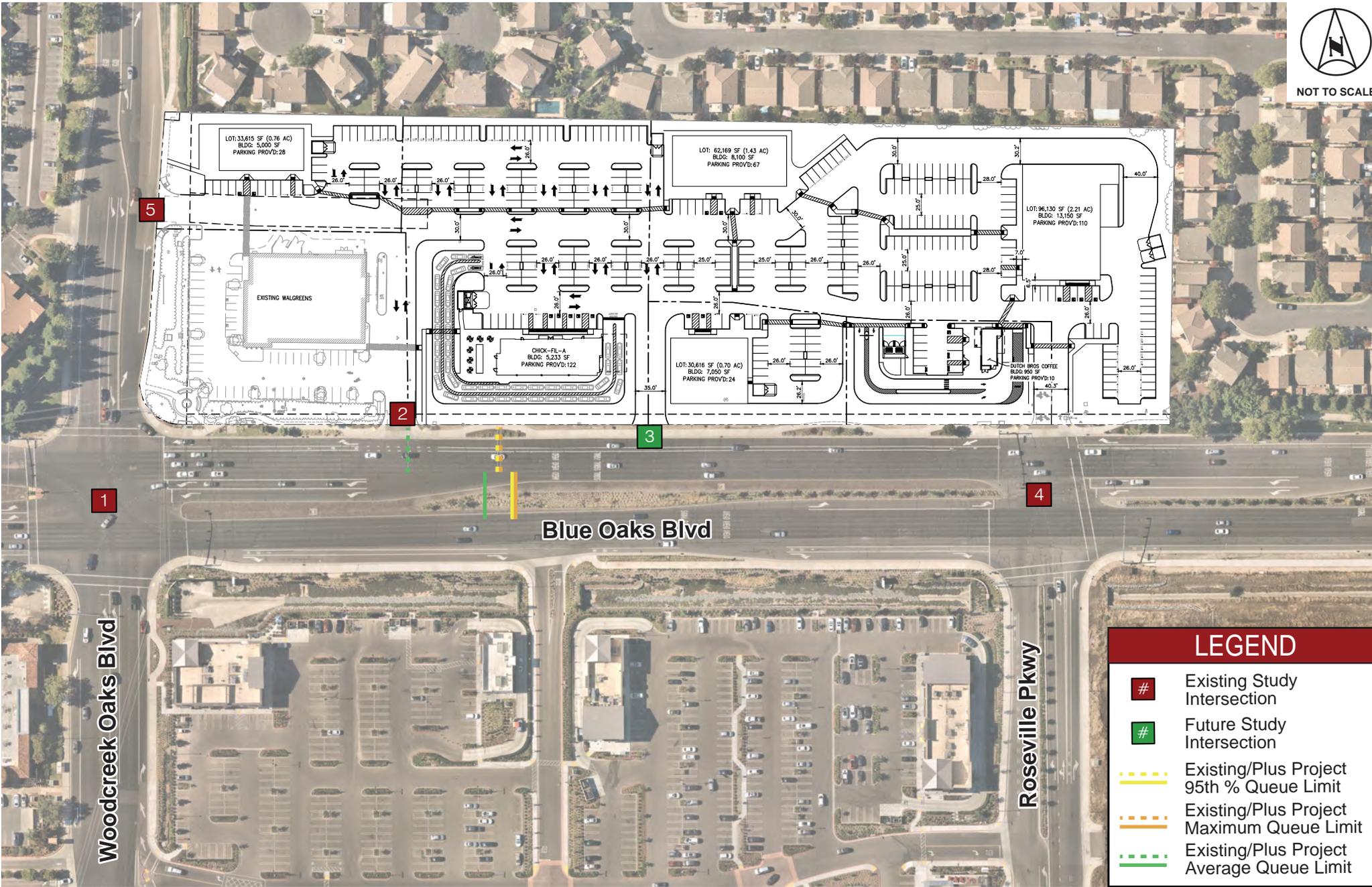
- # Existing Study Intersection
- # Future Study Intersection
- Project Location
- XX Turning Movement Volumes



NOT TO SCALE



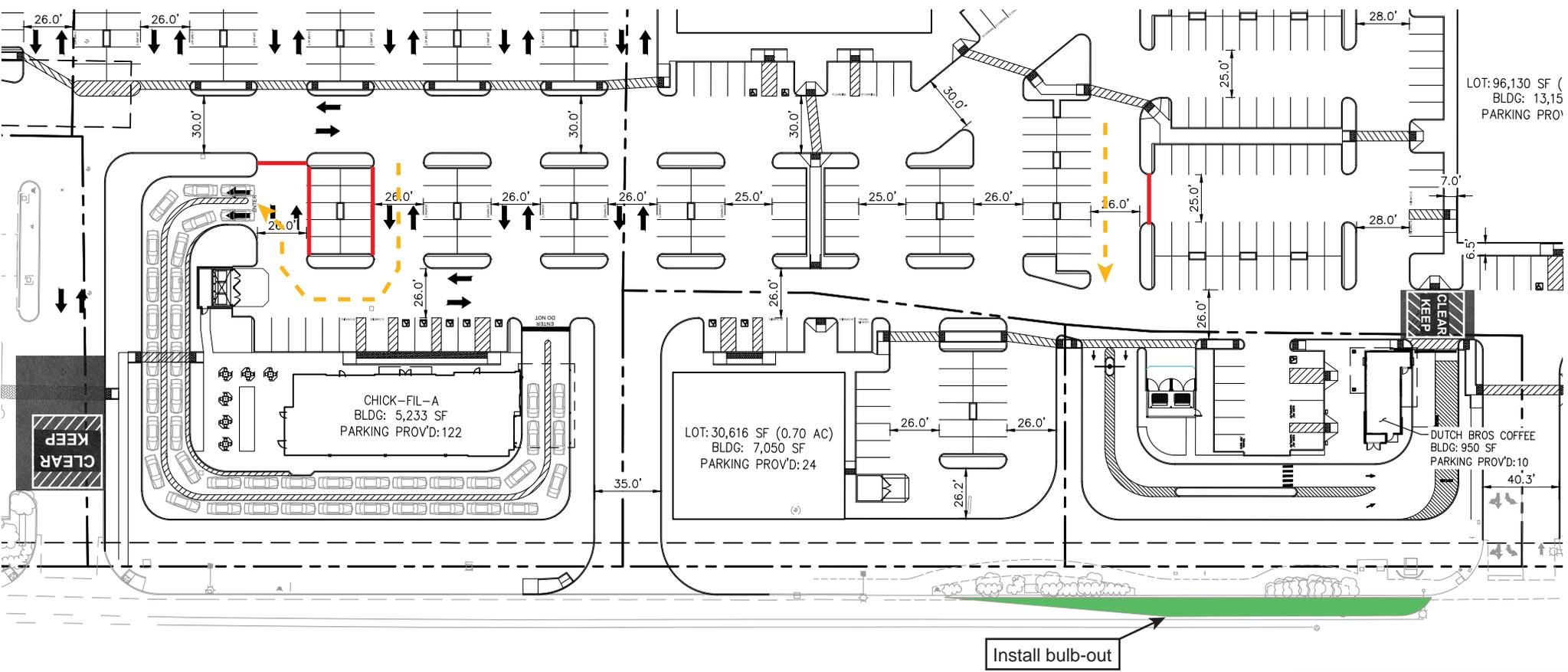
NOT TO SCALE



LEGEND	
#	Existing Study Intersection
#	Future Study Intersection
---	Existing/Plus Project 95th % Queue Limit
---	Existing/Plus Project Maximum Queue Limit
---	Existing/Plus Project Average Queue Limit



NOT TO SCALE



LEGEND

Queue Management Strategies:

- Yellow arrow: Overflow Queue
- Red line: Parking Block Off

Site Plan Source: Kimley-Horn, May 2022

Attachment A

Trip Generation Data (Local Sites)

Prepared by National Data & Surveying Services

Trip Generation Study

Location: Chick-fil-A, 912 Pleasant Grove Blvd

City: Roseville, CA

TIME	DRIVE THRU LANE Volume								
	Day 1 [7/26]		Day 2 [7/27]		Day 3 [7/28]		Total Drive Thru		
	Join Queue	Exit Queue	Join Queue	Exit Queue	Join Queue	Exit Queue	IN	OUT	OUTCOME
4:00 PM	26	23	29	22	19	19	74	64	10
4:15 PM	16	18	21	17	23	18	60	53	7
4:30 PM	19	17	28	19	29	24	76	60	16
4:45 PM	27	27	26	20	21	25	74	72	2
5:00 PM	26	19	16	22	22	19	64	60	4
5:15 PM	19	19	22	18	19	15	60	52	8
5:30 PM	30	19	19	18	17	18	66	55	11
5:45 PM	24	24	16	15	22	18	62	57	5
Totals	187	166	177	151	172	156	536	473	63

Prepared by National Data & Surveying Services

Trip Generation Study

Location: Chick-fil-A, 912 Pleasant Grove Blvd

City: Roseville, CA

TIME	Pedestrian Group Volume								
	Day 1 [7/26]		Day 2 [7/27]		Day 3 [7/28]		Total Drive Thru		
	ARRIVAL	DEPARTURE	ARRIVAL	DEPARTURE	ARRIVAL	DEPARTURE	IN	OUT	OUTCOME
4:00 PM	7	9	7	5	8	12	22	26	-4
4:15 PM	6	9	7	11	8	11	21	31	-10
4:30 PM	6	6	6	10	7	5	19	21	-2
4:45 PM	6	8	10	7	8	10	24	25	-1
5:00 PM	9	7	10	9	10	12	29	28	1
5:15 PM	8	9	6	9	8	11	22	29	-7
5:30 PM	10	9	14	8	12	12	36	29	7
5:45 PM	6	5	13	15	13	10	32	30	2
Totals	58	62	73	74	74	83	205	219	-14

Attachment B

Traffic Count Data Sheets

Turning Movement Volume Report

Report Date: 8/4/2022 9:28:39 AM

From 7/26/2022 to 7/26/2022

Blue Oaks & Woodcreek
Oaks

Intersection: 108

Time	N				S				E				W				Int Total
	Left	Thru	Right	Total													
26/07/22 00:00-01:00	13	8	14	35	16	7	2	25	16	336	11	363	38	344	36	418	841
26/07/22 01:00-02:00	7	4	7	18	7	3	2	12	4	462	1	467	12	273	10	295	792
26/07/22 02:00-03:00	3	6	5	14	7	1	0	8	4	450	0	454	8	405	8	421	897
26/07/22 03:00-04:00	1	1	8	10	6	0	1	7	1	394	1	396	11	293	4	308	721
26/07/22 04:00-05:00	5	2	26	33	27	0	4	31	3	372	0	375	13	451	3	467	906
26/07/22 05:00-06:00	10	7	70	87	62	9	7	78	2	678	11	691	29	403	11	443	1299
26/07/22 06:00-07:00	50	18	130	198	107	21	6	134	11	886	26	923	53	680	20	753	2008
26/07/22 07:00-08:00	86	23	181	290	195	30	13	238	21	1196	46	1263	87	707	49	843	2634
26/07/22 08:00-09:00	115	41	205	361	246	53	20	319	29	1548	75	1652	127	640	57	824	3156
26/07/22 09:00-10:00	142	53	261	456	191	43	23	257	61	1281	95	1437	173	648	87	908	3058
26/07/22 10:00-11:00	201	60	222	483	196	51	25	272	70	1383	81	1534	227	721	116	1064	3353
26/07/22 11:00-12:00	230	76	203	509	172	54	18	244	83	1246	109	1438	236	813	139	1188	3379
26/07/22 12:00-13:00	287	93	261	641	141	51	20	212	87	1276	105	1468	285	1000	146	1431	3752
26/07/22 13:00-14:00	265	93	225	583	154	47	28	229	95	1324	103	1522	294	1016	151	1461	3795
26/07/22 14:00-15:00	221	81	190	492	174	56	24	254	94	1160	77	1331	339	1034	158	1531	3608
26/07/22 15:00-16:00	275	89	219	583	168	74	23	265	69	1127	98	1294	360	1047	174	1581	3723
26/07/22 16:00-	267	93	209	569	162	61	34	257	122	1255	80	1457	345	1190	179	1714	3997

Turning Movement Volume Report

Report Date: 8/4/2022 9:28:39 AM

From 7/26/2022 to 7/26/2022

Blue Oaks & Woodcreek
Oaks

Intersection: 108

Time	N				S				E				W				Int Total
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
17:00																	
26/07/22 17:00-18:00	299	114	221	634	154	89	25	268	119	1316	103	1538	420	1578	255	2253	4693
26/07/22 18:00-19:00	279	124	218	621	162	63	25	250	108	1155	106	1369	380	1370	233	1983	4223
26/07/22 19:00-20:00	234	104	132	470	121	47	26	194	96	927	74	1097	292	1034	157	1483	3244
26/07/22 20:00-21:00	200	78	139	417	108	54	13	175	89	961	87	1137	231	851	157	1239	2968
26/07/22 21:00-22:00	109	54	81	244	71	31	17	119	55	548	36	639	163	687	142	992	1994
26/07/22 22:00-23:00	71	30	67	168	55	15	8	78	36	531	23	590	112	461	81	654	1490
26/07/22 23:00-00:00	23	25	29	77	21	9	3	33	20	553	12	585	66	395	73	534	1229
Summary	3393	1277	3323	7993	2723	869	367	3959	1295	22365	1360	25020	4301	18041	2446	24788	61760

Turning Movement Volume Report

Report Date: 8/4/2022 9:29:22 AM

From 7/27/2022 to 7/27/2022

Blue Oaks & Woodcreek
Oaks

Intersection: 108

Time	N				S				E				W				Int Total
	Left	Thru	Right	Total													
27/07/22 00:00-01:00	17	9	25	51	11	2	6	19	11	496	4	511	34	392	30	456	1037
27/07/22 01:00-02:00	12	8	6	26	10	3	0	13	3	248	3	254	21	236	14	271	564
27/07/22 02:00-03:00	2	5	8	15	7	2	0	9	4	398	0	402	10	339	10	359	785
27/07/22 03:00-04:00	2	1	12	15	5	0	0	5	2	434	0	436	14	301	7	322	778
27/07/22 04:00-05:00	1	2	20	23	19	0	7	26	0	524	5	529	10	343	5	358	936
27/07/22 05:00-06:00	15	5	71	91	58	5	4	67	2	614	8	624	24	301	8	333	1115
27/07/22 06:00-07:00	41	24	129	194	128	22	9	159	4	872	21	897	55	445	29	529	1779
27/07/22 07:00-08:00	86	35	194	315	210	25	17	252	20	1069	46	1135	87	704	39	830	2532
27/07/22 08:00-09:00	115	35	209	359	221	62	19	302	27	1444	67	1538	137	625	77	839	3038
27/07/22 09:00-10:00	162	66	205	433	197	59	19	275	56	1440	92	1588	212	767	77	1056	3352
27/07/22 10:00-11:00	189	61	202	452	185	63	29	277	74	1188	100	1362	186	722	117	1025	3116
27/07/22 11:00-12:00	240	84	234	558	166	55	24	245	88	1338	102	1528	259	834	138	1231	3562
27/07/22 12:00-13:00	281	101	242	624	154	57	23	234	104	1274	89	1467	293	1026	145	1464	3789
27/07/22 13:00-14:00	242	83	217	542	165	62	20	247	82	1398	88	1568	276	1029	163	1468	3825
27/07/22 14:00-15:00	208	68	197	473	155	66	29	250	87	1180	78	1345	274	980	141	1395	3463
27/07/22 15:00-16:00	236	85	216	537	154	64	31	249	87	1177	96	1360	330	1152	159	1641	3787
27/07/22 16:00-	260	95	218	573	160	48	39	247	96	1202	104	1402	333	1371	187	1891	4113

Turning Movement Volume Report

Report Date: 8/4/2022 9:29:22 AM

From 7/27/2022 to 7/27/2022

Blue Oaks & Woodcreek
Oaks

Intersection: 108

Time	N				S				E				W				Int Total
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
17:00																	
27/07/22 17:00-18:00	289	110	216	615	165	75	27	267	138	1275	108	1521	375	1578	273	2226	4629
27/07/22 18:00-19:00	282	106	198	586	152	64	35	251	122	1272	106	1500	372	1299	245	1916	4253
27/07/22 19:00-20:00	222	76	149	447	131	48	18	197	91	902	81	1074	259	920	156	1335	3053
27/07/22 20:00-21:00	163	72	112	347	114	32	21	167	73	898	70	1041	222	881	166	1269	2824
27/07/22 21:00-22:00	110	71	98	279	78	38	20	136	53	613	35	701	172	677	125	974	2090
27/07/22 22:00-23:00	69	36	65	170	45	23	10	78	42	607	25	674	131	472	100	703	1625
27/07/22 23:00-00:00	39	25	32	96	18	21	7	46	22	307	13	342	68	291	52	411	895
Summary	3283	1263	3275	7821	2708	896	414	4018	1288	22170	1341	24799	4154	17685	2463	24302	60940

Turning Movement Volume Report

Report Date: 8/4/2022 9:30:28 AM

From 7/28/2022 to 7/28/2022

Blue Oaks & Woodcreek
Oaks

Intersection: 108

Time	N				S				E				W				Int Total
	Left	Thru	Right	Total													
28/07/22 00:00-01:00	12	6	22	40	10	6	2	18	20	526	7	553	46	192	45	283	894
28/07/22 01:00-02:00	7	8	15	30	14	5	2	21	6	486	6	498	20	213	14	247	796
28/07/22 02:00-03:00	1	3	9	13	5	2	1	8	4	363	1	368	14	158	4	176	565
28/07/22 03:00-04:00	1	4	8	13	4	0	1	5	1	301	0	302	14	242	5	261	581
28/07/22 04:00-05:00	1	4	23	28	19	2	2	23	0	468	2	470	14	276	2	292	813
28/07/22 05:00-06:00	11	2	69	82	66	7	3	76	5	631	11	647	30	204	9	243	1048
28/07/22 06:00-07:00	34	16	133	183	104	16	7	127	9	902	21	932	60	440	26	526	1768
28/07/22 07:00-08:00	94	27	186	307	204	43	11	258	21	1172	49	1242	107	605	47	759	2566
28/07/22 08:00-09:00	112	43	210	365	246	43	24	313	43	1414	58	1515	136	659	84	879	3072
28/07/22 09:00-10:00	153	55	233	441	194	42	20	256	44	1321	98	1463	186	646	77	909	3069
28/07/22 10:00-11:00	183	62	209	454	170	60	28	258	61	1308	95	1464	198	733	98	1029	3205
28/07/22 11:00-12:00	258	86	231	575	191	57	18	266	85	1214	114	1413	260	862	115	1237	3491
28/07/22 12:00-13:00	299	92	225	616	151	68	20	239	100	1325	100	1525	266	971	136	1373	3753
28/07/22 13:00-14:00	272	80	235	587	157	63	40	260	91	1226	99	1416	284	971	156	1411	3674
28/07/22 14:00-15:00	220	87	218	525	138	47	22	207	73	1171	95	1339	257	997	140	1394	3465
28/07/22 15:00-16:00	220	85	233	538	147	45	22	214	104	1167	107	1378	330	1186	154	1670	3800
28/07/22 16:00-	250	103	207	560	166	67	35	268	111	1337	105	1553	346	1305	205	1856	4237

Turning Movement Volume Report

Report Date: 8/4/2022 9:30:28 AM

From 7/28/2022 to 7/28/2022

Blue Oaks & Woodcreek
Oaks

Intersection: 108

Time	N				S				E				W				Int Total
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
17:00																	
28/07/22 17:00-18:00	297	124	215	636	179	60	33	272	114	1308	98	1520	314	1276	211	1801	4229
28/07/22 18:00-19:00	277	119	175	571	181	70	34	285	126	1156	100	1382	313	1368	208	1889	4127
28/07/22 19:00-20:00	238	78	162	478	135	53	26	214	77	967	78	1122	257	1009	176	1442	3256
28/07/22 20:00-21:00	181	76	155	412	96	39	22	157	76	949	91	1116	244	867	164	1275	2960
28/07/22 21:00-22:00	125	51	95	271	55	30	15	100	56	589	36	681	171	719	127	1017	2069
28/07/22 22:00-23:00	66	35	63	164	49	18	10	77	40	654	30	724	153	444	92	689	1654
28/07/22 23:00-00:00	26	15	41	82	33	16	1	50	24	607	14	645	71	323	61	455	1232
Summary	3338	1261	3372	7971	2714	859	399	3972	1291	22562	1415	25268	4091	16666	2356	23113	60324

National Data & Surveying Services Intersection Turning Movement Count

Location: Walgreens Dwy & Blue Oaks Blvd
 City: Roseville
 Control: 1-Way Stop(SB)

Project ID: 22-070155-001
 Date: 7/26/2022

Data - Totals

NS/EW Streets:	Walgreens Dwy				Walgreens Dwy				Blue Oaks Blvd				Blue Oaks Blvd								
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	1 SR	0 SU	0 EL	4 ET	0 ER	0 EU	0 WL	4 WT	0 WR	0 WU					
4:00 PM	0	0	0	0	0	0	6	0	0	334	0	0	0	437	14	0	791				
4:15 PM	0	0	0	0	0	0	8	0	0	368	0	0	0	371	9	0	756				
4:30 PM	0	0	0	0	0	0	12	0	0	342	0	0	0	462	6	0	822				
4:45 PM	0	0	0	0	0	0	5	0	0	361	0	0	0	500	6	0	872				
5:00 PM	0	0	0	0	0	0	8	0	0	346	0	0	0	586	5	0	945				
5:15 PM	0	0	0	0	0	0	6	0	0	398	0	0	0	582	5	0	991				
5:30 PM	0	0	0	0	0	0	2	0	0	379	0	0	0	536	9	0	926				
5:45 PM	0	0	0	0	0	0	4	0	0	421	0	0	0	502	6	0	933				
TOTAL VOLUMES :	0	0	0	0	0	0	51	0	0	2949	0	0	0	3976	60	0	7036				
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	98.51%	1.49%	0.00%					
PEAK HR :	05:00 PM - 06:00 PM																				TOTAL
PEAK HR VOL :	0	0	0	0	0	0	20	0	0	1544	0	0	0	2206	25	0	3795				
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.625	0.000	0.000	0.917	0.000	0.000	0.000	0.941	0.694	0.000	0.957				
					0.625				0.917				0.944								

National Data & Surveying Services Intersection Turning Movement Count

Location: Walgreens Dwy & Blue Oaks Blvd
 City: Roseville
 Control: 1-Way Stop(SB)

Project ID: 22-070155-001
 Date: 7/27/2022

Data - Totals

NS/EW Streets:	Walgreens Dwy				Walgreens Dwy				Blue Oaks Blvd				Blue Oaks Blvd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	1 SR	0 SU	0 EL	4 ET	0 ER	0 EU	0 WL	4 WT	0 WR	0 WU	
4:00 PM	0	0	0	0	0	0	10	0	0	362	0	0	0	438	6	0	816
4:15 PM	0	0	0	0	0	0	6	0	0	362	0	0	0	494	5	0	867
4:30 PM	0	0	0	0	0	0	5	0	0	351	0	0	0	450	3	0	809
4:45 PM	0	0	0	0	0	0	6	0	0	342	0	0	0	527	8	0	883
5:00 PM	0	0	0	0	0	0	3	0	0	342	0	0	0	580	3	0	928
5:15 PM	0	0	0	0	0	0	5	0	0	401	0	0	0	526	11	0	943
5:30 PM	0	0	0	0	0	0	7	0	0	388	0	0	0	540	1	0	936
5:45 PM	0	0	0	0	0	0	4	0	0	353	0	0	0	514	5	0	876
TOTAL VOLUMES :	0	0	0	0	0	0	46	0	0	2901	0	0	0	4069	42	0	7058
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	98.98%	1.02%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	21	0	0	1473	0	0	0	2173	23	0	3690
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.000	0.918	0.000	0.000	0.000	0.937	0.523	0.000	0.978
							0.750				0.918				0.942		

National Data & Surveying Services Intersection Turning Movement Count

Location: Walgreens Dwy & Blue Oaks Blvd
 City: Roseville
 Control: 1-Way Stop(SB)

Project ID: 22-070155-001
 Date: 7/28/2022

Data - Totals

NS/EW Streets:	Walgreens Dwy				Walgreens Dwy				Blue Oaks Blvd				Blue Oaks Blvd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	1 SR	0 SU	0 EL	4 ET	0 ER	0 EU	0 WL	4 WT	0 WR	0 WU	
4:00 PM	0	0	0	0	0	0	4	0	0	362	0	0	0	455	9	0	830
4:15 PM	0	0	0	0	0	0	5	0	0	348	0	0	0	464	9	0	826
4:30 PM	0	0	0	0	0	0	8	0	0	374	0	0	0	469	10	0	861
4:45 PM	0	0	0	0	0	0	6	0	0	376	0	0	0	323	7	0	712
5:00 PM	0	0	0	0	0	0	7	0	0	379	0	0	0	296	2	0	684
5:15 PM	0	0	0	0	0	0	3	0	0	374	0	0	0	541	7	0	925
5:30 PM	0	0	0	0	0	0	7	0	0	385	0	0	0	638	8	0	1038
5:45 PM	0	0	0	0	0	0	7	0	0	336	0	0	0	465	8	0	816
TOTAL VOLUMES :	0	0	0	0	0	0	47	0	0	2934	0	0	0	3651	60	0	6692
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	98.38%	1.62%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	24	0	0	1474	0	0	0	1940	25	0	3463
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.857	0.000	0.000	0.957	0.000	0.000	0.000	0.760	0.781	0.000	0.834
							0.857				0.957				0.760		

Turning Movement Volume Report

Report Date: 8/4/2022 9:35:22 AM

From 7/26/2022 to 7/26/2022

Blue Oaks & Roseville
Pkyw_ Walgreens

Intersection: 177

Time	N				S				E				W				Int Total
	Left	Thru	Right	Total													
26/07/22 00:00-01:00	2	0		2	0	0	0	0	2	86	0	88	16	194	6	216	306
26/07/22 01:00-02:00	0	0		0	0	0	0	0	0	41	0	41	12	80	0	92	133
26/07/22 02:00-03:00	1	0		1	0	0	0	0	0	42	0	42	2	51	2	55	98
26/07/22 03:00-04:00	0	0		0	0	0	0	0	0	50	0	50	8	44	1	53	103
26/07/22 04:00-05:00	0	0		0	0	0	0	0	0	148	0	148	17	45	0	62	210
26/07/22 05:00-06:00	1	0		1	0	0	0	0	1	393	1	395	30	123	1	154	550
26/07/22 06:00-07:00	2	0		2	1	0	0	1	0	801	0	801	65	407	3	475	1279
26/07/22 07:00-08:00	4	1		5	1	0	0	1	0	1244	2	1246	91	640	1	732	1984
26/07/22 08:00-09:00	6	1		7	6	0	1	7	1	1693	0	1694	91	804	4	899	2607
26/07/22 09:00-10:00	6	1		7	13	0	1	14	5	1515	6	1526	128	935	7	1070	2617
26/07/22 10:00-11:00	18	1		19	11	1	4	16	4	1455	1	1460	142	1101	19	1262	2757
26/07/22 11:00-12:00	20	3		23	22	1	5	28	5	1380	0	1385	173	1213	18	1404	2840
26/07/22 12:00-13:00	25	3		28	13	1	3	17	6	1468	0	1474	211	1506	13	1730	3249
26/07/22 13:00-14:00	23	2		25	26	2	8	36	6	1386	1	1393	184	1445	17	1646	3100
26/07/22 14:00-15:00	29	2		31	14	0	2	16	7	1347	0	1354	195	1557	20	1772	3173
26/07/22 15:00-16:00	27	2		29	17	1	5	23	5	1349	2	1356	180	1624	9	1813	3221
26/07/22 16:00-	14	1		15	14	1	2	17	4	1370	0	1374	173	1728	21	1922	3328

Turning Movement Volume Report

Report Date: 8/4/2022 9:35:22 AM

From 7/26/2022 to 7/26/2022

Blue Oaks & Roseville
Pkyw_ Walgreens

Intersection: 177

Time	N				S				E				W				Int Total
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
17:00																	
26/07/22 17:00-18:00	21	2		23	19	2	8	29	3	1435	1	1439	212	2222	22	2456	3947
26/07/22 18:00-19:00	27	2		29	11	1	2	14	5	1371	0	1376	186	1993	24	2203	3622
26/07/22 19:00-20:00	24	2		26	13	1	2	16	5	980	0	985	152	1447	18	1617	2644
26/07/22 20:00-21:00	13	0		13	12	0	2	14	7	762	0	769	128	1236	13	1377	2173
26/07/22 21:00-22:00	7	0		7	8	0	1	9	3	456	0	459	86	993	12	1091	1566
26/07/22 22:00-23:00	6	1		7	4	0	1	5	0	339	0	339	53	602	4	659	1010
26/07/22 23:00-00:00	6	1		7	0	0	0	0	0	174	0	174	26	410	3	439	620
Summary	282	25	0	307	205	11	47	263	69	21285	14	21368	2561	22400	238	25199	47137

Turning Movement Volume Report

Report Date: 8/4/2022 9:34:21 AM

From 7/27/2022 to 7/27/2022

Blue Oaks & Roseville
Pkyw_ Walgreens

Intersection: 177

Time	N				S				E				W				Int Total
	Left	Thru	Right	Total													
27/07/22 00:00-01:00	0	0		0	0	0	0	0	0	116	0	116	9	219	1	229	345
27/07/22 01:00-02:00	2	0		2	1	0	1	2	0	53	0	53	13	99	0	112	169
27/07/22 02:00-03:00	0	0		0	0	0	0	0	1	36	0	37	5	54	0	59	96
27/07/22 03:00-04:00	1	0		1	0	0	0	0	0	46	2	48	14	51	2	67	116
27/07/22 04:00-05:00	0	0		0	1	0	0	1	0	142	0	142	14	56	2	72	215
27/07/22 05:00-06:00	3	0		3	0	0	0	0	0	396	4	400	24	140	1	165	568
27/07/22 06:00-07:00	1	0		1	0	0	0	0	2	836	2	840	63	396	1	460	1301
27/07/22 07:00-08:00	6	0		6	2	0	0	2	1	1274	0	1275	94	620	1	715	1998
27/07/22 08:00-09:00	11	1		12	5	0	0	5	2	1658	1	1661	97	896	7	1000	2678
27/07/22 09:00-10:00	16	1		17	12	1	5	18	2	1502	0	1504	122	1076	8	1206	2745
27/07/22 10:00-11:00	23	3		26	12	1	3	16	2	1405	5	1412	142	1056	11	1209	2663
27/07/22 11:00-12:00	15	2		17	19	1	5	25	2	1445	2	1449	182	1282	9	1473	2964
27/07/22 12:00-13:00	29	3		32	17	1	2	20	7	1469	0	1476	216	1489	16	1721	3249
27/07/22 13:00-14:00	21	3		24	11	1	4	16	4	1416	1	1421	185	1500	14	1699	3160
27/07/22 14:00-15:00	32	3		35	17	1	5	23	7	1342	1	1350	193	1461	16	1670	3078
27/07/22 15:00-16:00	24	3		27	22	1	5	28	4	1293	3	1300	151	1671	18	1840	3195
27/07/22 16:00-	24	2		26	25	1	6	32	8	1382	1	1391	199	1812	25	2036	3485

Turning Movement Volume Report

Report Date: 8/4/2022 9:34:21 AM

From 7/27/2022 to 7/27/2022

Blue Oaks & Roseville
Pkyw_ Walgreens

Intersection: 177

Time	N				S				E				W				Int Total
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
17:00																	
27/07/22 17:00-18:00	26	2		28	21	1	5	27	5	1411	1	1417	229	2189	18	2436	3908
27/07/22 18:00-19:00	20	2		22	19	1	4	24	11	1343	3	1357	194	1872	21	2087	3490
27/07/22 19:00-20:00	20	1		21	10	1	2	13	3	952	0	955	155	1351	16	1522	2511
27/07/22 20:00-21:00	13	0		13	14	1	6	21	4	810	1	815	146	1277	14	1437	2286
27/07/22 21:00-22:00	10	0		10	4	0	1	5	3	481	0	484	87	989	9	1085	1584
27/07/22 22:00-23:00	2	0		2	4	0	2	6	3	313	0	316	36	680	8	724	1048
27/07/22 23:00-00:00	9	0		9	1	0	0	1	0	157	0	157	28	380	2	410	577
Summary	308	26	0	334	217	12	56	285	71	21278	27	21376	2598	22616	220	25434	47429

Turning Movement Volume Report

Report Date: 8/4/2022 9:33:01 AM

From 7/28/2022 to 7/28/2022

Blue Oaks & Roseville
Pkyw_ Walgreens

Intersection: 177

Time	N				S				E				W				Int Total
	Left	Thru	Right	Total													
28/07/22 00:00-01:00	1	0		1	0	0	0	0	1	99	0	100	15	235	5	255	356
28/07/22 01:00-02:00	1	0		1	0	0	0	0	1	80	0	81	6	98	0	104	186
28/07/22 02:00-03:00	0	0		0	0	0	0	0	0	39	0	39	3	53	0	56	95
28/07/22 03:00-04:00	0	0		0	0	0	0	0	0	49	0	49	9	55	0	64	113
28/07/22 04:00-05:00	1	0		1	0	0	0	0	0	137	0	137	12	58	0	70	208
28/07/22 05:00-06:00	3	1		4	0	0	0	0	0	398	0	398	27	112	4	143	545
28/07/22 06:00-07:00	4	0		4	0	0	0	0	3	778	0	781	64	384	3	451	1236
28/07/22 07:00-08:00	7	1		8	2	0	0	2	1	1321	0	1322	89	676	4	769	2101
28/07/22 08:00-09:00	13	1		14	7	1	2	10	2	1631	0	1633	113	883	9	1005	2662
28/07/22 09:00-10:00	14	2		16	11	1	5	17	2	1491	2	1495	135	935	8	1078	2606
28/07/22 10:00-11:00	15	2		17	9	1	5	15	2	1408	1	1411	152	1043	10	1205	2648
28/07/22 11:00-12:00	27	2		29	12	1	5	18	6	1459	1	1466	182	1267	13	1462	2975
28/07/22 12:00-13:00	37	3		40	23	1	6	30	4	1420	1	1425	241	1400	8	1649	3144
28/07/22 13:00-14:00	22	2		24	15	1	4	20	7	1410	2	1419	193	1449	20	1662	3125
28/07/22 14:00-15:00	32	2		34	23	1	3	27	5	1373	0	1378	177	1390	9	1576	3015
28/07/22 15:00-16:00	30	3		33	11	1	2	14	4	1287	2	1293	187	1611	14	1812	3152
28/07/22 16:00-	22	1		23	18	2	7	27	4	1425	1	1430	170	1876	27	2073	3553

Turning Movement Volume Report

Report Date: 8/4/2022 9:33:01 AM

From 7/28/2022 to 7/28/2022

Blue Oaks & Roseville
Pkyw_ Walgreens

Intersection: 177

Time	N				S				E				W				Int Total
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
17:00																	
28/07/22 17:00-18:00	27	3		30	25	2	6	33	5	1407	1	1413	195	1768	23	1986	3462
28/07/22 18:00-19:00	25	3		28	12	1	4	17	8	1294	1	1303	202	1912	17	2131	3479
28/07/22 19:00-20:00	28	3		31	23	1	6	30	9	998	0	1007	156	1442	20	1618	2686
28/07/22 20:00-21:00	8	1		9	11	1	2	14	2	799	1	802	129	1343	18	1490	2315
28/07/22 21:00-22:00	17	2		19	6	1	2	9	2	508	1	511	94	1031	8	1133	1672
28/07/22 22:00-23:00	8	1		9	3	0	0	3	2	346	0	348	58	672	8	738	1098
28/07/22 23:00-00:00	4	0		4	2	0	1	3	1	211	0	212	35	416	4	455	674
Summary	346	33	0	379	213	16	60	289	71	21368	14	21453	2644	22109	232	24985	47106

National Data & Surveying Services Intersection Turning Movement Count

Location: Woodcreek Oaks Blvd & Walgreens Dwy/Woodcreek Oaks Blvd
 City: Roseville
 Control: 1-Way Stop(WB)

Project ID: 22-070155-002
 Date: 7/26/2022

Data - Totals

NS/EW Streets:	Woodcreek Oaks Blvd				Woodcreek Oaks Blvd				Walgreens Dwy/Woodcreek Oaks Blvd				Walgreens Dwy/Woodcreek Oaks Blvd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	2	1	0	0	2	0	0	0	1	0	0	0	0	0	1	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	74	11	0	0	54	1	0	0	0	3	0	0	0	8	0	151
4:15 PM	0	62	9	0	0	57	0	0	0	0	4	0	0	0	9	0	141
4:30 PM	0	75	6	0	0	60	0	0	0	0	4	0	0	0	10	0	155
4:45 PM	0	82	10	0	0	57	0	0	0	0	1	0	0	0	9	0	159
5:00 PM	0	84	6	0	0	62	0	0	0	0	2	0	0	0	7	0	161
5:15 PM	0	115	5	0	0	66	0	0	0	0	1	0	0	0	4	0	191
5:30 PM	0	104	3	0	0	74	0	0	0	0	4	0	0	0	10	0	195
5:45 PM	0	87	4	0	0	72	0	0	0	0	3	0	0	0	7	0	173
TOTAL VOLUMES :	0	683	54	0	0	502	1	0	0	0	22	0	0	0	64	0	1326
APPROACH %'s :	0.00%	92.67%	7.33%	0.00%	0.00%	99.80%	0.20%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	390	18	0	0	274	0	0	0	0	10	0	0	0	28	0	720
PEAK HR FACTOR :	0.000	0.848	0.750	0.000	0.000	0.926	0.000	0.000	0.000	0.000	0.625	0.000	0.000	0.000	0.700	0.000	0.923
	0.850				0.926				0.625				0.700				

National Data & Surveying Services Intersection Turning Movement Count

Location: Woodcreek Oaks Blvd & Walgreens Dwy/Woodcreek Oaks Blvd
 City: Roseville
 Control: 1-Way Stop(WB)

Project ID: 22-070155-002
 Date: 7/27/2022

Data - Totals

NS/EW Streets:	Woodcreek Oaks Blvd				Woodcreek Oaks Blvd				Walgreens Dwy/Woodcreek Oaks Blvd				Walgreens Dwy/Woodcreek Oaks Blvd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	2	1	0	0	2	0	0	0	1	0	0	0	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	70	10	0	0	65	0	0	0	0	4	0	0	0	5	0	
4:15 PM	0	83	5	0	0	57	0	0	0	0	7	0	0	0	8	0	
4:30 PM	0	76	7	0	0	51	0	0	0	0	3	0	0	0	8	0	
4:45 PM	0	89	6	0	0	62	0	0	0	0	2	0	0	0	7	0	
5:00 PM	0	116	8	0	0	60	0	0	0	0	3	0	0	0	6	0	
5:15 PM	0	106	10	0	0	66	0	0	0	0	4	0	0	0	7	0	
5:30 PM	0	102	4	0	0	68	1	0	0	0	3	0	0	0	11	0	
5:45 PM	0	104	9	0	0	59	0	0	0	0	1	0	0	0	9	0	
TOTAL VOLUMES :	0	746	59	0	0	488	1	0	0	0	27	0	0	0	61	0	
APPROACH %'s :	0.00%	92.67%	7.33%	0.00%	0.00%	99.80%	0.20%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																
PEAK HR VOL :	0	428	31	0	0	253	1	0	0	0	11	0	0	0	33	0	
PEAK HR FACTOR :	0.000	0.922	0.775	0.000	0.000	0.930	0.250	0.000	0.000	0.000	0.688	0.000	0.000	0.000	0.750	0.000	
	0.925				0.920				0.688				0.750				0.981

National Data & Surveying Services Intersection Turning Movement Count

Location: Woodcreek Oaks Blvd & Walgreens Dwy/Woodcreek Oaks Blvd
 City: Roseville
 Control: 1-Way Stop(WB)

Project ID: 22-070155-002
 Date: 7/28/2022

Data - Totals

NS/EW Streets:	Woodcreek Oaks Blvd				Woodcreek Oaks Blvd				Walgreens Dwy/Woodcreek Oaks Blvd				Walgreens Dwy/Woodcreek Oaks Blvd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	2	1	0	0	2	0	0	0	1	0	0	0	0	0	1	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	77	8	0	0	57	0	0	0	0	4	0	0	0	7	0	153
4:15 PM	0	94	9	0	0	65	0	0	0	0	4	0	0	0	7	0	179
4:30 PM	0	77	16	0	0	78	0	0	0	0	9	0	0	0	17	0	197
4:45 PM	0	60	6	0	0	66	0	0	0	0	7	0	0	0	14	0	153
5:00 PM	0	65	7	0	0	60	0	0	0	0	3	0	0	0	9	0	144
5:15 PM	0	97	3	0	0	59	0	0	0	0	5	0	0	0	7	0	171
5:30 PM	0	131	9	0	0	66	0	0	0	0	2	0	0	0	8	0	216
5:45 PM	0	103	9	0	0	59	0	0	0	0	5	0	0	0	10	0	186
TOTAL VOLUMES :	0	704	67	0	0	510	0	0	0	0	39	0	0	0	79	0	1399
APPROACH %'s :	0.00%	91.31%	8.69%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	396	28	0	0	244	0	0	0	0	15	0	0	0	34	0	717
PEAK HR FACTOR :	0.000	0.756	0.778	0.000	0.000	0.924	0.000	0.000	0.000	0.000	0.750	0.000	0.000	0.000	0.850	0.000	0.830
	0.757				0.924				0.750				0.850				

Attachment C
Analysis Worksheets

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	4:50	4:50	4:50	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	8743	8901	8858	9030	8997	9034	9010
Vehs Exited	8754	8865	8797	9010	8977	8967	8973
Starting Vehs	478	451	431	490	472	457	417
Ending Vehs	467	487	492	510	492	524	454
Travel Distance (mi)	9347	9433	9322	9621	9602	9613	9605
Travel Time (hr)	466.0	471.0	481.4	494.2	499.4	497.5	483.1
Total Delay (hr)	231.2	234.0	247.4	252.3	257.9	255.5	241.9
Total Stops	14466	14391	14778	15535	15845	15483	14877
Fuel Used (gal)	416.2	419.7	418.2	432.3	430.3	432.6	430.1

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	8765	8881	8929	8914
Vehs Exited	8664	8883	8846	8871
Starting Vehs	406	447	423	444
Ending Vehs	507	445	506	486
Travel Distance (mi)	9287	9476	9445	9475
Travel Time (hr)	459.9	478.2	487.2	481.8
Total Delay (hr)	226.1	239.7	249.3	243.5
Total Stops	14144	15215	15040	14975
Fuel Used (gal)	411.5	425.4	424.0	424.0

Interval #0 Information Seeding

Start Time	4:50
End Time	5:00
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	2191	2211	2168	2219	2208	2292	2244
Vehs Exited	2186	2205	2155	2256	2214	2252	2158
Starting Vehs	478	451	431	490	472	457	417
Ending Vehs	483	457	444	453	466	497	503
Travel Distance (mi)	2343	2336	2331	2348	2354	2376	2359
Travel Time (hr)	119.2	113.7	113.1	118.1	123.5	121.9	114.8
Total Delay (hr)	60.3	54.9	55.0	58.8	64.2	61.9	55.7
Total Stops	3698	3373	3399	3705	3961	3784	3491
Fuel Used (gal)	104.6	102.6	103.7	105.6	106.1	106.4	104.5

Interval #1 Information

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	2188	2230	2239	2218
Vehs Exited	2145	2159	2163	2186
Starting Vehs	406	447	423	444
Ending Vehs	449	518	499	472
Travel Distance (mi)	2281	2386	2361	2348
Travel Time (hr)	112.6	120.5	116.7	117.4
Total Delay (hr)	55.0	60.6	57.3	58.4
Total Stops	3407	3760	3537	3610
Fuel Used (gal)	100.9	107.3	104.4	104.6

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	2126	2230	2225	2257	2301	2215	2298
Vehs Exited	2181	2217	2136	2227	2268	2206	2321
Starting Vehs	483	457	444	453	466	497	503
Ending Vehs	428	470	533	483	499	506	480
Travel Distance (mi)	2319	2385	2267	2397	2439	2392	2419
Travel Time (hr)	113.2	119.8	115.8	117.2	129.7	122.5	124.9
Total Delay (hr)	55.2	59.9	58.8	57.1	68.3	62.5	64.0
Total Stops	3484	3730	3711	3661	4249	3794	3934
Fuel Used (gal)	102.7	106.1	100.4	104.5	109.1	107.8	108.6

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	2243	2229	2257	2235
Vehs Exited	2244	2250	2238	2228
Starting Vehs	449	518	499	472
Ending Vehs	448	497	518	479
Travel Distance (mi)	2357	2385	2376	2374
Travel Time (hr)	116.8	122.7	123.3	120.6
Total Delay (hr)	57.6	62.5	63.3	60.9
Total Stops	3588	4045	3962	3807
Fuel Used (gal)	104.7	106.8	107.0	105.8

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	2217	2231	2235	2290	2226	2244	2204
Vehs Exited	2161	2250	2292	2268	2252	2267	2206
Starting Vehs	428	470	533	483	499	506	480
Ending Vehs	484	451	476	505	473	483	478
Travel Distance (mi)	2327	2359	2401	2438	2393	2444	2420
Travel Time (hr)	114.1	114.2	125.7	130.5	121.3	128.1	121.1
Total Delay (hr)	55.6	55.2	65.5	69.3	61.1	66.5	60.5
Total Stops	3543	3402	3742	4057	3683	3974	3596
Fuel Used (gal)	102.8	104.4	108.2	111.7	107.0	111.3	108.1

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	2153	2187	2179	2215
Vehs Exited	2120	2194	2250	2226
Starting Vehs	448	497	518	479
Ending Vehs	481	490	447	471
Travel Distance (mi)	2291	2334	2358	2377
Travel Time (hr)	112.2	118.1	123.3	120.9
Total Delay (hr)	54.5	59.3	64.0	61.2
Total Stops	3414	3816	3667	3689
Fuel Used (gal)	101.1	105.1	106.9	106.7

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	2209	2229	2230	2264	2262	2283	2264
Vehs Exited	2226	2193	2214	2259	2243	2242	2288
Starting Vehs	484	451	476	505	473	483	478
Ending Vehs	467	487	492	510	492	524	454
Travel Distance (mi)	2358	2353	2322	2438	2416	2400	2407
Travel Time (hr)	119.5	123.2	126.8	128.3	124.9	125.0	122.3
Total Delay (hr)	60.1	64.1	68.1	67.1	64.3	64.6	61.6
Total Stops	3741	3886	3926	4112	3952	3931	3856
Fuel Used (gal)	106.1	106.6	105.8	110.5	108.0	107.1	109.0

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	2181	2235	2254	2239
Vehs Exited	2155	2280	2195	2228
Starting Vehs	481	490	447	471
Ending Vehs	507	445	506	486
Travel Distance (mi)	2359	2371	2350	2377
Travel Time (hr)	118.3	116.8	124.0	122.9
Total Delay (hr)	59.1	57.3	64.7	63.1
Total Stops	3735	3594	3874	3858
Fuel Used (gal)	104.8	106.1	105.8	107.0

1: Woodcreek Oaks & Blue Oaks Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.2	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.1	0.0	0.0	0.0	3.2	0.4	3.2	0.0	0.0	0.0
Total Delay (hr)	1.9	12.9	0.2	5.2	12.3	0.4	4.0	1.3	0.8	2.1	1.1	0.1
Total Del/Veh (s)	54.6	34.7	7.6	45.5	27.8	5.4	48.4	42.9	12.2	46.7	45.7	13.3
Stop Delay (hr)	1.7	9.1	0.1	4.7	9.3	0.3	3.6	1.1	0.6	2.0	1.0	0.1
Stop Del/Veh (s)	48.5	24.5	3.8	40.9	21.2	4.2	43.3	36.7	10.1	44.6	40.6	13.7

1: Woodcreek Oaks & Blue Oaks Performance by movement

Movement	All
Denied Delay (hr)	0.5
Denied Del/Veh (s)	0.4
Total Delay (hr)	42.2
Total Del/Veh (s)	32.2
Stop Delay (hr)	33.6
Stop Del/Veh (s)	25.6

2: Shopping Center/Walgreens Dway & Blue Oaks Performance by movement

Movement	EBT	EBR	WBT	WBR	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.0
Total Delay (hr)	1.3	0.2	1.4	0.0	0.2	3.1
Total Del/Veh (s)	3.2	2.7	2.3	0.1	27.9	2.8
Stop Delay (hr)	0.1	0.0	0.1	0.0	0.2	0.3
Stop Del/Veh (s)	0.1	0.1	0.1	0.0	27.7	0.3

3: Blue Oaks & Prop Site Dway Performance by movement

Movement	EBT	WBT	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	0.3	1.3	1.5
Total Del/Veh (s)	0.6	2.1	1.5
Stop Delay (hr)	0.0	0.0	0.0
Stop Del/Veh (s)	0.0	0.0	0.0

4: RV Pkwy/Walgreens & Blue Oaks Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.2	0.0	0.1	0.1	0.1	0.1	4.1	0.2	0.3
Total Delay (hr)	0.0	2.9	0.0	2.3	5.8	0.0	0.2	0.0	0.1	0.2	0.0	0.0
Total Del/Veh (s)	52.9	7.1	0.5	39.3	9.4	5.3	39.2	36.5	8.8	40.1	39.0	9.9
Stop Delay (hr)	0.0	1.7	0.0	2.0	1.2	0.0	0.2	0.0	0.1	0.2	0.0	0.0
Stop Del/Veh (s)	51.4	4.4	0.3	32.7	1.9	0.4	37.6	32.4	8.9	38.6	37.1	9.5

4: RV Pkwy/Walgreens & Blue Oaks Performance by movement

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.1
Total Delay (hr)	11.7
Total Del/Veh (s)	10.5
Stop Delay (hr)	5.5
Stop Del/Veh (s)	5.0

5: Woodcreek Oaks & Walgreens Dway Performance by movement

Movement	WBR	NBT	NBR	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.2	0.1
Total Delay (hr)	0.0	0.2	0.0	0.1	0.3
Total Del/Veh (s)	3.6	1.5	0.9	1.2	1.5
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.1
Stop Del/Veh (s)	3.6	0.4	0.3	0.0	0.4

Total Zone Performance

Denied Delay (hr)	4.4
Denied Del/Veh (s)	2.0
Total Delay (hr)	196.9
Total Del/Veh (s)	1860.9
Stop Delay (hr)	133.9
Stop Del/Veh (s)	1265.0

Intersection: 1: Woodcreek Oaks & Blue Oaks

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	98	146	314	340	368	64	240	284	354	358	368	141
Average Queue (ft)	40	59	177	191	210	21	145	180	229	251	280	59
95th Queue (ft)	84	113	288	308	335	49	225	281	351	370	395	106
Link Distance (ft)			1422	1422	1422				285	285	285	285
Upstream Blk Time (%)							0	0	2	6	11	
Queuing Penalty (veh)							0	0	12	32	61	
Storage Bay Dist (ft)	255	255				525	240	240				
Storage Blk Time (%)			2				0	0	6			
Queuing Penalty (veh)			3				1	2	27			

Intersection: 1: Woodcreek Oaks & Blue Oaks

Movement	NB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	L	L	T	T	R	L	L	T	T	R
Maximum Queue (ft)	174	189	102	111	173	120	128	79	63	47
Average Queue (ft)	94	118	41	40	69	51	68	34	19	11
95th Queue (ft)	156	173	82	84	129	101	110	67	48	33
Link Distance (ft)			526	526				260	260	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	240	240			240	270	270			270
Storage Blk Time (%)		0			0					
Queuing Penalty (veh)		0			0					

Intersection: 2: Shopping Center/Walgreens Dway & Blue Oaks

Movement	EB	WB	WB	WB	SB
Directions Served	T	T	T	T	R
Maximum Queue (ft)	4	40	64	98	68
Average Queue (ft)	0	2	4	10	21
95th Queue (ft)	4	20	33	51	53
Link Distance (ft)	285	242	242	242	171
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 3: Blue Oaks & Prop Site Dway

Movement	WB
Directions Served	T
Maximum Queue (ft)	5
Average Queue (ft)	0
95th Queue (ft)	5
Link Distance (ft)	354
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: RV Pkwy/Walgreens & Blue Oaks

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	T	T	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	23	187	174	194	201	5	131	149	261	280	323	14
Average Queue (ft)	2	62	61	74	77	0	54	77	70	69	94	1
95th Queue (ft)	12	142	138	148	157	3	108	127	200	204	251	8
Link Distance (ft)		354	354	354	354				838	838	838	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	225					225	245	245				410
Storage Blk Time (%)		0			0				0		0	
Queuing Penalty (veh)		0			0				1		0	

Intersection: 4: RV Pkwy/Walgreens & Blue Oaks

Movement	NB	NB	NB	SB	SB
Directions Served	L	LT	R	L	TR
Maximum Queue (ft)	42	31	53	61	38
Average Queue (ft)	10	6	17	18	10
95th Queue (ft)	31	22	40	49	35
Link Distance (ft)	516	516	516		248
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				100	
Storage Blk Time (%)				0	
Queuing Penalty (veh)				0	

Intersection: 5: Woodcreek Oaks & Walgreens Dway

Movement	WB
Directions Served	R
Maximum Queue (ft)	38
Average Queue (ft)	14
95th Queue (ft)	33
Link Distance (ft)	196
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 296

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	4:50	4:50	4:50	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	9744	9822	9831	9814	9883	9869	9813
Vehs Exited	9748	9808	9798	9684	9892	9884	9760
Starting Vehs	568	545	508	499	507	553	517
Ending Vehs	564	559	541	629	498	538	570
Travel Distance (mi)	9967	10176	10022	9998	10093	10091	10087
Travel Time (hr)	540.1	551.7	535.0	566.1	560.6	554.3	566.5
Total Delay (hr)	286.2	294.1	280.5	312.4	304.4	298.0	309.8
Total Stops	17489	17930	17361	18051	18026	17980	18045
Fuel Used (gal)	454.5	468.1	456.7	463.3	464.5	464.0	468.1

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	9713	9830	9821	9811
Vehs Exited	9640	9832	9741	9780
Starting Vehs	502	531	479	515
Ending Vehs	575	529	559	546
Travel Distance (mi)	9941	10089	9909	10037
Travel Time (hr)	561.9	559.6	567.2	556.3
Total Delay (hr)	309.3	303.2	314.9	301.3
Total Stops	18209	18663	17524	17920
Fuel Used (gal)	458.9	464.9	460.3	462.3

Interval #0 Information Seeding

Start Time	4:50
End Time	5:00
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	2487	2490	2405	2382	2523	2482	2468
Vehs Exited	2535	2524	2382	2384	2468	2485	2421
Starting Vehs	568	545	508	499	507	553	517
Ending Vehs	520	511	531	497	562	550	564
Travel Distance (mi)	2605	2529	2439	2471	2548	2582	2468
Travel Time (hr)	137.8	137.5	122.2	131.6	137.8	147.6	135.8
Total Delay (hr)	71.6	73.1	60.1	69.0	73.3	82.1	72.8
Total Stops	4427	4523	3635	4249	4314	4716	4285
Fuel Used (gal)	117.9	117.3	108.5	113.0	115.8	120.0	114.4

Interval #1 Information

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	2362	2474	2532	2461
Vehs Exited	2285	2474	2429	2437
Starting Vehs	502	531	479	515
Ending Vehs	579	531	582	543
Travel Distance (mi)	2409	2504	2469	2502
Travel Time (hr)	132.4	138.0	136.2	135.7
Total Delay (hr)	71.5	74.3	73.0	72.1
Total Stops	4412	4626	4437	4361
Fuel Used (gal)	109.9	116.2	113.4	114.6

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	2391	2455	2454	2474	2461	2477	2477
Vehs Exited	2398	2416	2452	2395	2453	2473	2468
Starting Vehs	520	511	531	497	562	550	564
Ending Vehs	513	550	533	576	570	554	573
Travel Distance (mi)	2404	2569	2493	2478	2547	2501	2557
Travel Time (hr)	129.3	137.3	130.9	138.8	148.3	138.8	146.2
Total Delay (hr)	67.7	72.5	67.6	76.2	83.7	75.2	81.3
Total Stops	4052	4462	4239	4385	4771	4591	4706
Fuel Used (gal)	109.3	117.9	113.4	113.7	118.8	115.0	118.4

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	2447	2527	2434	2456
Vehs Exited	2446	2438	2456	2436
Starting Vehs	579	531	582	543
Ending Vehs	580	620	560	560
Travel Distance (mi)	2514	2584	2521	2517
Travel Time (hr)	143.1	145.7	148.6	140.7
Total Delay (hr)	79.2	80.2	84.4	76.8
Total Stops	4621	4935	4756	4548
Fuel Used (gal)	116.5	118.8	118.2	116.0

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	2460	2382	2506	2475	2468	2441	2440
Vehs Exited	2400	2393	2501	2453	2479	2441	2461
Starting Vehs	513	550	533	576	570	554	573
Ending Vehs	573	539	538	598	559	554	552
Travel Distance (mi)	2488	2550	2555	2523	2477	2487	2551
Travel Time (hr)	137.9	138.4	142.8	148.6	133.6	132.6	143.4
Total Delay (hr)	74.7	74.4	77.8	84.5	70.6	69.4	78.5
Total Stops	4603	4505	4751	4720	4238	4270	4473
Fuel Used (gal)	115.0	117.2	118.2	118.4	114.4	113.5	118.7

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	2450	2393	2425	2441
Vehs Exited	2446	2493	2487	2455
Starting Vehs	580	620	560	560
Ending Vehs	584	520	498	550
Travel Distance (mi)	2536	2489	2521	2518
Travel Time (hr)	144.2	141.6	141.6	140.5
Total Delay (hr)	79.9	78.1	77.8	76.6
Total Stops	4573	4626	4143	4486
Fuel Used (gal)	117.2	115.9	117.3	116.6

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	2406	2495	2466	2483	2431	2469	2428
Vehs Exited	2415	2475	2463	2452	2492	2485	2410
Starting Vehs	573	539	538	598	559	554	552
Ending Vehs	564	559	541	629	498	538	570
Travel Distance (mi)	2470	2528	2534	2525	2521	2522	2512
Travel Time (hr)	135.1	138.4	139.1	147.1	140.9	135.3	141.0
Total Delay (hr)	72.2	74.1	74.9	82.8	76.7	71.3	77.2
Total Stops	4407	4440	4736	4697	4703	4403	4581
Fuel Used (gal)	112.3	115.6	116.6	118.2	115.5	115.4	116.7

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	2454	2436	2430	2449
Vehs Exited	2463	2427	2369	2443
Starting Vehs	584	520	498	550
Ending Vehs	575	529	559	546
Travel Distance (mi)	2482	2511	2397	2500
Travel Time (hr)	142.1	134.2	140.8	139.4
Total Delay (hr)	78.8	70.6	79.7	75.8
Total Stops	4603	4476	4188	4519
Fuel Used (gal)	115.4	114.1	111.4	115.1

1: Woodcreek Oaks & Blue Oaks Performance by movement

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.3	0.0	0.2	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.3	0.4	0.1	3.2	0.5	3.1	0.0	0.0
Total Delay (hr)	3.9	15.6	0.2	0.3	6.6	16.5	0.5	4.1	1.8	0.8	2.4	1.0
Total Del/Veh (s)	54.2	42.4	8.1	48.5	49.7	33.4	6.8	49.1	41.8	13.0	47.9	44.0
Stop Delay (hr)	3.3	11.3	0.1	0.3	5.9	12.7	0.4	3.7	1.5	0.7	2.3	0.9
Stop Del/Veh (s)	45.9	30.7	4.3	44.7	44.3	25.7	5.5	43.9	35.1	10.5	45.7	39.0

1: Woodcreek Oaks & Blue Oaks Performance by movement

Movement	SBR	All
Denied Delay (hr)	0.0	0.7
Denied Del/Veh (s)	0.0	0.5
Total Delay (hr)	0.1	53.7
Total Del/Veh (s)	14.3	37.4
Stop Delay (hr)	0.1	43.0
Stop Del/Veh (s)	14.7	29.9

2: Shopping Center/Walgreens Dway & Blue Oaks Performance by movement

Movement	EBT	EBR	WBT	WBR	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.1
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	5.4	0.1
Total Delay (hr)	1.5	0.1	2.7	0.0	1.1	5.5
Total Del/Veh (s)	3.5	2.5	4.1	0.6	68.7	4.7
Stop Delay (hr)	0.1	0.0	0.4	0.0	1.2	1.6
Stop Del/Veh (s)	0.1	0.1	0.6	0.0	69.0	1.4

3: Blue Oaks & Prop Site Dway Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.2	0.0
Total Delay (hr)	0.3	2.9	0.0	0.5	3.7
Total Del/Veh (s)	0.8	4.4	2.0	19.4	3.4
Stop Delay (hr)	0.0	0.0	0.0	0.5	0.5
Stop Del/Veh (s)	0.0	0.1	0.0	19.2	0.5

4: RV Pkwy/Walgreens & Blue Oaks Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.2
Denied Del/Veh (s)	0.0	0.0	0.0	0.2	0.0	0.2	0.1	0.1	3.8	0.6	0.6	0.2
Total Delay (hr)	0.8	6.1	0.0	3.3	15.2	0.3	0.3	0.1	1.9	0.0	0.4	28.4
Total Del/Veh (s)	47.8	15.0	3.0	56.0	23.9	8.5	50.7	60.4	44.8	41.8	15.6	23.2
Stop Delay (hr)	0.8	4.6	0.0	2.8	6.8	0.1	0.3	0.0	1.8	0.0	0.4	17.6
Stop Del/Veh (s)	45.7	11.4	2.4	46.8	10.6	1.9	48.8	56.3	42.2	40.0	14.7	14.3

5: Woodcreek Oaks & Walgreens Dway Performance by movement

Movement	WBR	NBT	NBR	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.2	0.1
Total Delay (hr)	0.1	0.2	0.1	0.1	0.5
Total Del/Veh (s)	3.7	1.5	1.7	1.2	1.6
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.1
Stop Del/Veh (s)	3.7	0.3	0.2	0.0	0.4

Total Zone Performance

Denied Delay (hr)	6.3
Denied Del/Veh (s)	2.6
Total Delay (hr)	244.8
Total Del/Veh (s)	2093.3
Stop Delay (hr)	167.5
Stop Del/Veh (s)	1432.2

Intersection: 1: Woodcreek Oaks & Blue Oaks

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	UL	L	T	T	T	R
Maximum Queue (ft)	146	206	365	367	408	58	267	284	367	363	382	207
Average Queue (ft)	79	116	201	209	228	21	178	220	250	266	286	67
95th Queue (ft)	136	181	313	326	351	46	264	313	374	388	403	140
Link Distance (ft)			1422	1422	1422				285	285	285	285
Upstream Blk Time (%)							0	0	6	11	17	0
Queuing Penalty (veh)							0	0	34	67	102	1
Storage Bay Dist (ft)	255	255				525	240	240				
Storage Blk Time (%)			4		0		1	3	11			
Queuing Penalty (veh)			10		0		7	18	53			

Intersection: 1: Woodcreek Oaks & Blue Oaks

Movement	NB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	L	L	T	T	R	L	L	T	T	R
Maximum Queue (ft)	196	210	100	134	157	137	140	104	57	47
Average Queue (ft)	100	122	44	60	70	57	75	35	18	12
95th Queue (ft)	169	183	83	109	127	109	119	76	45	36
Link Distance (ft)			526	526				260	260	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	240	240			240	270	270			270
Storage Blk Time (%)	0	0								
Queuing Penalty (veh)	0	0								

Intersection: 2: Shopping Center/Walgreens Dway & Blue Oaks

Movement	EB	EB	WB	WB	WB	WB	SB
Directions Served	T	T	T	T	T	TR	R
Maximum Queue (ft)	30	25	175	178	182	12	157
Average Queue (ft)	1	1	15	19	26	0	56
95th Queue (ft)	31	26	87	94	113	8	127
Link Distance (ft)	285	285	242	242	242	242	171
Upstream Blk Time (%)	0		0	0	0		3
Queuing Penalty (veh)	0		1	0	1		0
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 3: Blue Oaks & Prop Site Dway

Movement	EB	WB	WB	WB	WB	SB
Directions Served	T	T	T	T	TR	R
Maximum Queue (ft)	5	4	10	10	8	131
Average Queue (ft)	0	0	0	0	0	52
95th Queue (ft)	6	4	7	6	6	97
Link Distance (ft)	242	354	354	354	354	168
Upstream Blk Time (%)						0
Queuing Penalty (veh)						0
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 4: RV Pkwy/Walgreens & Blue Oaks

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB	
Directions Served	L	T	T	T	T	R	L	L	T	T	T	R	
Maximum Queue (ft)	124	251	256	259	267	22	156	365	508	508	523	205	
Average Queue (ft)	47	101	104	116	120	1	66	103	225	231	266	21	
95th Queue (ft)	99	193	200	206	214	9	126	224	418	430	466	97	
Link Distance (ft)		354	354	354	354				838	838	838		
Upstream Blk Time (%)													
Queuing Penalty (veh)													
Storage Bay Dist (ft)	225					225	245	245					410
Storage Blk Time (%)		1				1			7				3
Queuing Penalty (veh)		0				0			14				3

Intersection: 4: RV Pkwy/Walgreens & Blue Oaks

Movement	NB	NB	SB	SB
Directions Served	L	LT	L	TR
Maximum Queue (ft)	44	37	149	244
Average Queue (ft)	10	8	97	70
95th Queue (ft)	32	26	153	166
Link Distance (ft)	516	516	248	
Upstream Blk Time (%)				1
Queuing Penalty (veh)				0
Storage Bay Dist (ft)			100	
Storage Blk Time (%)			17	1
Queuing Penalty (veh)			17	1

Intersection: 5: Woodcreek Oaks & Walgreens Dway

Movement	WB
Directions Served	R
Maximum Queue (ft)	57
Average Queue (ft)	23
95th Queue (ft)	42
Link Distance (ft)	196
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 611
