



AGENDA

April 26, 2017

SPECIAL DESIGN COMMITTEE MEETING

4:30 p.m.

Civic Center Meeting Rooms 1 & 2

311 Vernon Street
Roseville, California

1. ROLL CALL

2. REQUESTS/PRESENTATIONS

2.1. EUREKA GATEWAY MOB - NERSP PCL 8 - 1513 EUREKA RD AND 1411 ROCKY RIDGE DR - FILE # PL16-0169

Recommendation: Pass a motion and approve: Item A: Mitigated Negative Declaration; Items B/C: Four (4) findings of fact and a Design Review Permit for an approximately 77,000-square-foot, 3-story medical office building on a 5.7-acre infill property; Items D/E: Two (2) findings of fact and an Administrative Permit to allow a parking reduction; and Items F/G: Four (4) findings of fact and Lot Line Adjustment to ensure the lot line will not cross the proposed building.

Applicant: Phil Titus, LPAS Architecture

Owners: John Pappas, Pappas Gateway LP, a California Limited Partnership (Hocker)

3. ORAL COMMUNICATIONS

4. ADJOURNMENT



DESIGN COMMITTEE

Title:

EUREKA GATEWAY MOB - NERSP PCL 8 - 1513 EUREKA RD AND 1411
ROCKY RIDGE DR - FILE # PL16-0169

Meeting Date: 4/26/2017

Item #: 2.1.

ATTACHMENTS:

Description

Staff Report

Exhibits

**ITEM III-B: DESIGN REVIEW PERMIT, ADMINISTRATIVE PERMIT, AND LOT LINE ADJUSTMENT
– 1513 EUREKA ROAD AND 1411 ROCKY RIDGE DRIVE – EUREKA GATEWAY
MOB-NERSP PCL 8 – PL16-0169**

REQUEST

The applicant requests approval of a Design Review Permit to allow the construction of a 77,106-square-foot, 3-story medical office building on a 5.7-acre property. An Administrative Permit is also requested, in order to allow a parking reduction. The site includes two parcels, and the applicant proposes a Lot Line Adjustment so that the line will not cross the proposed building.

Applicant – Phil Titus, LPAS Architecture

Owner – John Pappas, Pappas Gateway LP, a California Limited Partnership

SUMMARY RECOMMENDATION

The Planning Division recommends that the Design Committee take the following actions:

- A. Adopt the Negative Declaration,
- B. Adopt the four (4) findings of fact for the Design Review Permit,
- C. Approve the Design Review Permit subject to eighty-three (83) conditions of approval,
- D. Adopt the two (2) findings of fact for the Administrative Permit,
- E. Approve the Administrative Permit subject to two (2) conditions of approval,
- F. Adopt the four (4) findings of fact for the Lot Line Adjustment, and
- G. Approve the Lot Line Adjustment subject to thirteen (13) conditions of approval.

SUMMARY OF OUTSTANDING ISSUES

There are no outstanding issues associated with this request. The applicant has reviewed and is in agreement with the recommended conditions of approval.

BACKGROUND

The project site is an L-shaped property which has frontage on both Rocky Ridge Drive and Eureka Road, and is addressed as both 1513 Eureka Road and 1411 Rocky Ridge Drive (see Figure 1). The site is within the Northeast Roseville Specific Plan (NERSP). The NERSP was adopted in April 1987 (Resolution #87-52). The property has a land use designation of Community Commercial/Business Professional (CC/BP) and a zoning designation of Community Commercial/Special Area–Northeast Roseville Specific Plan (CC/SA-NE).

The subject property is a portion of NERSP large-lot Parcel 8, where a multi-use development plan was approved in 1995. As shown in Figure 1, Parcel 8 includes all of the land on the eastern side of Eureka Road from Rocky Ridge Road to Lead Hill Boulevard. The project site, shown with hatchmarks in Figure 1, is the only undeveloped portion of Parcel 8. The approval of Parcel 8 included a General Plan Amendment, Specific Plan Amendment, Rezone, and Development Agreement to change the land uses and add the Parcel 8 Design Guidelines to the Specific Plan. The Design Guidelines address site development, appropriate land uses, landscaping, architectural design, siting, and a variety of other design components. Deviations from the Design Guidelines may be approved via the Design Review entitlement process.

The applicant proposes to construct a 77,106-square-foot, 3-story medical office building on a 5.7-acre infill property. The parapet height of the building is proposed to be 52 feet, with the mechanical screen in the middle of the roof at a height of 60 feet. In addition to the buildings, the applicant proposes to build frontage improvements, 452 parking spaces, and landscaping on the site. The parking provided is less than the Zoning Ordinance standard requires, so an Administrative Permit for a Parking Reduction has been requested. The property includes two lots, and the existing lot line between them is located where the building is proposed. The applicant has proposed a lot line adjustment to move the parcel boundary northeastward, where it will cross the parking lot instead of the building.

SITE INFORMATION

Location: 1513 Eureka Rd and 1411 Rocky Ridge Dr

Total Size: 5.7 acres

Topography and Setting: The project site is undeveloped, but is surrounded on all sides by urban development. The site supports non-native annual grasses and slopes upward approximately 25 feet in elevation from Rocky Ridge Drive and Eureka Road toward the rear of the property. Aerial photography and site visits show evidence of the site being used for illegal off-roading, particularly during the wintertime, as drivers have easy access to the site from the surrounding developed properties. This has left some bare and disturbed areas. A stormwater pipe from the upslope property where the theater is located has an outlet onto the subject property, where the stormwater then extends through a constructed stormwater swale. The beginning of the swale is more than 10 feet deep and steeply sloped. After approximately 100 feet, the swale curves west and rapidly becomes shallower and much wider, until it is no longer a channel and the water leaves the swale as overland sheet flow. The property owner maintains this swale to prevent the growth of vegetation which would block the flow of water. On both site visits, there was debris (wire bins, cardboard, etc) in the deeper portion of the stormwater channel.

Sacramento Municipal Utility District (SMUD) transmission lines cross the northeastern side of the property, connecting to a SMUD substation located across Rocky Ridge Drive on the northeastern corner of Rocky Ridge Drive and Eureka Road. Surrounding development adjacent to the site includes a fuel station on the southeastern corner of Rocky Ridge Drive and Eureka Road, a walled and gated parking lot to the northeast, and commercial development to the south (California Backyard, Century Theaters,

Figure 1: NERSP Parcel 8 and the Project Site



and multiple other retail and office uses). An apartment complex is located beyond the walled parking lot to the northeast. The site has frontage on both Rocky Ridge Drive and Eureka Road, a four- and six-lane road, respectively.

EVALUATION – DESIGN REVIEW

The Design Review Permit evaluation of the project has been based on the applicable development standards within the City's Zoning Ordinance, the design standards of the Community Design Guidelines, and the NERSP Parcel 8 Design Guidelines. Section 19.78.060 of the City of Roseville Zoning Ordinance requires that four findings be made in order to approve or conditionally approve a Design Review Permit. The four findings are listed below in ***bold italics***, and are followed by an evaluation of the project in relation to each finding. Refer to Exhibits B–D for site plans, Exhibit E for the floor plans, and Exhibit F for elevations.

1. The Project as approved preserves and accentuates the natural features of the property, such as open space, topography, trees, wetlands and water courses, provides adequate drainage for the project, and allows beneficial use to be made of the site for development.

The property is a small infill site surrounded on all sides by urban development. The project site is sloped and uneven, and also contains a constructed stormwater channel that was designed as an interim feature. There are no trees, wetlands, or watercourses on the site. The site has been disturbed by illegal use of the site for off-roading, and has also been used as a site for illegal dumping. The slopes on the site must be leveled in order to make beneficial use of the site for development, and the stormwater channel (which is not visible from surrounding public streets or sidewalks) must be converted to an underground pipe system, as planned. There are no natural features to preserve, and the development is consistent with what was anticipated as part of the Parcel 8 approval.

2. The project site design as approved provides open space; access; vehicle parking; vehicle, pedestrian, and bicycle circulation; pedestrian walks and links to alternative modes of transportation; loading areas; landscaping and irrigation; and lighting, which results in a safe, efficient, and harmonious development and which is consistent with the applicable goals, policies, and objectives set forth in the General Plan, the Community Design Guidelines, and the applicable Specific Plan and/or applicable design guidelines.

Figure 2, Project Layout, shows the proposed project site layout and landscaping overlaid on an aerial photograph of surrounding development. This figure is used throughout the below discussions to illustrate the various design characteristics of the project.

Access and Circulation

The project site is an infill property, with development on all sides. The Parcel 8 approval contemplated an interconnected circulation design between the individual developments, and the site plan shown in Figure 2 is consistent with that intent. As shown, there are drive aisles that stub into the project site from both sides, which the project circulation design has been designed to tie into. Also as shown, the project includes three proposed points of access to the public street. Driveway 1 is an existing driveway on Rocky Ridge Drive. It is located off-site, on the gas station parcel. Driveway 2 is an existing driveway on Eureka Road, which also serves the gas station, but is on the project site. Driveway 3 is an existing driveway on Eureka Road that currently serves the businesses to the east of the site.

A circulation analysis was prepared by Kimley-Horn transportation consultants, focused on examining the project access design and the intersection of Eureka Road and Rocky Ridge Drive to determine the amount of storage and/or driveway designs necessary to ensure safe and efficient operations. The study

Figure 2: Project Layout



is included as part of the Negative Declaration and Initial Study package appended to this staff report as Attachment 1. The study found that the intersection of Rocky Ridge Drive and Eureka Road would operate at LOS C or better, and would have adequate storage length to accommodate the proposed project. The study also included specific design recommendations for the project access, which have been incorporated into the site design.

The applicant has proposed to connect the site through to Driveway 1 (see Figure 2), but requested an analysis both with and without this connection in order to provide options. The gas station property owner has expressed some concern about the increase in vehicle volumes that will result at this driveway if the connection is made. There is a recorded easement and a recorded reciprocal access agreement for the purpose of making this connection, but the project applicant would prefer that there be willing agreement

between the current property owners. The study found that the access design would operate adequately even if the driveway connection to Rocky Ridge Drive were not provided. Therefore, a condition of approval has been included which will grant the applicant the ability to redesign this area to show no connection, in the event the adjoining property owner proves unwilling to have the access.

Driveway 2 is existing, and is located on the project site. It currently serves only the gas station property, but was designed to be a shared access point once the project site develops. The applicant has designed this driveway as a “T”, where users would immediately turn left to access the gas station, and right to access the proposed medical office building. There is an existing median within Eureka Road that would restrict this driveway to right-in/right-out movements.

Driveway 3 is existing and currently serves the businesses to the east of the site. The existing drive-aisle ends in a stub, after making connection with the drive-aisle in front of The Family church and the California Backyard buildings. The project would continue this drive aisle through the site, to complete the connection. Like Driveway 2 this driveway would also be restricted to right-in/right-out movements. Drivers wishing to make a left-turn movement would either turn right and then make a u-turn at Eureka Road and Rocky Ridge Drive, or could use the continuous connection between this site and the neighboring development to access Lead Hill Drive.

As indicated, the proposed site access and circulation has been studied by Kimley-Horn transportation consultants, and has been reviewed by City Engineering staff. These analyses have found the proposed access design meets City standards.

Parking

Refer to the analysis of the Administrative Permit for a parking reduction for a detailed evaluation; a summary is provided here. The project includes the construction of 452 parking stalls (see Exhibit B). The Zoning Ordinance standard for general medical offices is one space per 150 square feet of gross building area, which results in a parking requirement of 514 spaces for this site. The applicant has provided justification for a lower parking standard, based on the fact that the Zoning Ordinance standard was developed for high-turnover medical offices (e.g. pediatrician or general practitioner), but the proposed project includes a variety of much less intense medical uses and spaces (e.g. surgery center).

Pedestrian and Bicycle Circulation

There is an existing sidewalk along the Rocky Ridge Drive property frontage, but the sidewalk along Eureka Road is currently incomplete. The project includes the completion of this sidewalk connection across the property frontage. The project also includes the construction of a pedestrian pathway from Eureka Road to the proposed building. The surrounding roadways are already designed to accommodate bicycles sharing the road, with dedicated bicycle lanes at the intersection; the project has no impact on bicycle facilities. The project was reviewed for consistency with the Pedestrian Master Plan and Bicycle Master Plan, and was found to be consistent.

Lighting, Landscaping, and Open Space

The landscape plan includes 35-foot landscape setbacks from both Rocky Ridge Drive and Eureka Road, as required by the Parcel 8 Design Guidelines. The Parcel 8 Design Guidelines call for a mix of different complementary plant types, rather than a monoculture of plants. Consistent with this, the existing developed frontages in the vicinity of the project have mixed plant palettes. The landscape architect examined surrounding plant species and, rather than attempt to mimic the same selections, instead designed a palette that uses similar textures and colors. As an example, the office complex frontage across Rocky Ridge Drive uses flowering plum trees, which are known for their pink flowers in the spring

and their purple foliage. The applicant has selected forest pansy redbud, which also has pink flowers in the spring and has darker purplish foliage. The proposed landscape palette provides design compatibility with adjacent developments, and also provides color, texture, and visual interest.

The Parcel 8 Design Guidelines indicate a maximum lot coverage of 35 percent for a multiple-story building. The footprint of the proposed building is approximately 26,000 square feet and the site is approximately 249,000 square feet, which is a lot coverage of 10 percent. The Parcel 8 Design Guidelines also establish that landscaping must cover a minimum of 15% of the site. There is approximately 50,000 square feet of landscaped area shown for the project, which is 20% of the site.

The Parcel 8 Design Guidelines establish a parking lot shading standard that is “as close as possible to 50% shade coverage,” recognizing that a 50% standard will not be possible to achieve in areas affected by the existing transmission lines. The easement around the transmission lines includes height limitations for all structures and plants, which in turn limits applicants to the use of small trees that provide much less shade. A large portion of the project site is affected by the presence of the transmission lines. The building had to be located outside of the easement, which means that much of the parking lot is within the easement. The applicant has proposed planting as many trees as possible within this area of the parking lot, but because the tree palette is limited to small trees, the parking lot shading is 35.6 percent. Staff examined the site plan and determined the applicant was providing as many trees as is reasonable, and that this is as close to 50 percent as it is possible to get given the site constraints.

The existing project site is sloped and uneven, and will require leveling in order to allow development of the site. The grading and utility plan (included as Exhibit C) indicates that retaining walls will be required on all shared property boundaries, though not along the Eureka Road or Rocky Ridge Drive frontages. The wall height varies from five feet tall to less than one foot tall. All of the walls will be located within landscaped areas, which will provide some visual softening.

The applicant is proposing typical parking lot lighting, with 15-foot-tall light standards, cut-off lenses, and all lighting directed downward. Building-mounted lighting is also proposed, to light the pedestrian pathways around the building. The lighting design conforms to the Design Guidelines.

3. The building design, including the materials, colors, height, bulk, size, and relief, and the arrangement of the structures on the site, as approved, is harmonious with other development and buildings in the vicinity and which is consistent with the applicable goals, policies, and objectives set forth in the General Plan, the Community Design Guidelines, and the applicable Specific Plan and/or applicable design guidelines.

The Parcel 8 Design Guidelines include the following recommendations:

- Use of one or more of the following materials: concrete block, cement plaster, stone veneers, granite, architectural metals, concrete or clay roof tile, standing seam metal roof, glass block accent, wood trellis, or fabric awning.
- Colors should use one or more of the approved colors for the theater and adjacent buildings.
- Roof lines should vary.
- Total building height should not exceed 55 feet, with architectural features not to exceed 75 feet.
- Building design should be responsive to views from all sides.
- Long, uninterrupted exterior walls should be avoided.
- Each building should have a different setback from Eureka Road.

The proposed building elevations are shown as Exhibit F, and show that the applicant is proposing the use of glass and metals in the building design, which conforms to the Parcel 8 Design Guidelines, and is also using a bright white, to echo the approved color of the adjacent office building to the south. Also refer to Attachment 2, a rendering of the elevations. With the exception of the building entrance area, the roofline of the proposed building does not vary. However, on a three-story building, roofline variation tends to have less impact than other types of architectural variation that occur lower on the façade, where most viewers tend to focus. In the surrounding area, including on Parcel 8, roofline variation tends to be used most heavily on the shorter one-, or two-story buildings, while flat roofs are common on the three-story and taller buildings.

The parapet of most of the building is 52 feet, while the architectural projection at the entrance is 56 feet tall. The mechanical screen on the roof is 60 feet tall and is set back from the roof edge on all sides by more than 40 feet. The mechanical screen is within the allowed overall height limitations, and because it is set back from the roof edge, it will not be visible from Eureka Road and will be only partially visible from more distant areas.

All sides of the proposed building will be visible from public streets, with the Eureka Road frontage being the most prominent. All sides of the building have been designed to incorporate a mix of colors, materials, and window glazing, as well as awnings and wall plane variation. The building includes a two-story glass wall which projects from the rest of the building, and wraps around from the entrance on the South Elevation onto the East Elevation. The center of the façades on the North and South Elevations include the use of three-story glass treatment with awnings, architectural projections, and the use of recessed walls. The West Elevation also includes projections which use glass. All of these described areas use a blue glazing, while the remainder of the office building windows will use a bronzed glazing, to provide contrast and variation.

The proposed building will be set back farther from Eureka Road than the adjacent office building to the south, but will be closer to the street than the fuel station to the north, satisfying the recommendation to have variation in building setbacks.

4. The design of the public services, as approved, including but not limited to, trash enclosures and service equipment, are located so as not to detract from the appearance of the site, and are screened appropriately and effectively using construction materials, colors, and landscaping that are harmonious with the site and the building designs.

As discussed in the section above, the mechanical equipment for the building is roof-mounted, and will be behind a mechanical screen. The required trash enclosure for the site is located on the interior of the site, where it will not be noticeable from public streets. The building also requires a generator, to provide emergency power in the case of a power interruption. The generator is located on the interior of the site, within an enclosure located at the southeastern corner of the building, where it will not be noticeable from public streets.

There is an existing wooden utility pole on the project site, located adjacent to the proposed trash enclosure, which is not able to be screened or incorporated into the site design. The site is steeply sloped in the area where the pole is located, and will need to be leveled. In order to level the area without disturbing the pole, the applicant has proposed building a circular 6-foot-tall retaining wall around the pole. Landscaping is proposed around the base of the wall, including small trees, which will soften and screen the wall to the extent possible. Though not an ideal design solution, in weighing the options staff agreed that the wall used to support the pole would not be noticeable from the public street due to its location on the interior of the site, and would therefore be acceptable.

EVALUATION – ADMINISTRATIVE PERMIT

Section 19.26.030.C.3 of the City of Roseville Zoning Ordinance contains provisions for requesting and evaluating Parking Reductions for an Individual Use. An applicant may apply for an Administrative Permit to allow a parking reduction for an individual use where they believe the number of parking spaces required for their use as specified in the Zoning Ordinance is not applicable because their use functions differently than the Zoning-Ordinance-specified use type. The applicant has the burden of proof for providing documentation substantiating their request. The approving authority shall only approve reduced parking if the criteria in ***bold, italics*** below are met.

1. Satisfactory evidence is provided describing the nature of the use, the operation and data from other facilities or similar facilities so as to demonstrate that the required parking standards are excessive and the proposed parking standards are appropriate.

The Zoning Ordinance Off-Street Parking regulations only include one standard for medical use: Medical Services, General. The standard is designed for a typical medical office, such as a General Practitioner or Pediatrician's office. These users generally see high volumes of clients during business hours, with many clients being cared for or waiting for appointments in any given hour. Many times these appointments overlap each other, causing a high demand for onsite parking. For this reason, the Zoning Ordinance requires one parking space per 150 square feet of building area for medical uses. Based on this requirement, the proposed use would require 514 parking spaces. The project includes 452 parking stalls, for a total deficit of 62 parking spaces. However, the applicant has provided evidence the proposed medical office building clinic does not operate like a typical high-turnover medical office.

According to the justification provided as Exhibit G, the proposed project will include a mix of medical services, some of which have much lower parking demands. While the project will include general practitioners and other high-turnover medical uses, the building will also include a surgery center and other low-turnover uses. The justification points out that parking analyses completed for other large medical office buildings (including Stonepoint Parcels 8 and 9 medical office building and the Kaiser medical office building) have found that actual parking demand is approximately 0.5 spaces per 150 square feet of building area. Based on this standard, the project parking demand would be 257 spaces, and the 452 parking spaces on the site would provide a parking surplus. The applicant has provided satisfactory evidence that the parking on the site is sufficient to meet parking demand.

2. Overflow parking will not impact any adjacent use.

As described above, the applicant has provided evidence that the onsite parking is sufficient to meet demand. Therefore, overflow parking will not impact adjacent uses.

EVALUATION – LOT LINE ADJUSTMENT

The project site includes two parcels. The parcel boundary which divides the two parcels is currently located near Eureka Road, which is where the building is proposed to be constructed. The building cannot be located elsewhere on the site because of the presence of a transmission line easement over most of the property, which prohibits any structures. Therefore, the applicant proposes to move the lot line between the two parcels farther away from Eureka Road, so that it will not infringe on the building. In accordance with the Subdivision Map Act and the City of Roseville Subdivision Ordinance, the evaluation of the request is based on compliance with the City's Zoning Ordinance and Building Code as follows.

1. *The proposed Lot Line Adjustment complies with the Zoning Ordinance for the district in which the parcels are located.*

The project site has a zoning designation of Community Commercial/Special Area–Northeast Roseville Specific Plan (CC/SA-NE). The City's Zoning Ordinance establishes minimum development standards for commercial structures located within the zone, but does not establish any minimum lot sizes or widths. The Lot Line Adjustment is intended to facilitate appropriate site development, and does not conflict with any of the City's development standards. As described in the analysis of the Design Review Permit, the project complies with the development standards of this zone.

2. *The proposed Lot Line Adjustment complies with the local building regulations, including the California Building Code.*

The California Building Code (CBC) establishes building regulations based upon the type of construction, the use of a building or structure and a building's proximity to other buildings and property lines. The future construction and uses of the site have been and will continue to be reviewed for compliance with the City's Design and Development Standards and the CBC through the building permit process. The Lot Line Adjustment is specifically intended to ensure that the site development is consistent with building regulations.

3. *The proposed Lot Line Adjustment provides for any necessary relocation of existing infrastructure or easements.*

The Lot Line Adjustment is part of the overall development of the site, which includes the creation of appropriate easements and infrastructure.

4. *The proposed Lot Line Adjustment complies with General, Specific Plan, and Subdivision Design Standards.*

As noted above, the Lot Line Adjustment is necessary to support the project, which is consistent with the General Plan. The proposed Lot Line Adjustment will not conflict with Subdivision Design Standards identified in the City's Subdivision Ordinance.

PUBLIC OUTREACH

The proposed project was distributed to the various agencies and departments which have requested notice of City applications, and all comments were considered and incorporated into the Conditions of Approval, as appropriate. Notice of the application was also distributed to the Roseville Coalition of Neighborhood Associations. No comments were received. A public notice of the Design Committee hearing was published on April 7, 2017, and was distributed to all property owners within 300 feet of the project site. To date, no comments have been received.

ENVIRONMENTAL DETERMINATION

An Initial Study and Negative Declaration was published on March 24, 2017, which found that the project would not have a significant effect on the environment and that no mitigation measures were required. The comment period ends April 17, 2017. No comments were received at the time of the writing of this staff report.

RECOMMENDATION

The Planning Division recommends the Design Committee take the following actions:

- A. Adopt the Negative Declaration on the following basis: The Design Committee has reviewed and considered the Initial Study and Negative Declaration dated March 24, 2017 and has found these documents to be adequate, complete, representative of the independent judgement of the City of Roseville, and consistent with the California Environmental Quality Act.
- B. Adopt the findings of fact as stated in the staff report for the **DESIGN REVIEW PERMIT – 1513 EUREKA ROAD AND 1411 ROCKY RIDGE DRIVE – EUREKA GATEWAY MOB–NERSP PCL 8 – PL16-0169**.
- C. Approve the **DESIGN REVIEW PERMIT – 1513 EUREKA ROAD AND 1411 ROCKY RIDGE DRIVE – EUREKA GATEWAY MOB–NERSP PCL 8 – PL16-0169** subject to eighty-three (83) conditions of approval.
- D. Adopt the findings of fact as stated in the staff report for the **ADMINISTRATIVE PERMIT – 1513 EUREKA ROAD AND 1411 ROCKY RIDGE DRIVE – EUREKA GATEWAY MOB–NERSP PCL 8 – PL16-0169**.
- E. Approve the **ADMINISTRATIVE PERMIT – 1513 EUREKA ROAD AND 1411 ROCKY RIDGE DRIVE – EUREKA GATEWAY MOB–NERSP PCL 8 – PL16-0169** subject to two (2) conditions of approval.
- F. Adopt the findings of fact as stated in the staff report for the **LOT LINE ADJUSTMENT – 1513 EUREKA ROAD AND 1411 ROCKY RIDGE DRIVE – EUREKA GATEWAY MOB–NERSP PCL 8 – PL16-0169**.
- G. Approve the **LOT LINE ADJUSTMENT – 1513 EUREKA ROAD AND 1411 ROCKY RIDGE DRIVE – EUREKA GATEWAY MOB–NERSP PCL 8 – PL16-0169** subject to thirteen (13) conditions of approval.

CONDITIONS OF APPROVAL FOR DESIGN REVIEW PERMIT

- 1. This Design Review Permit approval shall be effectuated within a period of two (2) years from **April 26, 2017** and if not effectuated shall expire on **April 26, 2019**. Prior to said expiration date, the applicant may apply for an extension of time, provided this approval is does not extend the expiration beyond **April 26, 2020**. (Planning)
- 2. The project is approved as shown in Exhibits B – H and as conditioned or modified below. (Planning)
- 3. The project shall comply with all required environmental mitigation identified in the Northeast Roseville Specific Plan EIR. (Planning)
- 4. The applicant shall pay City's actual costs for providing plan check, mapping, GIS, and inspection services. This may be a combination of staff costs and direct billing for contract professional services. Project billing may occur up to two months after end or warranty or Notice of Termination date for the SWPPP, whichever occurs later. (Engineering, Environmental Utilities, Electric, Finance)
- 5. The design and construction of all improvements shall conform to the Design and Construction Standards of the City of Roseville, or as modified by these conditions of approval, or as directed by the City Engineer. (Engineering)

6. The applicant shall not commence with any on-site improvements or improvements within the right-of-way until such time as grading and/or improvement plans are approved and grading and/or encroachment permits are issued by the Department of Development Services – Engineering Division. (Engineering)
7. The approval of this project does not constitute approval of proposed improvements as to size, design, materials, or location, unless specifically addressed in these conditions of approval. (Engineering)
8. The parcel adjacent to Eureka Rd shall be addressed as 1513 Eureka Road. The northern parcel adjacent to Rocky Ridge Dr shall be addressed as 1411 Rocky Ridge Drive. All projects with multi-tenants or buildings must submit a plot plan with building footprint(s) to the Business Services Department (Addressing@Roseville.ca.us) for building/suite addressing. (Business Services)

PRIOR TO ISSUANCE OF BUILDING PERMITS:

9. Parking stalls shall meet, or exceed, the following minimum standards:
 - a. All parking stalls shall be double-striped. Parking stalls adjacent to sidewalks, landscaped areas or light fixtures, and all Accessible stalls shall about a 6" raised curb or concrete bumper. (Planning)
 - b. Standard -- 9 feet x 18 feet; Compact--9 feet x 16 feet; Accessible--14 feet x 18 feet (a 9 foot wide parking area plus a 5 foot wide loading area) and a minimum of one (1) parking space shall be Accessible van accessible--17 feet x 18 feet (9 foot wide parking area plus an 8 foot wide loading area). (Planning)
 - c. An 'exterior routes of travel' site accessibility plan incorporating slope, cross-slope, width, pedestrian ramps, curb ramps, handrails, signage, detectable warnings or speed limit signs or equivalent means shall comprise part of the site improvement plans submitted to City for review, prior to building plan check approvals. This site accessibility plan shall also include:
 - i) Accessible parking stalls shall be dispersed and located closest to accessible entrances. The total number of accessible parking spaces shall be established by Table 11B-208.2 of the CBC.
 - ii) Accessible Parking spaces and crosswalks shall be signed, marked and maintained as required by Chapter 11B of the CBC.
 - iii) Accessible parking and exterior route of travel shall comply with CBC, Chapter 11B. (Building)
10. Signs and/or striping shall be provided on-site as required by the Planning Department to control on-site traffic movements. Parking lot striping and signage shall be maintained in a visible and legible manner. (Planning)
11. The plans submitted to the Building Department for permits shall indicate all approved revisions/alterations as approved by the Commission including all conditions of approval. (Planning)
12. The project Landscape Plans shall comply with the following:
 - a. The Landscape Plan shall indicate the location of, and be designed to avoid conflicts with, all pole-mounted light fixtures and utility equipment including (but not limited to) electric transformers, switchgear, and overhead lines, backflow preventers, fire department

connections, and public water, sewer, and storm drain facilities. (Planning, Fire, Environmental Utilities, Electric, Public Works)

- b. The tree plantings in the parking lot shall be designed to provide as close to 50% shade coverage after 15 years as feasible. (Planning)
 - c. At a minimum, landscaped areas not covered with live material shall be covered with a rock, (3") bark (no shredded bark) or (3") mulch covering. (Planning)
 - d. The landscape plan shall comply with the Landscape Guidelines for the Northeast Roseville Specific Plan, the Parcel 8 Design Guidelines, and the City of Roseville Water Efficient Landscape ordinance. (Planning)
 - e. All landscaping in areas containing electrical service equipment shall conform to the Electric Department's Landscape Requirements and Work Clearances as outlined in Section 10.00 of the Departments "Specification for Commercial Construction." (Electric)
13. Any roof-mounted equipment and satellite dishes proposed shall be shown on the building plans. The equipment shall be fully screened from public streets and the surrounding properties. (Planning)
14. At the time of building permit application and plan submittal, the project applicant shall submit a proposed plan which shows the suite addressing plan for individual tenant spaces within the building. The Chief Building Official, or the designate, shall approve said plan prior to building permit approval. (Building)
15. A separate Site Accessibility Plan which details the project's site accessibility information as required by California Title 24, Part 2 shall be submitted as part of the project Building Permit Plans. (Building)
16. For Multiple Building Complexes: As part of the required Site Accessibility Plan, the developer shall delineate the extent of the site accessibility improvements being installed as part of the initial improvements for the project, and those that are planned to be developed as part of subsequent phases (i.e. around future pad buildings). (Building)
17. Building permit plans shall comply with all applicable code requirements (California Building Code – CBC – based on the International Building Code, California Green Building Standards Code-CGBSC, California Mechanical Code – CMC – based on the Uniform Mechanical Code, California Plumbing Code – CPC – based on the Uniform Plumbing Code, California Fire Code – CFC – based on the International Fire Code – with City of Roseville Amendments – RFC, California Electrical Code – CEC – based on the National Electrical Code, and California Energy Standards – CEC T-24 Part 6), California Title 24 and the American with Disabilities Act - ADA requirements, and all State and Federally mandated requirements in effect at the time of submittal for building permits (contact the Building Division for applicable Code editions). (Building)
18. Maintenance of copy of building plans: Health and Safety Code section 19850 requires the building department of every city or county to maintain an official copy of the building plans for the life of the building. As such, each individual building shall be submitted as a separate submittal package. Building plan review, permit issuance and archiving is based on each individual building address. (Building)
19. For all work to be performed off-site, permission to enter and construct shall be obtained from the property owner, in the form of a notarized right-of-entry. Said notarized right-of-entry shall be provided to Public Works prior to approval of any plans. (Engineering)

20. The Improvement Plans shall include a complete set of Landscape Plans. The Landscape Plans shall be approved with the Improvement Plans. (Planning, Engineering, Fire, Environmental Utilities, Electric)
21. A note shall be added to the grading plans that states:

*“Prior to the commencement of grading operations, the contractor shall identify the site where the **excess/borrow** earthen material shall be imported/deposited. If the **borrow/deposit** site is within the City of Roseville, the contractor shall produce a report issued by a geotechnical engineer to verify that the exported materials are suitable for the intended fill, and shall show proof of all approved grading plans. Haul routes to be used shall be specified.”* (Public Works)
22. Bike Parking, clean air vehicle spaces, and carpool spaces shall be provided per the California Green Building Standards. Bike rack/locker design and location and the marking of clean air and carpool spaces shall be approved by Alternative Transportation. (Alternative Transportation, Building)
23. The site shall be accessed by the two existing driveways on Eureka Road. These driveways shall maintain a shared access with the adjacent properties. The western driveway on Eureka Road shall be modified to accommodate a 140-foot right turn curb flare. An 8-foot sidewalk shall be constructed across the frontage of Eureka Road. (Engineering)
24. The Developer shall make reasonable efforts to connect the east/west access to the existing Rocky Ridge Drive driveway. The requirement for this connection will be waived if the Developer's reasonable efforts do not provide access directly through to the existing Rocky Ridge Driveway. (Engineering)
25. The applicant shall dedicate all necessary rights-of-way or Public Utility Easement for the widening of any streets or transfer of public utilities across and over any portion of the property as required with this entitlement. A separate document shall be drafted for approval and acceptance by the City of Roseville, and recorded at the County Recorder's Office. (Engineering)
26. All storm drainage, including roof drains, shall be collected on site and treated with Best Management Practices (BMP's) per the City's Stormwater Quality Design Manual. All storm water shall be routed to the nearest existing storm drain system or natural drainage facility. Drain outfalls shall extend down to the receiving water and shall be constructed with adequate velocity attenuation devices. The grading/improvement plans for the site shall be accompanied with a shed map that defines that area tributary to this site and all drainage facilities shall be designed to accommodate the tributary flow. The storm drain system and proposed BMP's shall be privately owned and maintained by the property owner. Prior to the issuance of any permits, the owner shall provide a plan for the maintenance of the proposed BMP's. (Engineering)
27. Prior to the issuance of any permits, the property owner shall prepare and submit a Storm Water Pollution Prevention Plan (SWPPP) to the City, as defined by the Regional Water Quality Control Board. The SWPPP shall be submitted in a single three ring binder. Upon approval, the SWPPP will be returned to the property owner during the pre-construction meeting. (Engineering)
28. The applicant shall remove and reconstruct any existing damaged curb, gutter, and sidewalk along the property frontage. During plan check of the improvement plans and/or during inspection, Public Works will designate the exact areas to be reconstructed. Any existing public facilities damaged during the course of construction shall be repaired by the property owner and at the property owner's expense, to the satisfaction of the City. (Engineering)

29. Prior to the approval of the improvement plans, it will be the project proponent's responsibility to pay the standard City Trench Cut Recovery Fee for any cuts within the City streets that are required for the installation of underground utilities. (Engineering)
30. Prior to the issuance of building permits, the property owner shall pay into the following fee programs: Citywide Drainage Fee, Citywide Traffic Mitigation Fee (TMF), Highway 65 Joint Partners Association (JPA), South Placer Regional Transportation Authority (SPRTA), and City/County Fee. (Public Works)
31. The applicant/developer shall prepare a Transportation Systems Management (TSM) Plan for Eureka Gateway to be reviewed and approved by the Transportation Commission. (Public Works)
32. Prior to the issuance of a grading permit or approval of Improvement Plans, the grading plans shall clearly identify all existing water, sewer and recycled water utilities within the boundaries of the project (including adjoining public right of way). Existing utilities shall be identified in plan-view and in profile view where grading activities will modify existing site elevations over top of or within 15 feet of the utility. Any utilities that could potentially be impacted by the project shall be clearly identified along with the proposed protection measures. The developer shall be responsible for taking measures and incurring costs associated with protecting the existing water, sewer and recycled water utilities to the satisfaction of the Environmental Utilities Director. (Environmental Utilities)
33. The applicant shall pay all applicable water and sewer fees. (Environmental Utilities)
34. Water and sewer infrastructure shall be designed pursuant to the adopted City of Roseville Improvement Standards and the City of Roseville Construction Standards and shall include:
 - a. Utilities or permanent structures shall not be located within the area which would be disturbed by an open trench needed to expose sewer trunk mains deeper than 12' unless approved by Environmental Utilities in these conditions. The area needed to construct the trench is a sloped cone above the sewer main. The cone shall have 1:1 side slopes.
 - b. Water, sewer and recycled mains shall not exceed a depth of 12' below finished grade, unless authorized in these conditions of approval.
 - c. All sewer manholes shall have all-weather 10-ton vehicle access unless authorized by these conditions of approval. (Environmental Utilities)
35. An easement shall be dedicated over the 12" water line located on the eastern property line. Where the water goes under the wall the wall shall bridge the water trench. No trees shall be planted in the easement. (Environmental Utilities)
36. The sewer main shall be 8 inches in diameter. (Environmental Utilities)
37. Walls shall be located outside of the sewer easement. (Environmental Utilities)
38. Trash enclosures, recycling areas, and enclosure approaches shall be designed to current Refuse Division specifications, the materials and colors shall match the building, and the location of such facilities shall be reviewed and approved by the Refuse Division, Planning and the Fire Department. The enclosure must have inside dimensions of 12 feet wide and 9 feet deep and be built to the specifications of the Solid Waste Department's Enclosure Description. (Refuse, Planning, Fire)
39. Access to trash enclosures shall have an inside turning radius of 25 feet and an outside turning radius of 45 feet must be maintained to allow the refuse truck access to and from the enclosure.

Enclosures must have a clear approach of 65 feet in front of the enclosure to allow servicing bins. (Refuse)

40. A trash enclosure and recycling enclosure is required for each building and each tenant, otherwise, the building owner is responsible for the trash service. (Refuse)
41. The design and installation of all fire protection equipment shall conform to the California Fire Code and the amendments adopted by the City of Roseville, along with all standards and policies implemented by the Roseville Fire Department. (Fire)
42. The applicable codes and standards adopted by the City shall be enforced at the time construction plans have been submitted to the City for permitting (Fire)
43. The fire flow required, at a 50% reduction due to the buildings being sprinklered, will be based on the largest single structure in accordance with the California Fire Code at the time detail plans are submitted to the City of Roseville for review. The maximum fire flow will not exceed 3,000 gpm based on the Appendix III-AA of the California Fire Code. (Fire)
44. The fire department access road shall meet the City's requirements for width and turning radii of 30 and 50 as noted on the fire department standards for access. This shall be enforced at the time plan are submitted for review, Additional information can be found on the City's web site www.roseville.ca.us or contact Patrick Chew, Senior Fire Inspector, at 916-774-5823 or pchew@roseville.ca.us with the Fire Prevention Division for information. (Fire)
45. An **approved** automatic fire extinguishing system shall be provided for all buildings where the total fire area is **3,600** square feet or greater, as required by California Fire Code as adopted by this city for non-single family residential units. All amendments, standards and policies can be found on the City's web site www.roseville.ca.us or contact Patrick Chew, Senior Fire Inspector, at 916-774-5823 or pchew@roseville.ca.us with the Fire and Life Safety Division for information. (Fire)
46. Every building three stories or more in height shall be provided with a Class 1 standpipe system in accordance with the California Fire Code as amended by the Fire Department by way ordinance. Standpipes shall be spaced every 300 feet of travel distance with the location(s) to be approved by this department. Plan review and field inspection fees associated with the installation of said systems shall be paid prior to plan submittal. (Fire)
47. Automatic fire extinguishing system risers, fire alarm system panels and digital alarm communicator system panels shall be located within an approved fire control room and shall be accessible from an adjacent fire apparatus roadway. Said fire control room shall be a minimum size of thirty-five (35) square feet in size and shall be openable from the exterior via an approved door opening. However, if this project requires the installation of a fire pump, this room will likely be much larger than the minimum stated by ordinance. (Fire)
48. Elevators shall be designed to accommodate first responders and their apparatuses such as gurneys. (Fire)
49. The phasing of this project shall not limit the fire department requirements for access and circulation throughout the project as a result of continuous construction in accordance with the California Fire Code, 2013 with the City of Roseville's Amendments. A separate phasing plan (and permit issued by the Building Department) shall be reviewed and approved by this department. (Fire)
50. If added cornice construction is involved, the design shall support the weight of a ladder leaning against the assembly as well as a 330-pound vertical load applied to the **leading edge** of the

horizontal projection of the cornice (a 250-pound firefighter carrying 80 pounds of equipment stepping off of a ladder onto the top of the cornice). (Fire)

51. Use, increase of hazardous materials or storage, liquids, gases and/or chemicals shall meet the requirements of the Chapter 6.95 of the Health and Safety Code, the Roseville Fire Department and the National Fire Codes. Submit a complete plan set and the Hazardous Materials Business Plan, including names and amount of any hazardous materials that will be stored or used, to the Fire and Life Safety Division for review and approval. A permit application shall also be provided at the time of submittal. Contact Steve Anderson of our Hazardous Materials Division within the Fire Department at (916) 774-5821 to initiate the process. Satisfaction of storage and use shall be determined prior to requesting occupancy. (Fire)
52. Adequate radio coverage shall be provided within all buildings for public safety agencies, as required by Roseville Municipal Code and the California Fire Code. A field test shall be provided by a person in possession of a current FCC License, or a current technician certification issued by the Associated Public-Safety Communications Officials International (APCO), or the National Association of Business and Educational Radio (NABER). The building owner shall retain all test records on the inspected premises and a copy shall be submitted to the Fire Department officials in accordance with Section 510 of the California Fire Code. (Fire)

Adequate radio coverage shall include all of the following:

- a. A minimum signal strength of 95 dBm available in 90% of the area of each floor of the building when transmitted from the closest City of Roseville Radio Communication site.
 - b. A minimum signal strength of 95 dBm received at the closest City of Roseville Communication site when transmitted from 90% of the area of each floor of the building.
 - c. The frequency range that must be supported shall be 821–824 MHz and 866 – 869 MHz.
 - d. A 100 % reliability factor. (Fire, Police)
53. The Electric Department requires the submittal of the following information in order to complete the final electric design for the project:
 - a. one (1) set of improvement plans
 - b. load calculations
 - c. electrical panel one-line drawings (Electric)
 54. All on-site external lighting shall be installed and directed to have no off-site glare. Lighting within the parking areas and pedestrian walkways shall provide a maintained minimum of one (1) foot candle, and 0.5 foot candle of light, respectively. All exterior light fixtures shall be vandal resistant. (Planning, Police)
 55. The parking lot shall have properly posted signs that state the use of the parking area is for the exclusive use of employees and customers of this project. (See California Vehicle Code Sections 22507.8, 22511.5, 22511.8, 22658(a), and the City of Roseville Municipal Code Section 11.20.110). The location of the signs shall be shown on the approved site plan. (Planning, Police)
 56. It is the developer's responsibility to notify PG&E of any work required on PG&E facilities. (PG&E)

DURING CONSTRUCTION & PRIOR TO ISSUANCE OF OCCUPANCY PERMITS:

57. Any backflow preventers visible from the street shall be painted green to blend in with the surrounding landscaping. The backflow preventers shall be screened with landscaping and shall comply with the following criteria:
- a. There shall be a minimum clearance of four feet (4'), on all sides, from the backflow preventer to the landscaping.
 - b. For maintenance purposes, the landscaping shall only be installed on three sides and the plant material shall not have thorns.
 - c. The control valves and the water meter shall be physically unobstructed.
 - d. The backflow preventer shall be covered with a green cover that will provide insulation. (Planning, Environmental Utilities)
58. The following easements shall be provided by separate instrument and shown on the site plan, unless otherwise provided for in these conditions:
- a. Water, sewer, and reclaimed water easements. (Environmental Utilities)
 - c. Additional internal easements will be required to cover primary electrical facilities to the project when the final electrical design is completed. (Electric)
59. Easement widths shall comply with the City's Improvement Standards and Construction Standards. Separate document easements required by the City shall be prepared in accordance with the City's "Policy for Dedication of Easements to the City of Roseville". All legal descriptions shall be prepared by a licensed land Surveyor. All existing public utility, electric, water, sewer and reclaimed water easements shall be maintained unless otherwise authorized by these conditions of approval. (Public Works, Environmental Utilities, Electric)
60. Inspection of the potable water supply system on new commercial/ industrial/ office projects shall be as follows:
- a. The Environmental Utilities Inspector will inspect all potable water supply up to the downstream side of the backflow preventer.
 - b. The property owner/applicant shall be responsible for that portion of the water supply system from the backflow preventer to the building. The builder/contractor shall engage a qualified inspector to approve the installation of this portion of the water supply. The Building Division will require from the builder/ contractor, a written document certifying that this portion of the potable water supply has been installed per improvement plans and in accordance with the Uniform Plumbing Code. This certificate of compliance shall be submitted to the Building Division before a temporary occupancy or a building final is approved.
 - c. The building inspectors will exclusively inspect all potable water supply systems for the building from the shutoff valve at the building and downstream within the building. (Building, Environmental Utilities)
61. All improvements being constructed in accordance with the approved grading and improvement plans shall be accepted as complete by the City. (Engineering)
62. The words "traffic control appurtenances" shall be included in the list of utilities allowed in public utilities easements (PUE's) located along public roadways. (Engineering)

63. The applicant/developer shall prepare a Transportation Systems Management (TSM) Agreement for Eureka Gateway to be reviewed and approved by the City Manager. (Engineering, Alternative Transportation)
64. Water, sewer and reclaimed water shall be constructed pursuant to the adopted City of Roseville Improvement Standards and the City of Roseville Construction Standards. (Environmental Utilities)
65. All water backflow devices shall be tested and approved by the Environmental Utilities Department. (Environmental Utilities)
66. All Electric Department facilities, including streetlights where applicable, shall be designed and built to the "City of Roseville Specifications for Commercial Construction." (Electric)
67. The City of Roseville Electric Department has electrical construction charges which are to be paid by the developer and which are explained in the City of Roseville "Specification for Commercial Construction." These charges will be determined upon completion of the final electrical design. (Electric)
68. Any relocation, rearrangement, or change of existing electric facilities due to this development shall be at the developer's expense. This shall include, but is not limited to, the relocation of the 60kV pole onsite, due to grading issues. (Electric)
69. Any facilities proposed for placement within public/electric utility easements shall be subject to review and approval by the Electric Department before any work commences in these areas. This includes, but is not limited to, landscaping, lighting, paving, signs, trees, walls, and structures of any type. (Electric)
70. All electric metering shall be directly outside accessible. This can be accomplished in any of the following ways:
 - a. Locate the metered service panel on the outside of the building.
 - b. Locate the metered service panel in a service room with a door that opens directly to the outside. The developer will be required to provide a key to the door for placement in a lock box to be installed on the outside of the door. Any doors leading from the service room to other areas of the building shall be secured to prohibit unauthorized entry. (Electric)
71. One 3/4" conduit with a 2-pair phone line shall be installed from the buildings telephone service panel to the meter section of the customer's electrical switchgear or panel. (Electric)
72. It is the responsibility of the developer to insure that all existing electric facilities remain free and clear of any obstruction during construction and when the project is complete. (Electric)

OTHER CONDITIONS OF APPROVAL:

73. Signs shown on the elevations are not approved as part of the Design Review Permit. A Sign Permit is required for all project signs. (Planning)
74. Following the installation of the landscaping, all landscape material shall be maintained in a healthy and weed free condition; dead plant material shall be replaced immediately. All trees shall be maintained and pruned in accordance with the accepted practices of the International Society of Arboriculture (ISA). (Planning)

75. The City reserves the right to restrict vehicle turning movements within the public right-of-way in the future if deemed necessary by the City Engineer. (Engineering)
76. The required width of fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. Minimum required widths and vertical clearances established by the Fire Code shall be maintained at all times during construction. Closure of accesses for fire apparatus by gates, barricades and other devices shall be prohibited unless approved by the Fire Chief. (Fire)
77. Temporary aboveground storage tanks may be used at construction sites for diesel fuel only and shall not exceed 1,000 gallon capacity. Tanks shall comply with all provisions found within the Fire Code. A Fire Department Permit shall be obtained prior to tank installation. The permit shall expire after 90 days from the date of issuance, unless extended by the Fire Chief. (Fire)
78. If site survey or earth moving work results in the discovery of hazardous materials in containers or what appears to be hazardous wastes released into the ground, the contractor or person responsible for the building permit must notify the Roseville Fire Department immediately. A representative from the Fire Department will make a determination as to whether the incident is reportable or not and if site remediation is required. (Fire)
79. The location and design of the gas service shall be determined by PG&E. The design of the gas service for this project shall not begin until PG&E has received a full set of City approved improvement plans for the project. (PG&E)
80. The project is subject to the noise standards established in the City's Noise Ordinance. In accordance with the City's Noise Ordinance project construction is exempt between the hours of seven a.m. and seven p.m. Monday through Friday, and between the hours of eight a.m. and eight p.m. Saturday and Sunday. Provided, however, that all construction equipment shall be fitted with factory installed muffling devices and that all construction equipment shall be maintained in good working order. (Building)
81. The developer (or designated consultant) shall certify that the building foundation location has been placed according to all approved setback requirements shown on the approved site plan. The developer shall prepare a written statement confirming building placement and provide an original copy to the City Building Department Field Inspector at the time of or prior to the foundation inspection. (Building)
82. Prior to Certificate of Occupancy, the applicant may apply for a Temporary Occupancy (TO) of the building. If a TO is desired, the applicant must submit a written request to the Building Division a minimum of thirty (30) days prior to the expected temporary occupancy date and shall include a schedule for occupancy and a description of the purpose for the Temporary Occupancy. (Building)
83. Concurrent with submittal for plan check and prior to a request for final building inspection, the applicant may request City approval of an occupancy phasing plan to allow individual or multiple building occupancies. This request shall be made in writing to the Building Department and shall include 10 copies of the following:
 - a. A description of measures that will be undertaken to minimize conflict between residents/ building occupants and construction traffic (e.g. fencing, etc.);
 - b. A phasing plan showing the proposed buildings, internal roads and access routes, landscaping, trash enclosure locations, and any other improvements planned for each phase; and
 - c. Estimated time frame for each phase and a specific date for the first phase. (Planning, Building)

CONDITIONS OF APPROVAL FOR ADMINISTRATIVE PERMIT

1. This Administrative Permit for a reduction of sixty-two (62) spaces is approved based on the proposed square footage and operating characteristics of the project, as described in this staff report and in Exhibit G, and as conditioned below. Should the user modify their operations, the parking reduction will no longer be valid. (Planning)
2. This Administrative Permit approval shall expire concurrently with the Design Review Permit. (Planning)

CONDITIONS OF APPROVAL FOR LOT LINE ADJUSTMENT

1. The Lot Line Adjustment is approved as shown in Exhibit B. (Planning, Engineering)
2. Building permits for the medical office building shall not be issued until the Lot Line Adjustment has been recorded. (Planning, Building, Engineering)
3. The following shall be submitted to Engineering prior to recordation of the lot line adjustment:
 - a. Two copies of property boundary description with exhibit map (8.5" x 11" sheet), and one copy of boundary closure calculations for resulting lots. These items shall be stamped and signed by a California Licensed Land Surveyor or Registered Civil Engineer authorized to practice land surveying.
 - b. One copy of the Conditions of Approval.
 - c. A completed Property Owner Consent Form.
 - d. Deed to convey interest in the property.
 - e. Preliminary title report no older than six months for all properties involved. (Engineering)
4. If surveying monuments are placed as a result of this Property Line Adjustment, it will be the responsibility of the Surveyor to record a Record of Survey with the County Recorder's Office. (Engineering)
5. The existing 15-foot public sewer easement on the eastern portion of the property shall be extended to the limits of the new property line. The easement will be to the benefit of the parcel to the north and shall allow for rights to construct. (Engineering)
6. Prior to recordation of the lot line adjustment, the applicant shall pay the City's surveyor's processing and consulting fee of \$150.(Engineering)
7. All existing easements shall be maintained, unless otherwise provided for in these conditions. (Environmental Utilities, Electric, Engineering)
8. The applicant shall submit to the Engineering Division of Public Works a paper copy and an electronic copy of the recorded Voluntary Merger per the "Digital Submittal of Cadastral Surveys". (Environmental Utilities)
9. Easement widths shall comply with the City's Improvement Standards and Construction Standards. (Engineering, Environmental Utilities, Electric)

10. Separate document easements required by the City shall be prepared in accordance with the City's "Policy for Dedication of Easements to the City of Roseville". All legal descriptions shall be prepared by a licensed land Surveyor (Environmental Utilities, Electric, Engineering)
11. Any relocation, rearrangement, or change to existing City facilities due to this Lot Line Adjustment shall be paid for by the applicant. (Engineering, Environmental Utilities, Electric)
12. All existing buildings shall conform to Table 5A of the Uniform Building Code (UBC) with regard to the minimum distance to the property line. (Building)
13. Any structures crossing the adjusted property lines shall be removed prior to recordation of the Lot Line Adjustment documents. (Engineering)

Attachments

1. Building Rendering

Exhibits

- A. Negative Declaration and Initial Study dated March 24, 2017
- B. Site Plan
- C. Grading Plan
- D. Landscape Plan
- E. Floor Plans
- F. Elevations
- G. Parking Reduction Justification
- H. Colors and Materials Board

<u>Note to Applicant and/or Developer:</u> Please contact the Planning Division staff at (916) 774-5276 prior to the Commission meeting if you have any questions on any of the recommended conditions for your project. If you challenge the decision of the Commission in court, you may be limited to raising only those issues which you or someone else raised at the public hearing held for this project, or in written correspondence delivered to the Planning Manager at, or prior to, the public hearing.
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MEDICAL OFFICE BUILDING
EUREKA ROAD @ ROCKY RIDGE

ROSEVILLE, CA

BUILDING RENDERINGS

DATE: 09.16.2016
PROJECT NO: 1111-0009
SCALE:
SHEET:



LPAS

2484 Natomas Park Drive Suite 100 Sacramento CA 95833
916 443 0335 lpasdesign.com Architecture • Design

DC Exhibit A

NOTICE OF INTENT TO ADOPT A 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 Negative Declaration for the project referenced below. This Negative Declaration is available for public review and comment.

Project Title/File#: Eureka Gateway MOB – NERSP PCL 8, PL16-0169

Project Location: 1513 Eureka Road and 1411 Rocky Ridge Drive, Roseville, Placer County;
APNs 048-013-002-000 and 048-013-003-000

Project Owner: John Pappas, Pappas Gateway LP, a California Limited Partnership

Project Applicant: Phil Titus, LPAS Architecture

Project Planner: Lauren Hocker, Associate Planner, (916) 774-5272

Project Description: The applicant proposes to construct an approximately 75,000-square-foot, 3-story medical office building on a 5.7-acre infill property, which requires a Design Review Permit. The property is L-shaped with frontage on both Eureka Road and Rocky Ridge Drive, and wraps around the development on the corner of those two roadways. In addition to the buildings, the applicant proposes to build frontage improvements, 453 parking spaces, and landscaping on the site. The site includes two parcels, and the applicant proposes a Lot Line Adjustment so that the line will not cross the proposed building. An Administrative Permit is also requested, in order to allow a parking reduction. The Zoning Ordinance standard for general medical offices is one space per 150 square feet of gross building area, which results in a parking requirement of 500 spaces for this site. The applicant has provided justification for a lower parking standard, based on the fact that the Zoning Ordinance standard was developed for high-turnover medical offices (e.g. pediatrician or general practitioner), but the proposed project includes a variety of much less intense medical uses and spaces (e.g. conference spaces and laboratories).

Document Review and Availability: The public review and comment period begins on March 27, 2017 and ends on April 17, 2017. The Negative Declaration may be reviewed during normal business hours (8:00 am to 5:00 pm) at the Planning Division offices, located at 311 Vernon Street. It may also be viewed online at http://www.roseville.ca.us/gov/development_services/planning/environmental_documents_n_public_notices.asp. **Written comments on the adequacy of the Negative Declaration may be submitted to Lauren Hocker, Planning Division, 311 Vernon Street, Roseville, CA 95678, and must be received no later than 5:00 pm on April 17, 2017.**

This project will be scheduled for a public hearing before the City's Design Committee. At this hearing, the Design Committee will consider the Negative Declaration and associated project entitlements. The date and time of the public hearing is currently unknown; a separate notice will be published when a public hearing before the Design Committee has been scheduled.

Kevin Payne
Development Services Director

Dated: March 17, 2017

Publish: March 24, 2017

NEGATIVE DECLARATION

Project Title/File Number: Eureka Gateway MOB – NERSP PCL 8, PL16-0169
Project Location: 1513 Eureka Road and 1411 Rocky Ridge Drive, Roseville, Placer County; APNs 048-013-002-000 and 048-013-003-000
Project Applicant: Phil Titus, LPAS Architecture
Property Owner: John Pappas, Pappas Gateway LP, a California Limited Partnership
Lead Agency Contact Person: Lauren Hocker, Associate Planner - City of Roseville; (916) 774-5272
Date: March 17, 2017

Project Description:

The applicant proposes to construct an approximately 75,000-square-foot, 3-story medical office building on a 5.7-acre infill property, which requires a Design Review Permit. The property is L-shaped with frontage on both Eureka Road and Rocky Ridge Drive, and wraps around the development on the corner of those two roadways. In addition to the buildings, the applicant proposes to build frontage improvements, 453 parking spaces, and landscaping on the site. The site includes two parcels, and the applicant proposes a Lot Line Adjustment so that the line will not cross the proposed building. An Administrative Permit is also requested, in order to allow a parking reduction. The Zoning Ordinance standard for general medical offices is one space per 150 square feet of gross building area, which results in a parking requirement of 500 spaces for this site. The applicant has provided justification for a lower parking standard, based on the fact that the Zoning Ordinance standard was developed for high-turnover medical offices (e.g. pediatrician or general practitioner), but the proposed project includes a variety of much less intense medical uses and spaces (e.g. conference spaces and laboratories).

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. *This Negative Declaration reflects the independent judgment of the lead agency.*

INITIAL STUDY & ENVIRONMENTAL CHECKLIST

Project Title/File Number:	Eureka Gateway MOB – NERSP PCL 8, PL16-0169
Project Location:	1513 Eureka Road and 1411 Rocky Ridge Drive
Project Description:	The applicant requests a Design Review Permit to construct an approximately 75,000-square-foot, 3-story medical office building on a 5.7-acre site, along with the related site improvements such as parking, driveways, and landscaping. The project also includes a Lot Line Adjustment to ensure a lot line does not cross the proposed building, and an Administrative Permit for a parking reduction.
Project Applicant:	Phil Titus, LPAS Architecture
Property Owner:	John Pappas, Pappas Gateway LP, a California Limited Partnership
Lead Agency Contact:	Lauren Hocker, Associate Planner; (916) 774-5272

This initial study has been prepared to identify and assess the anticipated environmental impacts of the above described project application. The document relies on 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.

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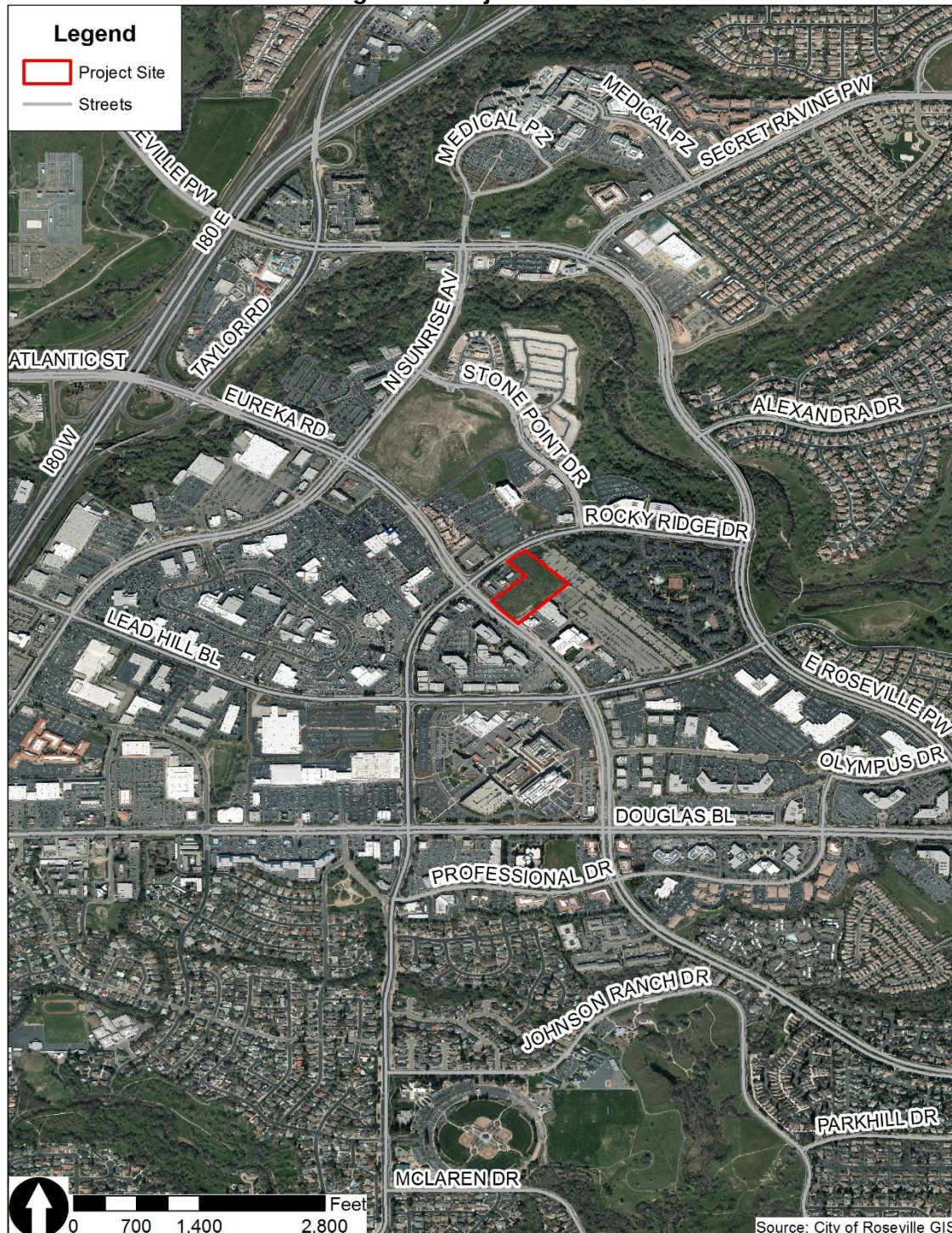
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PROJECT DESCRIPTION

Project Location

The project site is an L-shaped property which has frontage on both Rocky Ridge Drive and Eureka Road, and is addressed as both 1513 Eureka Road and 1411 Rocky Ridge Drive (see Figure 1).

Figure 1: Project Location



Background

Location	Zoning	General Plan Land Use	Actual Use of Property
Site	CC/SA-NE	CC/BP	Vacant
North	PD	BP	Offices, retail, restaurants, fueling, substation
South	CC/SA-NE	CC/BP	Office, retail, restaurants, movie theater
East	GC/SA & R3	CC/BP & HDR	Parking, apartments
West	BP/SA-NE	BP	Offices, restaurants

The project is located within the Northeast Roseville Specific Plan (NERSP). The NERSP was adopted in April 1987 (Resolution #87-52) but has been amended multiple times, the most recent of which was in September 2013. The subject property is a portion of NERSP large-lot Parcel 8, where a multi-use development plan was approved in 1995. The approval included a General Plan Amendment, Specific Plan Amendment, Rezone, and Development Agreement to change the land uses and add the Parcel 8 Design Guidelines to the Specific Plan. The Design Guidelines address site development, appropriate land uses, landscaping, architectural design, siting, and a variety of other design components. Deviations from the Design Guidelines may be approved via the Design Review entitlement process.

As shown in Figure 2, Parcel 8 includes all of the land on the eastern side of Eureka Road from Rocky Ridge Road to Lead Hill Boulevard. The project site, shown with hatchmarks in Figure 2, is the only undeveloped portion of Parcel 8.

An Environmental Impact Report was certified with the NERSP (State Clearinghouse Number 86042805), which examined the impacts of Specific Plan buildout. This addressed the major cumulative impacts of developing the Specific Plan as a whole, including the subject property, which has a land use designation of CC/BP (Community Commercial/Business Professional) and a zoning designation of CC-SA/NE (Community Commercial – Special Area/Northeast Roseville Specific Plan). A Negative Declaration was adopted with the Parcel 8 project (State Clearinghouse Number 95102020). The Initial Study which led to the Negative Declaration for Parcel 8 included a traffic impact study to address

Figure 2: NERSP Parcel 8 and the Project Site



impacts related to the changes in land use, as well as site-specific impacts related to air quality, biological resources, and other resources.

Environmental Setting

The project site is undeveloped, but is surrounded on all sides by urban development. The site supports non-native annual grasses and generally slopes upward from Rocky Ridge Drive and Eureka Road toward the rear of the property. Aerial photography and site visits show evidence of the site being used for illegal off-roading, particularly during the wintertime, as drivers have easy access to the site from the surrounding developed properties. This has left some bare and disturbed areas. A stormwater pipe from the upslope property where the theater is located has an outlet onto the subject property, where the stormwater then extends through a constructed stormwater swale. The beginning of the swale is more than 10 feet deep and steeply sloped. After approximately 100 feet, the swale curves west and rapidly becomes shallower and much wider, until it is no longer a channel and the water leaves the swale as overland sheet flow. The property owner maintains this swale to prevent the growth of vegetation which would block the flow of water. On both site visits, there was junk (wire bins, cardboard, etc) in the deeper portion of the stormwater channel.

Sacramento Municipal Utility District (SMUD) transmission lines cross the northeastern side of the property, connecting to a SMUD substation located across Rocky Ridge Drive on the northeastern corner of Rocky Ridge Drive and Eureka Road. Surrounding development adjacent to the site includes a fuel station on the southeastern corner of Rocky Ridge Drive and Eureka Road, a walled and gated parking lot and then apartments to the northeast, and commercial development to the south (e.g. California Backyard and Century Theaters). The site has frontage on both Rocky Ridge Drive and Eureka Road, a four- and six-lane road, respectively.

Proposed Project

The applicant proposes to construct an approximately 75,000-square-foot, 3-story medical office building on a 5.7-acre infill property, which requires a Design Review Permit. The property is L-shaped with frontage on both Eureka Road and Rocky Ridge Drive, and wraps around the development on the corner of those two roadways. In addition to the buildings, the applicant proposes to build frontage improvements, 453 parking spaces, and landscaping on the site. The site includes two parcels, and the applicant proposes a Lot Line Adjustment so that the line will not cross the proposed building. An Administrative Permit is also requested, in order to allow a parking reduction. The Zoning Ordinance standard for general medical offices is one space per 150 square feet of gross building area, which results in a parking requirement of 500 spaces for this site. The applicant has provided justification for a lower parking standard, based on the fact that the Zoning Ordinance standard was developed for high-turnover medical offices (e.g. pediatrician or general practitioner), but the proposed project includes a variety of much less intense medical uses and spaces (e.g. conference spaces and laboratories).

CITY OF ROSEVILLE MITIGATION ORDINANCES, GUIDELINES, AND STANDARDS

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

to development projects. The City's Mitigating Policies and Standards are referenced, where applicable, in the Initial Study Checklist:

- City of Roseville 2035 General Plan
- City of Roseville Zoning Ordinance (RMC Title 19)
- City of Roseville Improvement Standards (Resolution 02-37)
- City of Roseville Construction Standards (Resolution 01-208)
- Subdivision Ordinance (RMC Title 18)
- Noise Regulation (RMC Ch.9.24)
- Flood Damage Prevention Ordinance (RMC Ch.9.80)
- Drainage Fees (Dry Creek [RMC Ch.4.49] and Pleasant Grove Creek [RMC Ch.4.48])
- West Placer Stormwater Quality Design Manual (Resolution 16-152)
- Urban Stormwater Quality Management and Discharge Control Ordinance (RMC Ch. 14.20)
- Traffic Mitigation Fee (RMC Ch.4.44)
- Highway 65 Joint Powers Authority Improvement Fee (Resolution 2008-02)
- South Placer Regional Transportation Authority Transportation and Air Quality Mitigation Fee (Resolution 09-05)
- Tree Preservation Ordinance (RMC Ch.19.66)
- Community Design Guidelines (Resolution 95-347)
- Specific Plan Design Guidelines:
 - Northeast Roseville Specific Plan (Olympus Pointe) Signage Guidelines (Resolution 89-42)

OTHER ENVIRONMENTAL DOCUMENTS RELIED UPON

- Amoruso Ranch Specific Plan Final Environmental Impact Report
- NERSP Parcel 8 and Century Theaters Roseville Negative Declaration and Initial Study

Pursuant to CEQA Guidelines Section 15183, any project which is consistent with the development densities established by zoning, a Community Plan, or a General Plan for which an EIR was certified shall not require additional environmental review, except as may be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. The Amoruso Ranch Specific Plan EIR updated the City's General Plan to 2035, and updated Citywide analyses of traffic, water supply, water treatment, wastewater treatment, and waste disposal. The NERSP Parcel 8 and Century Theaters Roseville Negative Declaration and Initial Study (Parcel 8 ND/IS) examined the site-specific impacts of development of the subject property and surrounding properties. This included a wetland delineation and mitigation for losses of wetland habitat, a traffic study, an air quality analysis, and an analysis of public service demands.

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 an undeveloped L-shaped property that is crossed by large electrical transmission lines and is surrounded by urban development. The primary viewer groups of the site are drivers on Rocky Ridge Drive and Eureka Road and workers within the upper floors of nearby multi-story office buildings. The rear of surrounding developments face the site, which means that the viewer groups see the grassy project site backed by large, unembellished walls and parking lots.

Would the project:

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

Thresholds of Significance and Regulatory Setting:

The significance of an environmental impact cannot always be determined through the use of a specific, quantifiable threshold. CEQA Guidelines Section 15064(b) affirms this by the statement “an ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting.” This is particularly true of aesthetic impacts. As an example, a proposed parking lot in a dense urban center would have markedly different visual effects than a parking lot in an open space area. For the purpose of this study, the significance thresholds are as stated in CEQA Guidelines Appendix G, as shown in a–d of the checklist below. The Findings of the Implementing Procedures indicate that compliance with the Zoning Ordinance (e.g. building height, setbacks, etc), Subdivision Ordinance (RMC Ch. 18), Community Design Guidelines (Resolution 95-347), and applicable Specific Plan Policies and/or Specific Plan Design Guidelines will prevent significant impacts in urban settings as it relates to items a, b, and c, below.

Discussion of Checklist Answers:

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

c) The project site is in an urban setting with many existing visual encroachments, and as a result lacks any prominent or high-quality natural features which could be negatively impacted by development. Most viewers either have impeded views of the site, due to buildings being in the way of direct views, or transitory views as they pass by on the surrounding roadways. 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. City design standards limit the height of light standards and require cut-off lenses and glare shields to minimize light and glare impacts; fixtures are not permitted to be directed in a manner that directs light off the site. 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 (2014), the majority of the City of Roseville is designated as Urban and Built Up Land and most of the open space areas of the City are designated as Grazing Land. There are a few areas designated as Farmland of Local Importance and two small areas designated as Unique Farmland located on the western side of the City along Baseline Road. The current Williamson Act Contract map (2013/2014) produced by the Department of Conservation shows that there are no Williamson Act contracts within the City, and only one (on PFE Road) that is adjacent to the City. None of the land within the City is considered forest land by the Board of Forestry and Fire Protection.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X

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

Thresholds of Significance and Regulatory Setting:

In responding to checklist items a, b, and d, project-related air emissions would have a significant effect if they would result in concentrations that either violate an ambient air quality standard or contribute to an existing air quality violation. To assist in making this determination, the PCAPCD adopted thresholds of significance, which were developed by considering both the health-based ambient air quality standards and the attainment strategies outlined in the State Implementation Plan. The PCAPCD-recommended significance threshold for reactive organic gases (ROG), 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. PCAPCD has a recommended screening methodology for carbon monoxide (CO) hot spots, which indicates further analysis is required if a project causes a signalized intersection to degrade from an acceptable to an unacceptable level of service, or if delay is increased by 10 seconds or more at an intersection already operating unacceptably.

Toxic Air Contaminants (TAC) are also of public health concern, but no thresholds or standards are provided because they are considered to have no safe level of exposure. Analysis of TAC is based on the *Air Quality and Land Use Handbook – A Community Health Perspective* (April 2005, California Air Resources Board), which lists TAC sources and recommended buffer distances from sensitive uses. For checklist item c, the PCAPCD's *CEQA Air Quality Handbook (Handbook)* recommends that the same thresholds used for the project analysis be used for the cumulative impact analysis.

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

Discussion of Checklist Answers:

a–b) Analyses are not included for sulfur dioxide, lead, and other constituents because there are no mass emission thresholds; these are concentration-based limits in the Federal and State Ambient Air Quality Standards which require substantial, point-source emissions (e.g. refineries, concrete plants, etc) before exceedance will occur, and the SVAB is in attainment for these constituents. 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.

Raney Planning and Management, Inc. prepared an air quality analysis (Attachment 1) for the proposed project. The proposed project's short-term construction-related and long-term operational emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.1, as recommended by the PCAPCD. Construction was assumed to begin in summer 2017 with a duration of approximately one year. In terms of operations, an average daily trip rate of 31.44 was assumed based on a project-specific information provided by KD Anderson & Associates, Inc. (a transportation engineering and analysis company), and the building was assumed to comply with the 2016 California Building Energy Efficiency Standards Code.

Construction emissions are generated from a variety of sources, including dust from grading and materials movement, construction exhaust, construction working commutes, and construction material hauling. Operational emissions are generated by the proposed project from area, energy, and mobile sources. Area sources include architectural coating (e.g. paint) vapors, landscape maintenance equipment, and the use of consumer products (e.g. cleaning products). Energy sources include electricity and natural gas consumption. Mobile emissions result from the future employee and patron vehicle trips. The project will also include a back-up emergency generator, which would contribute emissions of NO_x, CO, and PM₁₀ when in use. Although the generator would only be used during emergency power losses and intermittently for testing and maintenance, for the purposes of modeling the generator was assumed to operate during operation of the complete building.

CalEEMod results are provided below in Table 1. As shown, the proposed project's maximum unmitigated construction-related and operation-related emissions would be below the applicable thresholds of significance.

Table 1: CalEEMod Results

Pollutant	Project Emissions (lbs/day)	Significance Threshold (lbs/day)	Exceeds Threshold?
Maximum Construction Emissions			
ROG	6.49	82	NO
NO _x	52.35	82	NO
PM ₁₀	21.09	82	NO
Maximum Operational Emissions			
ROG	16.80	55	NO
NO _x	24.13	55	NO
PM ₁₀	8.42	82	NO

The proposed project's construction and operational emissions would not exceed the applicable threshold of significance. In addition, the project must comply with all applicable PCAPCD rules and regulations. Therefore, the project would not substantially contribute to the region's nonattainment status for ozone or particulate matter, and implementation of the project will not violate an air quality standard or contribute to an existing or projected air quality violation. In addition, because the proposed project would not produce substantial emissions of criteria air pollutants, adjacent residents or businesses would not be exposed to significant levels of pollutant concentrations during construction or operation. Therefore, implementation of the proposed project would result in less than significant impacts.

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

d) As described in section a–b, the project will not result in any new significant impacts related to criteria pollutants.

With regard to carbon monoxide (CO), the SVAB is in attainment for this constituent, and it requires high localized concentrations (called carbon monoxide “hot spots”) before the ambient air quality standard would be exceeded. “Hot spots” are typically associated with heavy traffic congestion occurring at high-volume roadway intersections. The Amoruso Ranch EIR analysis of Citywide traffic indicated that 198 out of 226 signalized intersections would operate at level of service C or better—that is, they will not experience heavy traffic congestion. It further indicated that analyses of CO concentrations at the most congested intersections in Roseville show that CO levels are well below federal and state ambient air quality standards. In addition, Kimley Horn completed a Traffic Evaluation for the proposed project. The main intersection studied is Eureka Road and Rocky Ridge Drive. The cumulative analysis of this intersection showed that the intersection delay (currently at level of service E, which is unacceptable) would worsen by 2.5 seconds during the pm peak hour. This small increase in delay is far less than the 10 second screening threshold. Therefore, no further CO analysis is required, and 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*. The only TAC-generating source on the site will be the emergency generator. The generator will require a permit from the PCAPCD, pursuant to which the generator would be regulated and monitored. Furthermore, the generator is for emergency operations in order to provide continuous power during power outages, which is required for medical buildings by the California Building Code. As such, the generator would not be used regularly and, per the permit, would be limited to a maximum operation time for maintenance and testing of 40 hours per year. Therefore, the emergency generator would not be associated with, or expose sensitive receptors to, any substantial pollutant concentrations. TAC impacts are less than significant.

e) Diesel fumes from construction equipment and delivery trucks are often found to be objectionable odors; however, construction is temporary and diesel emissions are minimal and regulated. Typical urban projects such as this proposed medical office building 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 primarily supports non-native grasses, intermixed with common annuals such as stork's bill geranium (*Erodium cicutarium*). As described in the Environmental Setting, a stormwater pipe from the upslope property to the south has an outlet onto the subject property, where the stormwater then extends through a constructed stormwater swale. This swale is maintained by the property owner, to ensure that water flows freely through the swale and then spreads overland in the center of the site. There are no trees on the site. During the site visit, staff observed soil disturbance from off-roading vehicles, as well as trash in various locations on the site (including in the swale) due to illegal dumping. City staff also observed English sparrows (*Passer domesticus*) and a western fence lizard (*Sceloporus occidentalis*) on the site. The project site is an isolated undeveloped property surrounded by urban development, including a four-lane roadway to the north, a six-lane roadway to the west, and a masonry wall on the eastern property line.

Would the project:

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

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

Thresholds of Significance and Regulatory Setting:

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

The Clean Water Act protects all “navigable waters”, which are defined as traditional navigable waters that are or were used for commerce, or may be used for interstate commerce; tributaries of covered waters; and wetlands adjacent to covered waters, including tributaries. Non-navigable waters are called isolated wetlands, and are not subject to either the Federal or State Clean Water Act. Thus, isolated wetlands are not subject to federal wetland protection regulations. However, in addition to the Clean Water Act, the State also has jurisdiction over impacts to surface waters through the Porter-Cologne Water Quality Control Act (Porter-Cologne), which 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. Human-induced wetlands—that is, wetlands that were created by human activities and would cease to exist if those human activities stopped—are not regulated.

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

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

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

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

Discussion of Checklist Answers:

a) The Parcel 8 ND/IS indicates the loss of grassland habitat in the NERSP was already examined and found to be cumulatively considerable as part of the Specific Plan EIR. There are no new or more severe impacts

which would occur as a result of this project. The project site is undeveloped grasslands which is isolated from other habitat and is only approximately 6 acres in size. At this time, there are large roadways on two sides of this property and a masonry wall on a third side, which present a substantial existing barrier to movement. While the property could provide refuge for common, small burrowing mammals or reptile species (such as the observed Western fence lizard) found in urban environments, it is too small and isolated to provide habitat for larger animals or predators. Birds of prey could forage incidentally on the site, but again, the site is too isolated and small to provide any substantial or vital habitat. There are no trees on the site for nesting. The project will not cause any substantial adverse impacts to a special status species.

b) There were no sensitive natural communities observed on the site, and thus the project will have no impact with regard to this criterion.

c) No potential wetlands were observed on the site, nor has the site been known historically to support wetlands. A wetland delineation was prepared for the Parcel 8 ND/IS, which found an intermittent drainage and two vernal pools elsewhere within Parcel 8, but due to the steeper slopes and rocky soils on the subject property, no wetlands were evident. While there is a stormwater swale on the site currently, this was a constructed feature, and only holds water due to the stormwater pipe which daylights at the upslope portion of this swale. The swale was constructed as an interim feature until the project site develops, at which time the underground stormwater pipe system would be completed and linked to the existing underground lines in the fuel station property to the south; there is an existing utility easement on the property for this purpose (the swale lies within the easement). The swale is a human-created and human-induced feature which was designed to hold and slow water for short periods; it is not a wetland. As the site does not contain wetlands, there is 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 and Tribal Cultural Resources

As described within the Open Space and Conservation Element of the City of Roseville General Plan, the Roseville region was within the territory of the Nisenan (also Southern Maidu or Valley Maidu). Two large permanent Nisenan habitation sites have been identified and protected within the City's open space (in Maidu Park). Numerous smaller cultural resources, such as midden deposits and bedrock mortars, have also been recorded in the City. 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. As indicated in the Parcel 8 ND/IS, an archeological survey was conducted in 1986 by D.L. True and Far Western Anthropological Research Group, Inc for the NERSP. No archeological sites or properties eligible for listing in the National Register of Historic Places were found on the project site. Also, pursuant to Assembly Bill 52 the current project was routed to all tribes which requested such notice. No responses were received regarding the presence of Tribal Cultural Resources.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of an historic resource as defined in Section 15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?			X	
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	
d) Disturb any human remains, including those interred outside of formal cemeteries?			X	
e) Cause a substantial adverse change in the significance of a Tribal Cultural Resource as defined in Public Resources Code Section 21074?			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 contains specific sections, other than the checklist items, related to the treatment of effects on historic and archeological 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.

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

Discussion of Checklist Answers:

a–b and d) No cultural resources are known to exist on the project site per the NERSP 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. This mitigation need not be applied herein, as it is already applicable and required of the project pursuant to the NERSP. The project will not result in any new impacts beyond those already discussed and disclosed in the NERSP EIR; project-specific impacts are less than significant.

c) No paleontological resources are known to exist on the project site per the NERSP 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. This mitigation need not be applied herein, as it is already applicable and required of the project pursuant to the NERSP. The project will not result in any new impacts beyond those already discussed and disclosed in the NERSP EIR; project-specific impacts are less than significant.

e) Notice of the proposed project was mailed to tribes which had requested such notice pursuant to AB 52. A request for consultation was not received, and consistent with items a–b and d above, no resources are known to exist on the project site. 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. This mitigation need not be applied herein, as it is already applicable and required of the project pursuant to the NERSP. The project will not result in any new impacts beyond those already discussed and disclosed in the NERSP EIR; project-specific impacts are less than significant.

VI. Geology and Soils

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

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:			X	
i) Ruptures of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located in a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X

Thresholds of Significance and Regulatory Setting:

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

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

Discussion of Checklist Answers:

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

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

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

Improvement Plans are reviewed for compliance with the City's Improvement Standards, including the provision of proper drainage, appropriate dust control, and erosion control measures. Grading and erosion control measures will be incorporated into the required grading plans and improvement plans. Therefore, the impacts associated with disruption, displacement, and compaction of soils associated with the project are less than significant.

c, d) A review of the Natural Resources Conservation Service Soil Survey for Placer County, accessed via the Web Soil Survey (<http://websoilsurvey.nrcs.usda.gov/app/>), indicates that the soils on the site are Inks-Exchequer complex, 2 to 25 percent slopes, which are not listed as geologically unstable or sensitive and have a low shrink-swell (expansion) potential.

VII. Greenhouse Gases

Greenhouse gases trap heat in the earth's atmosphere. The principal greenhouse gases (GHGs) that enter the atmosphere because of human activities are carbon dioxide (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. The current Scoping Plan (adopted May 2014) indicates that statewide emissions of GHG in 1990 amounted to 431 million metric tons, and that the 2020 "Business As Usual" (BAU) scenario is estimated as 509³ million metric tons, which would require a reduction of 15.3% from 2020 BAU. In addition to this, Senate Bill 32 was signed by the Governor on September 8, 2016, to establish a reduction target

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

³ Includes Pavely and Renewables Portfolio Standard reduction

of 40 percent below 1990 levels by 2030. The Air Resources Board is currently updating the Scoping Plan to reflect this target.

The Placer County Air Pollution Control District (PCAPCD) recommends that thresholds of significance for GHG be related to AB 32 reduction goals, and has adopted thresholds of significance which take into account the 2030 reduction target. The thresholds include a de minimis and a bright-line maximum threshold. Any project emitting less than 1,100 metric tons of carbon dioxide equivalents per year (MT CO₂e/yr) during construction or operation results in less than significant impacts. The PCAPCD considers any project with emissions greater than the bright-line cap of 10,000 MT CO₂e/yr to have significant impacts. For projects exceeding the de minimum threshold but below the bright-line threshold, comparison to the appropriate efficiency threshold is recommended. The significance thresholds are shown in Table 2, below.

Table 2: GHG Significance Thresholds

Bright-line Threshold 10,000 MT CO₂e/yr			
Residential Efficiency (MT CO₂e/capita¹)		Non-Residential Efficiency (MT CO₂e/ksf²)	
Urban	Rural	Urban	Rural
4.5	5.5	26.5	27.3
De Minimis Threshold 1,100 MT CO₂e/yr			
1. Per Capita = per person 2. Per ksf = per 1,000 square feet of building			

Discussion of Checklist Answers:

a–b) CalEEMod (version 2016.3.1) was used to model the proposed project's construction-related and operations-related emissions of GHG emissions. Construction-related GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to climate change. Climate change is a cumulative effect that occurs over time, and emissions increase on a year-to-year basis due to increases in developed area and other factors. However, the proposed project's construction-related GHG has been estimated and compared to the PCAPCD thresholds. The project will result in a total of 850.63 MT CO₂e over a period of two years. During the year with the most activity, construction emissions will be 520.82 MT CO₂e, which is below the de minimis threshold of 1,100 MT CO₂e/yr. The project will not contribute significant construction-related emissions of GHG.

Table 3 displays the analysis results for the operational project. As shown, mobile emissions from vehicles are the greatest contributor of emissions for the project. The total operational emissions exceed the de minimis threshold of 1,100 MT CO₂e but are below the maximum bright-line threshold of 10,000 MT CO₂e, and therefore the efficiency thresholds apply. The PCAPCD efficiency thresholds rely on GHG emissions expressed in MT CO₂e per 1,000 square feet of non-residential building area. As such, the project's estimated annual emissions of 1,979.10 MT CO₂e must be divided by the floor area of the medical office building. The proposed project is approximately 75,000 square feet, or 75 thousand square feet (ksf). Thus, the proposed project will emit 26.4 MT CO₂e/ksf annually, which is below the significance threshold of 26.5 MT CO₂e/ksf annually. Therefore, the proposed project would not result in significant operational emissions of GHG. The project-generated GHG emissions would not conflict with, and are consistent with, the State goals listed in AB32 and other policies and regulations adopted by the California Air Resources Board. This impact is considered less than significant.

Table 3: Operational GHG Emissions

Emission Source	Annual GHG (MT CO ₂ e)
Area	0.01
Energy Usage	320.27
Mobile	1,223.37
Emergency Generator	2.57
Solid Waste	407.35
Water	25.52
TOTAL	1,979.10

VIII. Hazards and Hazardous Materials

There are no hazardous cleanup sites of record within 1,000 feet of the site according to either the Department of Toxic Substances Control Envirostor database (<http://www.envirostor.dtsc.ca.gov/public/>) or the State Water Resources Control Board Geotracker database (<http://geotracker.waterboards.ca.gov/>). The nearest properties where hazardous materials are stored or handled includes the Kaiser Roseville medical campus to the southwest and the underground fuel storage tank at the gas station adjacent to the project. The project site is undeveloped, and no previous environmental review of the site has found evidence of contamination or hazardous conditions. The nearest school to the project site is Maidu Elementary school, located approximately 0.8 miles south of the site.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through 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 on-quarter mile of an existing or proposed school?				X

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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 for people residing or working in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to hazardous materials is based directly on the CEQA Guidelines checklist items a–h listed above. A material is defined as hazardous if it appears on a list of hazardous materials prepared by a federal, state or local regulatory agency, or if it has characteristics defined as hazardous by such an agency. The determination of significance based on the above criteria depends on the probable frequency and severity of consequences to people who might be exposed to the health hazard, and the degree to which Project design or existing regulations would reduce the frequency of or severity of exposure. As an example, products commonly used for household cleaning are classified as hazardous when transported in large quantities, but one

would not conclude that the presence of small quantities of household cleaners at a home would pose a risk to a school located within ¼-mile.

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

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

Discussion of Checklist Answers:

a, b) Standard construction activities would require the use of hazardous materials such as fuels, oils, lubricants, glues, paints and paint thinners, soaps, bleach, and solvents. These are common household and commercial materials routinely used by both businesses and average members of the public. The materials only pose a hazard if they are improperly used, stored, or transported either through upset conditions (e.g. a vehicle accident) or mishandling. In addition to construction use, the operational project would result in the use of common hazardous materials such as bleach, solvents, and herbicides, as well as the use of hazardous materials common to medical uses. Hazardous waste commonly found in medical facilities could include radioactive materials; biohazardous materials; pharmaceuticals; chemicals used for equipment sterilization; formaldehyde; and solvents, oxidizers, corrosives, and stains used in clinical laboratories. Hazardous waste present during project operation could potentially include hazardous chemical waste, radioactive waste, biohazardous waste and medical sharps (i.e., needles or blades). Chapter 9.60 of the City's Municipal Code requires disclosure of the use and storage of hazardous materials in existing and proposed commercial activities in accordance with Placer County guidelines and state law. According to the General Plan the project would be required to submit a Hazardous Materials Management Plan, which would detail site specific chemical inventories, emergency contact information, as well as vicinity and facility maps if the project would store 55 gallons, 500 pounds or 200 cubic feet of gas (City of Roseville General Plan page VIII-40).

Since the project would generate hazardous waste there is a potential for the accidental release of hazardous materials into the environment if they are not properly handled and disposed. Hazardous waste would be properly contained and disposed of according to standard hazardous materials regulations set forth by the EPA and Cal EPA, DTSC, California Department of Public Health (CDPH), the California Building Code (CBC) and the California Fire Code (CFC). There are no designated routes for the transportation of hazardous materials in the City, but most transport of these materials would use designated truck routes which are designed to divert traffic away from residential areas. 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, storage, or transport of hazardous materials are reduced to less than significant levels.

c) The project is not within ¼-mile of a school, and thus there is no impact with regard to this criterion.

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 65962.5⁴; therefore, no impact will occur.

g) The City has adopted the 2011 *Multi-Hazard Mitigation Plan* as the local hazard mitigation plan for natural disasters. Additionally, the Roseville Fire Department (RFD) has developed a *Hazardous Materials Response Plan*, which identifies participants, responsibilities, and operational duties in the event of a hazardous material emergency, including clean-up and contamination procedures. 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 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.

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

IX. Hydrology and Water Quality

As described in the Open Space and Conservation Element of the City of Roseville General Plan, the City is located within the Pleasant Grove Creek Basin and the Dry Creek Basin. Pleasant Grove Creek and its tributaries drain most of the western and central areas of the City and Dry Creek and its tributaries drain the remainder of the City. Most major stream areas in the City are located within designated open space.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?			X	

⁴ <http://www.calepa.ca.gov/SiteCleanup/CorteseList/SectionA.htm>

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

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

Thresholds of Significance and Regulatory Setting:

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

Discussion of Checklist Answers:

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

Regional Water Quality Control Board which requires the City to reduce pollutants in stormwater to the maximum extent practicable. The City does this, in part, by means of the City's 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 Design/Construction Standards, Urban Stormwater Quality Management and Discharge Control Ordinance, and Stormwater Quality Design Manual. For these reasons, impacts related to water quality are less than significant.

b) The project does not involve the installation of groundwater wells. The City maintains wells to supplement surface water supplies during multiple dry years, but the effect of groundwater extraction on the aquifer was addressed in the Water Supply Assessment of the Amoruso Ranch Specific Plan EIR, which included a Citywide water analysis. The proposed project is consistent with the General Plan land use designation, and is thus consistent with the citywide Water Supply Assessment. Project impacts related to groundwater extraction are less than significant.

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

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

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

X. Land Use and Planning

The project site has a land use designation of CC/BP (Community Commercial/Business Professional) and a zoning designation of CC-SA/NE (Community Commercial – Special Area/Northeast Roseville Specific Plan). Adjacent properties also have commercial and business professional land use and zoning designations, as described in the Background section of this Initial Study. These properties are developed with a variety of uses, including a movie theater, restaurants, a gas station, and a medical office. Although most of the surrounding uses are non-residential, there is an apartment complex approximately 200 feet to the east of the project site.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?				X

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

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to land use is based directly on the CEQA Guidelines checklist items a–c listed above. Consistency with applicable City General Plan policies, Improvement Standards, and design standards is already required and part of the City's processing of permits and plans, so these requirements do not appear as mitigation measures. Land use regulations applicable to the site include the City's General Plan 2035, the Zoning Ordinance, and the NERSP. The NERSP contains general design guidelines and policies for development within the NERSP as a whole, but also contains the Parcel 8 Design Guidelines which apply to this site.

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 has been designed to complete points of connection between this undeveloped site and the surrounding properties. The project will not physically divide an established community.

b) Medical services are an allowed use in the CC/BP land use designation and the CC-SA/NE zoning designation. The Parcel 8 Design Guidelines also list medical services as an allowed use. The project would be required to comply with the City's Improvement Standards and Construction Standards and Community Design Guidelines in order to receive a grading and building permit. Compliance with these standards and consistency with the underlying land use designations would ensure that impacts related to conflict with applicable land use plans is less than significant.

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

XI. Mineral Resources

The Surface Mining and Reclamation Act (SMARA) of 1975 requires the State Geologist to classify land into Mineral Resource Zones (MRZ's) based on the known or inferred mineral resource potential of that land. The California Division of Mines and Geology (CDMG) was historically responsible for the classification and

designation of areas containing—or potentially containing—significant mineral resources, though that responsibility now lies with the California Geological Survey (CGS). CDMG published Open File Report 95-10, which provides the mineral classification map for Placer County. A detailed evaluation of mineral resources has not been conducted within the City limits, but MRZ's have been identified. There are four broad MRZ categories (MRZ-1 through MRZ-4), and only MRZ-2 represents an area of known significant mineral resources. According to the USGS mapping program for mineral resources (available at <http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc>), there is only one small MRZ-2 designation area, located at the far eastern edge of the City.

Would the project:

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

Thresholds of Significance and Regulatory Setting:

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

Discussion of Checklist Answers:

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

XII. Noise

The primary noise sources in the vicinity include the two roadways adjacent to the property, Eureka Road and Rocky Ridge Drive, and the lube and smog vehicle maintenance bays at the gas station adjacent to the site. According to the General Plan, the project site is within the 60 L_{dn} noise contour for existing roadways and the 65 L_{dn} noise contour for future roadways (City of Roseville 2015, Figure IX-1 and Figure IX-2). Other uses near the site include parking lots, offices, and restaurants, which tend to generate very low outdoor noise volumes. The nearest sensitive user group to the site is the apartment complex approximately 200 feet to the east of the project boundary.

Would the project result in:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Exposer of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Exposure of persons to or generation of excessive ground borne vibration of ground borne noise levels?			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

Thresholds of Significance and Regulatory Setting:

Standards for transportation noise and non-transportation noise affecting existing or proposed land uses are established within the City of Roseville General Plan Noise Element Table IX-1 and IX-3, and these standards are used as the thresholds to determine the significance of impacts related to items a and c. The General Plan established noise level for office buildings is 60 L_{dn} for outdoor activity areas and 45 L_{eq} for interior spaces. The significance of other noise impacts is based directly on the CEQA Guidelines checklist items b, and d–f listed above. The Findings of the Implementing Procedures indicate that compliance with the City Noise Regulation

(RMC Ch. 9.24) will prevent significant non-transportation noise as it relates to items a, b, and c. The Ordinance establishes noise exposure standards that protect noise-sensitive receptors from a variety of noise sources, including non-transportation/fixed noise, amplified sound, industrial noise, and events on public property. The project is not within an airport land use plan, within two miles of a public or public use airport and there are also no private airstrips in the vicinity of the project area. Therefore, items e and f have been ruled out from further analysis.

Discussion of Checklist Answers:

a) As noted, the project site will be exposed to exterior noise volumes of 65 decibels (dB) in the cumulative condition. The proposed office complex does not have any outdoor activity areas (e.g. break areas, customer patios, etc), and thus the outdoor noise standard does not apply. Typical construction practices result in an exterior-to-interior noise reduction of approximately 25 dB. With an exterior noise environment of 65 dB, the interior noise environment would be 40 dB. Interior noise levels will be below the General Plan standard, and impacts are less than significant.

c) The project itself is not a noise-generating use, as all activities will be occurring indoors. Cumulative noise conditions on roadways have already been developed as part of the General Plan, which was previously discussed. The project is consistent with the General Plan land use designation, so the trips added by the project have already been assessed as part of the cumulative noise environment. The project will not substantially increase ambient noise conditions existing without the project, and impacts are less than significant.

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

XIII. Population and Housing

The project site is located within the Northeast Roseville Specific Plan and has a land use designation of CC/BP (Community Commercial/Business Professional) and a zoning designation of CC-SA/NE (Community Commercial – Special Area/Northeast Roseville Specific Plan). The City of Roseville General Plan Table II-4 identifies the total number of residential units and population anticipated as a result of buildout of the City, and the Specific Plan likewise includes unit allocations and population projections for the Plan Area. Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, though extension of roads or other infrastructure)?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

Thresholds of Significance and Regulatory Setting:

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

Discussion of Checklist Answers:

a) The CEQA Guidelines identify several ways in which a project could have growth-inducing impacts (Public Resources Code Section 15126.2), either directly or indirectly. Growth-inducement may be the result of fostering economic growth, fostering population growth, providing new housing, or removing barriers to growth. Growth inducement may be detrimental, beneficial, or of no impact or significance under CEQA. An impact is only deemed to occur when it directly or indirectly affects the ability of agencies to provide needed public services, or if it can be shown that the growth will significantly affect the environment in some other way. The project is consistent with the land use designation of the site. The City already has multiple major medical office uses, so the presence or absence of medical offices is not currently a constraint on City growth. Therefore, construction of this medical office will not remove a barrier to growth or induce substantial growth. Therefore, the impact of the project is less than significant.

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

XIV. Public Services

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

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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) 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) Project applicants are 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. This school district is effectively built out, and school sites are already developed. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

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

XV. Recreation

There are no parks or recreation facilities adjacent to the project site. The nearest recreation area is the Miner's Ravine open space and trail, located approximately ¼-mile to the east of the site.

Would the project:

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

Thresholds of Significance and Regulatory Setting:

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

Discussion of Checklist Answers:

a) The EIR for the Specific Plan 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 and Specific Plan, the project would not cause any unforeseen or new impacts related to the use of existing or proposed parks and recreational facilities. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

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

XVI. Transportation/Traffic

The proposed project has frontage on two roadways: Eureka Road, a six-lane roadway, and Rocky Ridge Drive, a four-lane roadway. The project site has one existing shared-access driveway on Eureka Road, currently serving the gas station on the corner of Rocky Ridge Drive and Eureka Road. Another driveway is located on Rocky Ridge Drive on the gas station property, which extends alongside the gas station and stubs at the project boundary. Similarly, there is an internal drive-aisle behind California Backyard to the southeast that stubs at the property boundary. There is an easement in place which connects these two stubs; they were designed to be connected across the project site as part of the Parcel 8 development.

Would the project:

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

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
f) Conflict with adopted policies, plans, or programs supporting public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?			X	

Thresholds of Significance and Regulatory Setting:

The significance of checklist items c–f are based directly on the CEQA Guidelines checklist descriptions. For checklist items a and b, the Circulation Element of the General Plan establishes Level of Service C or better as an acceptable operating condition at all signalized intersections during a.m. and p.m. peak hours. Exceptions to this policy may be made by the City Council, but a minimum of 70% of all signalized intersections should maintain LOS C. The Findings of the Implementing Procedures indicate that compliance with the Traffic Mitigation Fee (RMC Ch. 4.44) will fund roadway projects and improvements necessary to maintain the City's Level of Service standards for projects consistent with the General Plan and related Specific Plan. An existing plus project conditions (short-term) traffic impact study may be required for projects with unique trip generation or distribution characteristics, in areas of local traffic constraints, or to study the proposed project access. A cumulative plus project conditions (long-term) study is required if a project is inconsistent with the General Plan or Specific Plan and would generate more than 50 pm peak-hour trips. The guidelines for traffic study preparation are found in the City of Roseville Design and Construction Standards–Section 4. A circulation and access study was prepared by Kimley-Horn for the project in order to evaluate access designs for the site (see Attachment 2).

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

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

Discussion of Checklist Answers:

a,b) The proposed project is consistent with the land use designations of the General Plan and Specific Plan, and therefore does not contribute more traffic to the roadways system than was anticipated in Citywide analyses. The traffic analysis prepared by Kimley-Horn focused on examining the project access design and the intersection of Eureka Road and Rocky Ridge Drive to determine the amount of storage and/or driveway designs necessary to ensure safe and efficient operations. The study found that the intersection of Rocky Ridge Drive and Eureka Road would operate at LOS C or better, and would have adequate storage length to accommodate the proposed project. The project will not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, nor will it conflict with an applicable congestion management program. Impacts are less than significant.

d,e) The project has been reviewed by the City Engineering and City Fire Department staff, and has been found to be consistent with the City's Design Standards. The study prepared by Kimley-Horn included specific design recommendations for the project access, which have been incorporated into the site design. Furthermore, standard conditions of approval added to all City project require compliance with Fire Codes and other design standards. Compliance with existing regulations ensure that impacts are less than significant.

f) The City of Roseville has adopted a Pedestrian Master Plan, Bicycle Master Plan, and Short-Range Transit Plan. The project was reviewed for consistency with these documents. Except the completion of the sidewalk system on the Eureka Road frontage, none of the master plans identify facilities on the project site. The project design includes installation of the sidewalk on Eureka Road. The project is consistent with the policies of the Pedestrian, Bicycle, and Short-Range Transit Plans. Impacts are less than significant.

XVII. Utilities and Service Systems

There are existing sewer lines within both Eureka Road and Rocky Ridge Drive. An easement extends across the project site from northwest (the gas station) to southeast (behind California Backyard). Underground lines already exist within the easement on either side of the project, but an open stormwater ditch and swale exists on the subject property. As part of the development of Parcel 8, this swale was designed to be interim, until the project site developed and could connect the underground stormwater system through the site. Electrical lines also exist along Eureka Road and Rocky Ridge Drive.

Would the project:

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

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

Thresholds of Significance and Regulatory Setting:

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

Discussion of Checklist Answers:

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

b,c) The project is consistent with the Specific Plan, and will be required to construct any lines necessary to serve the project. The infrastructure needed is minor, consisting only of what is needed to bring utilities from the property lines into the site. 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.

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

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

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

XVIII. Mandatory Findings of Significance

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, threatened or rare species, or eliminate important examples of the major periods of California history or prehistory?			X	
b) Does the project have impacts which are			X	

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

Significance Criteria and Regulatory Setting:

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

Discussion of Checklist Answers:

a–c) Long term environmental goals are not impacted by the proposed project. The cumulative impacts do not deviate beyond what was contemplated in the Specific Plan EIR, and mitigation measures have already been incorporated via the Specific Plan 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 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 WILL NOT have a significant effect on the environment and a **NEGATIVE DECLARATION** has been prepared.

Initial Study Prepared by:



Lauren Hocker, Associate Planner
City of Roseville, Development Services – Planning Division

Exhibits:

- A. Site Plan
- B. Landscape Plan
- C. Elevations
- D. Renderings

Attachments:

1. Air Quality and Greenhouse Gas Impact Analysis, Eureka Road Medical Office Building Project, February 2017
2. Kimley-Horn Eureka Road Medical Office Building Traffic Evaluation, December 16, 2016.

Air Quality and Greenhouse Gas Impact Analysis

Eureka Road Medical Office Building Project

Prepared for:

Pappas Gateway, LP

February 2017

Prepared by:



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Introduction

This Air Quality and Greenhouse Gas Impact Analysis identifies and analyzes the potential environmental impacts from the Eureka Road Medical Office Building Project (proposed project) related to air quality and greenhouse gas (GHG) emissions. The information and analysis in this document is organized in accordance with the checklist in Appendix G of the California Environmental Quality Act (CEQA) Guidelines. If the analysis provided in this document identifies potentially significant environmental effects of the project, mitigation measures that should be applied to the project are prescribed. All modeling results are included as Appendix A of this document.

Project Summary

The proposed project would include the construction of a new medical office building and associated parking lot located near the southeastern corner of the Eureka Road and Rocky Ridge Drive intersection in the City of Roseville, California. The project site consists of a total of 5.7 acres of currently vacant land. The total building square footage would be up to 75,000. A total of 467 parking spaces would be provided, including handicapped, standard, and compact parking. In addition, 24 bike parking spaces would be provided on-site. Access to the site would be provided from Rocky Ridge Drive and Eureka Road. Figure 1 presents the Site Plan for the proposed project. For the purposes of this analysis, operation of the proposed project was assumed to require the use of an emergency diesel generator on-site in order to provide continuous power operation during utility power outages, as required by the California Building Code.

Buildout of the project site would be considered infill development, as existing commercial developments generally surround the project site (see Figure 2, Project Vicinity Map). An existing Chevron gas station is located immediately adjacent to the site at the southeastern corner of the Eureka Road and Rocky Ridge Drive intersection. Existing commercial uses and associated parking areas are located immediately southeast of the project site, including an office building, retail, and a movie theatre. A parking lot associated with Sullivan Automotive Group is located along the northeastern border of the site. Opposite Rocky Ridge Drive and Eureka Road from the site are predominantly additional commercial uses. The nearest residential area to the project site would be the Rosemeade at Olympus Pointe apartment complex located opposite the Sullivan Automotive Group parking lot to the northeast.

Construction of the proposed project has been assumed to commence in June of 2017 and would be fully operational by December of 2018. Construction would not require the import or export of soil, as the site is anticipated to be balanced. The project applicant intends to incorporate a variety of sustainable design features into the proposed project, which would include, but not necessarily be limited to, the following:

- Compliance with the City's Water Efficient Landscape Ordinance and the California Green Building Code requirements regarding water conservation;
- Short- and long-term bicycle parking facilities;
- Designated car/vanpool and Clean Air vehicle parking spaces;

Figure 1
Proposed Project Site Plan

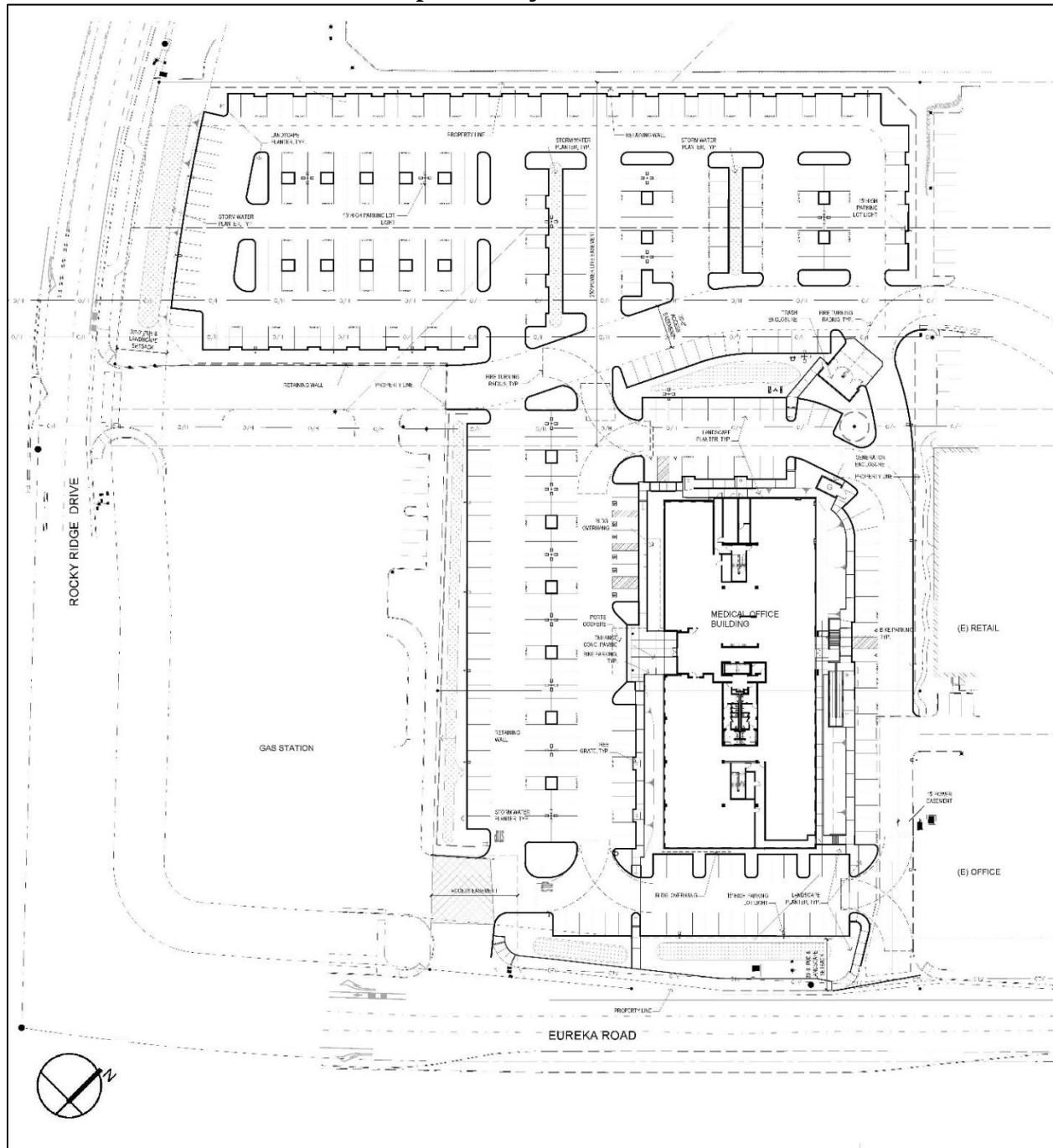


Figure 2
Project Vicinity Map



- Seating area at main entrance of building for dial-a-ride and other ride share services;
- Electric vehicle charging station;
- Pedestrian connectivity from the street and designated path along landscaped areas;
- High efficacy glazing on building;
- Cool roof; and
- Low-flow toilets, urinals, and faucets.

In addition, due to the project location, the following site features are inherent in the proposed project design:

- Within walking distance to public transportation (two existing bus stops are located approximately 0.25 mile from the project site – one near the intersection of North Sunrise Avenue and Eureka Road to the northwest and one at Lead Hill Boulevard and Rocky Ridge Road to the southwest);
- Existing network of pedestrian and bicycle connections in vicinity (bike lanes and sidewalks provided along nearby roadways and access to Miner’s Ravine Trail is located approximately 0.36 mile northeast of the project site);
- Near major transportation routes (i.e., Interstate 80 [I-80] is less than a mile from the site and Highway 65 is less than two miles from the site);
- Near existing residential developments; and
- Near existing commercial uses, including retail and restaurants.

Sources

1. California Air Pollution Control Officers Association. *Quantifying Greenhouse Gas Mitigation Measures*. August 2010.
- 2.
3. California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005.
4. California Air Resources Board. *Ambient Air Quality Standards*. Available at: <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>. May 04, 2016.
5. California Air Resources Board. *First Update to the Climate Change Scoping Plan*. May 15, 2014.
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7. California Department of Transportation. *Transportation Project-Level Carbon Monoxide Protocol*. December 1997.
8. ENVIRON International Corporation and the California Air Districts. *California Emissions Estimator Model User’s Guide Version 2016.3.1*. September 2016.
9. KD Anderson & Associates, Inc. *Eureka Gateway Medical Office Building Project Trip Generation Study*. January 27, 2017.
10. Kimley-Horn. *Traffic Evaluation, Eureka Road Medical Office Buildings (PL16-0169)*. November 2, 2016.
11. Placer County Air Pollution Control District. *CEQA Air Quality Handbook*. October 11, 2012.

12. Placer County Air Pollution Control District. *Placer County Air Pollution Control District Policy. Review of Land Use Projects Under CEQA*. October 13, 2016
13. Sacramento Metropolitan Air Quality Management District. *Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2013 SIP Revisions)*. September 26, 2013.
14. Shijo, Wayne, Project Manager, KD Anderson and Associates, Inc. Personal communication [email] with Rod Stinson, Division Manager/Air Quality Specialist, Raney Planning and Management. February 8, 2017. Appendix B.

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

Discussion

- a,b. The City of Roseville is located within the boundaries of the Sacramento Valley Air Basin (SVAB) and under the jurisdiction of the Placer County Air Pollution Control District (PCAPCD). The federal Clean Air Act (CAA) and the California Clean Air Act (CCAA) require that federal and State ambient air quality standards (AAQS) be established, respectively, for six common air pollutants, known as criteria pollutants. The criteria pollutants include particulate matter (PM), ground-level ozone, carbon monoxide (CO), sulfur oxides, nitrogen oxides (NO_x), and lead. At the federal level, the SVAB area is designated as nonattainment for the 8-hour ozone and the 24-hour particulate matter 2.5 microns in diameter (PM_{2.5}) AAQS, and attainment or unclassified for all other federal criteria pollutant AAQS. At the State level, the SVAB area is designated as nonattainment for the 1-hour ozone, 8-hour ozone, particulate matter 10 microns in diameter (PM₁₀), and PM_{2.5} AAQS, and attainment or unclassified for all other State AAQS.

The CAA requires each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The SIPs are modified periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins, as reported by their jurisdictional agencies. Due to the nonattainment designations, PCAPCD, along with the other air districts in the SVAB region, periodically prepares and updates air quality plans that provide emission reduction strategies to achieve attainment of the NAAQS, including control strategies to reduce air pollutant emissions via regulations, incentive programs, public education, and partnerships with other agencies. The current applicable air quality plan for the proposed project area is the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (Ozone Attainment Plan), adopted by the PCAPCD on February 19, 2009, which was approved on March 26, 2009 as a revision to the SIP. Revisions to the Placer County portion of the SIP or Ozone Attainment Plan were made and adopted on August 11, 2011. The U.S. Environmental

Protection Agency (USEPA) approved an update to the plan, 2013 Revisions to the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2013 Ozone Attainment Plan) on January 9, 2015.

General conformity requirements of the regional air quality plan include whether a project would cause or contribute to new violations of any NAAQS, increase the frequency or severity of an existing violation of any NAAQS, or delay timely attainment of any NAAQS. In order to evaluate ozone and other criteria air pollutant emissions and support attainment goals for those pollutants that the area is designated nonattainment, the PCAPCD recommends significance thresholds for emissions of PM₁₀ and ozone precursors – reactive organic gases (ROG) and oxides of nitrogen (NO_x). On October 13, 2016, the PCAPCD adopted updated significance thresholds for the aforementioned pollutants.

The significance thresholds, expressed in pounds per day (lbs/day), listed in Table 1 are the PCAPCD's recommended thresholds of significance for use in the evaluation of air quality impacts associated with proposed development projects. The City of Roseville, as lead agency, utilizes the PCAPCD's recommended thresholds of significance for CEQA evaluation purposes. Thus, if the proposed project's emissions exceed the pollutant thresholds presented in Table 1, the project could have a significant effect on air quality, the attainment of federal and State AAQS, and could conflict with or obstruct implementation of the applicable air quality plan.

Table 1		
PCAPCD Thresholds of Significance		
Pollutant	Construction Threshold (lbs/day)	Operational Threshold (lbs/day)
ROG	82	55
NO _x	82	55
PM ₁₀	82	82
<i>Source: Placer County Air Pollution Control District. Placer County Air Pollution Control District Policy. Review of Land Use Projects Under CEQA. October 13, 2016.</i>		

Implementation of the proposed project would contribute local emissions in the area during construction and operation of the proposed project. The proposed project's short-term construction-related and long-term operational emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.1 software (CalEEMod) – a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including GHG emissions, from land use projects. The model applies inherent default values for various land uses, including trip generation rates based on the Institute of Transportation Engineers (ITE) Manual, vehicle mix, trip length, average speed, etc. However, where project-specific data is available, such data should be input into the model. As such, the proposed project's modeling assumed the following:

- Construction was assumed to commence in June 2017 and would occur over an approximately one-year period;
- Approximately 5.7 acres would be disturbed during grading of the site;

- An average daily trip rate of 31.44 was assumed, based on trip generation information provided by KD Anderson & Associates, Inc.;
- Operations of the proposed project would involve use of an on-site generator to provide emergency power only; and
- Compliance with the 2016 California Building Energy Efficiency Standards Code.

The proposed project's estimated emissions associated with construction and operations are presented and discussed in further detail below.

Construction Emissions

During construction of the project, various types of equipment and vehicles would temporarily operate on the project site. Construction exhaust emissions would be generated from construction equipment, vegetation clearing and earth movement activities, construction worker commutes, and construction material hauling for the entire construction period. The aforementioned activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants. Project construction activities also represent sources of fugitive dust, which includes PM emissions. As construction of the proposed project would generate air pollutant emissions intermittently within the site, and the vicinity of the site, until all construction has been completed, construction is a potential concern because the proposed project is in a non-attainment area for ozone and PM.

All projects under the jurisdiction of PCAPCD are required to comply with all applicable PCAPCD rules and regulations. Accordingly, the proposed project would be required to comply with all applicable PCAPCD rules and regulations for construction, which would be noted on City-approved construction plans. The applicable rules and regulations for construction would include, but would not be limited to, the following:

- Rule 202 related to visible emissions;
- Rule 217 related to cutback and emulsified asphalt paving materials;
- Rule 218 related to architectural coatings;
- Rule 228 related to fugitive dust;
- Rule 401 related to general permit requirements; and
- Regulation 3 related to open burning.

According to the CalEEMod results, the proposed project would result in maximum construction criteria air pollutant emissions as shown in Table 2. Assumptions used for the modeling are presented above and in Appendix A. CalEEMod inherently accounts for applicable PCAPCD rules, with the exception of Rule 218 related to architectural coatings; accordingly, the modeling was adjusted to reflect that the project would use only low-volatile-organic-compound (VOC) paints per PCAPCD Rule 218.

Table 2 Maximum Unmitigated Construction-Related Emissions			
Pollutant	Project Emissions (lbs/day)	PCAPCD Significance Threshold (lbs/day)	Exceeds Threshold?
ROG	6.49	82.0	NO
NO _x	52.35	82.0	NO
PM ₁₀	21.09	82.0	NO
<i>Source: CalEEMod, February 2017 (see Appendix A).</i>			

As shown in the table, the proposed project's maximum unmitigated construction-related emissions would be below the applicable thresholds of significance. Therefore, construction activities associated with development of the proposed project would not substantially contribute to the PCAPCD's nonattainment status for ozone or PM. Accordingly, construction of the proposed project would not violate any AAQS or contribute to an existing or projected air quality violation or conflict with or obstruct implementation of the applicable air quality plan, and a less-than-significant impact would occur associated with construction.

Operational Emissions

Operational emissions of ROG, NO_x, and PM₁₀ would be generated by the proposed project from area, energy, and mobile sources. Area sources include hearth usage, architectural coating vapors, landscape maintenance equipment exhaust, and use of consumer products (e.g., deodorants, cleaning products, spray paint, etc.). Energy sources include electricity and natural gas consumption. Mobile-source emissions would result from the future employee and patron vehicle trips. When in use, the emergency generator would contribute emissions of NO_x, CO and PM₁₀.

As stated above, the proposed project would be required to comply with all applicable PCAPCD rules and regulations, including the following related to operations:

- Rule 205 related to nuisances; and
- Rule 246 related to water heaters.

According to the CalEEMod results, the proposed project would result in maximum unmitigated operational emissions as shown in Table 3. Assumptions used for the modeling are presented above and in Appendix A. The proposed project would include installation of an emergency generator; however, the emergency generator would only be operated in emergencies and for periodic testing and maintenance. Nevertheless, the worst-case scenario for emissions was considered to occur during full operation of the proposed medical office with simultaneous operation of the emergency generator. Therefore, Table 3 separates the emissions that would result from operation of the proposed project without the generator, operation of the generator alone, and total operational emissions including generator operations. As shown in the table, the proposed project's operational emissions would be below the applicable thresholds of significance.

Table 3 Maximum Unmitigated Operational Emissions (lbs/day)			
	ROG	NO_x	PM₁₀
Proposed Project	13.65	15.32	7.96
Emergency Generator	3.15	8.81	0.46
Total Operational Emissions	16.80	24.13	8.42
PCAPCD Thresholds	55	55	82
Exceed Thresholds?	NO	NO	NO
<i>Source: CalEEMod, February 2017 (see Appendix A).</i>			

In addition, it should be noted that a permit would be required to be obtained by the PCAPCD for operation of the emergency generator, which would ensure that the associated emissions are monitored and regulated. Therefore, the proposed project would not substantially contribute to the PCAPCD's nonattainment status for ozone or PM during operations. Accordingly, operation of the proposed project would not violate any AAQS or contribute to an existing or projected air quality violation or conflict with or obstruct implementation of the applicable air quality plan, and a less-than-significant impact would occur associated with operations.

Conclusion

The proposed project's construction and operational emissions would not exceed the applicable thresholds of significance. In addition, the project would be required to comply with all applicable PCAPCD rules and regulations. Because the project would not exceed the thresholds of significance, the proposed project would not substantially contribute to the region's nonattainment status of ozone or PM. Therefore, implementation of the proposed project would not violate an air quality standard or contribute to an existing or projected air quality violation, and a ***less-than-significant*** impact related to air quality could occur.

- c. A cumulative impact analysis considers a project over time in conjunction with other past, present, and reasonably foreseeable future projects whose impacts might compound those of the project being assessed. Due to the dispersive nature and regional sourcing of air pollutants, air pollution is already largely a cumulative impact. The nonattainment status of regional pollutants, including ozone and PM, is a result of past and present development, and, thus, cumulative impacts related to these pollutants could be considered cumulatively significant.

To improve air quality and attain the health-based standards, reductions in emissions are necessary within nonattainment areas. The project is part of a pattern of urbanization occurring in the greater Sacramento ozone nonattainment area. The growth and combined vehicle usage, and business activity within the nonattainment area from the project, in combination with other past, present, and reasonably foreseeable projects within Roseville and surrounding areas, could either delay attainment of the standards or require the adoption of additional controls on existing and future air pollution sources to offset emission increases. Thus, the project could cumulatively contribute to regional air quality health effects through emissions of criteria and mobile source air pollutants.

The PCAPCD recommends using the region's existing attainment plans as a basis for analysis of cumulative emissions. If a project would interfere with an adopted attainment plan, the project would inhibit the future attainment of AAQS, and thus result in a cumulative impact. As discussed above, the PCAPCD's recommended thresholds of significance for ozone precursors and PM₁₀ are based on attainment plans for the region. Thus, the PCAPCD concluded that if a project's ozone precursor and PM₁₀ emissions would be less than PCAPCD project-level thresholds, the project would not be expected to conflict with any relevant attainment plans, and would not result in a cumulatively considerable contribution to a significant cumulative impact. As a result, the PCACPD established operational phase cumulative-level emissions thresholds identical to the operational thresholds identified above, in Table 1.

As shown in Table 3 above, the proposed project would not result in emissions in exceedance of the applicable thresholds of significance for ozone precursors or PM₁₀. Accordingly, impacts related to the cumulative emissions of criteria pollutants for which PCAPCD is in non-attainment would be considered *less than significant*.

- d. Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, childcare centers, playgrounds, retirement homes, convalescent homes, hospitals, and medical clinics. The proposed project would not involve the creation of new housing; however, the proposed project involves the creation of a new medical office building, which could be considered a sensitive receptor due to the expected presence of persons with existing health problems. The nearest existing sensitive receptors to the site would be the residences associated with the Rosemeade at Olympus Pointe apartment complex located approximately 230 feet northeast of the project site, measured from edge of project site boundaries to nearest apartment building.

The major pollutant concentrations of concern are localized CO emissions and toxic air contaminant (TAC) emissions, which are addressed in further detail below.

Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. Implementation of the proposed project would increase traffic volumes on streets near the project site; therefore, the project would be expected to increase local CO concentrations. High levels of localized CO concentrations are only expected where background levels are high, and traffic volumes and congestion levels are high. The Statewide CO Protocol document identifies signalized intersections operating at Level of Service (LOS) E or F, or projects that would result in the worsening of signalized intersections to LOS E or F, as having the potential to result in localized CO concentrations

in excess of the State or federal AAQS, as a result of large numbers of cars idling at stop lights.¹

Consistent with the State CO Protocol, the PCAPCD recommends further analysis for localized CO concentrations if the project would cause a signalized intersection to be degraded from an acceptable LOS (i.e., LOS A, B, C, or D) to an unacceptable LOS (i.e., LOS E or F), or substantially worsen an already existing unacceptable peak-hour LOS at an intersection, as determined by a traffic study. Substantially worsen is defined by PCAPCD as an increase in delay by 10 seconds or more (or by five percent).

To assess potential traffic impacts that could result from operation of the proposed project, Kimley Horn completed a Traffic Evaluation for the proposed project. The main intersection of concern is the intersection of Eureka Road and Rocky Ridge Drive. Kimley Horn evaluated the intersection under cumulative conditions, which is assumed to represent the worst-case traffic scenario. Per the Traffic Evaluation, the intersection would operate at an unacceptable LOS E under cumulative conditions without the addition of project-related traffic. Traffic related to operation of the proposed project would increase the delay at the intersection of Eureka Road and Rocky Ridge Drive from 57.4 seconds to 59.9 seconds, an increase of 2.5 seconds, during the PM peak hour. The increase in delay of 2.5 seconds would not be considered to substantially worsen the intersection according to the PCAPCD. Thus, the proposed project would not result in the degradation of an intersection operating at an acceptable LOS to an unacceptable LOS, nor would project substantially worsen operations at an intersection already operating at an unacceptable LOS.

Based on the above, the proposed project would not result in substantial concentrations of localized CO at any affected intersection. Therefore, the proposed project would not expose sensitive receptors to substantial pollutant concentrations.

TAC Emissions

Another category of environmental concern is TACs. The CARB's Air Quality and Land Use Handbook: A Community Health Perspective (Handbook) provides recommended setback distances for sensitive land uses from major sources of TACs, including, but not limited to, freeways and high traffic roads, distribution centers, and rail yards. The CARB has identified diesel particulate matter (DPM) from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Health risks from TACs are a function of both the concentration of emissions and the duration of exposure. Health-related risks associated with DPM in particular are primarily associated with long-term exposure and associated risk of contracting cancer.

As part of the *California Building Industry Association v. Bay Area Air Quality Management District* case, the California Supreme Court granted limited review to the

¹ California Department of Transportation. *Transportation Project-Level Carbon Monoxide Protocol*. December 1997.

question: Under what circumstances, if any, does CEQA require an analysis of how existing environmental conditions will impact future residents or users (receptors) of a proposed project? In the opinion published on December 17, 2015, the Supreme Court stated that even in those specific instances where evaluation of a project's potentially significant exacerbating effects on existing environmental hazards is appropriate, the evaluation of how future residents or users could be affected by the exacerbated conditions is still compelled by the project's impact on the environment, and not the environment's impact on the project.²

Considering the recent court rulings, while the proposed project would be considered a sensitive receptor, due to the presence of medical patients, consideration of potential impacts related to existing sources of TACs on future patients at the proposed medical office are outside of the scope of CEQA. However, potential sources of TACs related to operation or construction of the proposed project could have the potential to expose existing sensitive receptors to TACs. As discussed previously, the closest sensitive receptor to the project site are the residents of the Rosemeade at Olympus development, approximately 230 feet northeast of the project site.

The proposed project would involve the operation of a new stationary diesel emergency generator on-site, for which a permit from the PCAPCD would be required to be obtained for operation. Per the permit, the generator would be regulated and monitored to ensure any associated emissions are under specified limitations. In addition, the generator is intended to be used only for emergency situations in order to provide continuous power operation during utility power outages, as required by the California Building Code. As such, the generator would not be used regularly and, per the permit, would be limited to a maximum operation time for maintenance and testing of 40 hours per year. Therefore, the emergency generator would not be associated with, or expose sensitive receptors to, any substantial pollutant concentrations. Thus, the proposed project would not generate any substantial pollutant concentrations during operations.

Construction-related activities could result in the generation of TACs, specifically diesel particulate matter (DPM), from on-road haul trucks and off-road equipment exhaust emissions. However, construction is temporary and occurs over a relatively short duration in comparison to the operational lifetime of the proposed project, particularly so for the proposed project, as the construction activities associated with the proposed project would occur over an approximately one-year period. All construction equipment and operation thereof would be regulated per the State's In-Use Off-Road Diesel Vehicle Regulation. Project construction would also be required to comply with all applicable PCAPCD rules and regulations, particularly associated with permitting of air pollutant sources. In addition, construction equipment would operate intermittently throughout the course of a day, would be restricted to daytime hours per Chapter 9.24 of the City's Municipal Code, and would likely only occur over portions of the project site at a time.

² Alameda County Superior Court. *California Building Industry Association v. Bay Area Air Quality Management District*. A135335 and A136212. Filed August 12, 2016.

According to CARB, DPM is highly dispersive (i.e., concentrations decrease substantially with distance). The nearest existing sensitive receptors to the site are located approximately 230 feet from the border of the project site. Considering the short-term nature of construction activities, the dispersive nature of DPM, and the regulated and intermittent nature of the operation of construction equipment, the likelihood that any one sensitive receptor would be exposed to high concentrations of DPM for any extended period of time would be low. For the aforementioned reasons, project construction would not be expected to expose sensitive receptors to substantial pollutant concentrations.

Conclusion

Based on the above, the proposed project would not expose any sensitive receptors to substantial concentrations of any pollutants. Therefore, impacts related to exposing sensitive receptors to substantial pollutant concentrations would be *less than significant*.

- e. Odors are generally regarded as an annoyance rather than a health hazard. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantitative methodologies to determine the presence of a significant odor impact do not exist. Certain land uses such as wastewater treatment facilities, landfills, confined animal facilities, composting operations, food manufacturing plants, refineries, and chemical plants have the potential to generate considerable odors. The project site is located in a developed area and is not located in the vicinity of any existing or planned such land uses. Medical office uses are not typically associated with the creation of objectionable odors. Thus, the project would not introduce any new sources or be exposed to any existing sources of potential objectionable odors.

Although less common, diesel fumes associated with substantial diesel-fueled equipment and heavy-duty trucks, such as from construction activities or freeway traffic, could be found to be objectionable. However, as addressed above, construction is temporary and construction equipment would operate intermittently throughout the course of a day, would be restricted to certain hours per the City's Municipal Code, and would likely only occur over portions of the improvement area at a time. In addition, all construction equipment and operation thereof would be regulated per the statewide In-Use Off-Road Diesel Vehicle Regulation. Construction equipment would also be required to comply with applicable PCAPCD rules and regulations, particularly associated with permitting of air pollutant sources. The aforementioned regulations would help to minimize air pollutant emissions as well as any associated odors. Considering the short-term nature of construction activities and the regulated and intermittent nature of the operation of construction equipment, construction of the proposed project would not be expected to create objectionable odors affecting a substantial number of people.

PCAPCD Rule 205, Nuisance, addresses the exposure of "nuisance or annoyance" air contaminant discharges, including odors, and provides enforcement of odor control. Rule 205 is complaint-based, where if public complaints are sufficient to cause the odor source to be considered a public nuisance, then the PCAPCD is required to investigate the identified source, as well as determine and ensure a solution for the source of the

complaint, which could include operational modifications to correct the nuisance condition. Thus, although not anticipated, if odor or air quality complaints are made upon development of the proposed project, the PCAPCD would be required (per PCAPCD Rule 205) to ensure that such complaints are addressed and mitigated, as necessary.

For the aforementioned reasons, construction and operation of the proposed project would not create objectionable odors affecting a substantial number of people, and impacts would be *less than significant*.

VII. GREENHOUSE GAS EMISSIONS. <i>Would the project:</i>		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	✗	☐
b.	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?	☐	☐	✗	☐

Discussion

- a,b. Emissions of greenhouse gases (GHGs) contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on earth. An individual project's GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. As such, impacts related to emissions of GHG are inherently considered cumulative impacts.

Recognizing the global scale of climate change, California has enacted several pieces of legislations in an attempt to address GHG emissions. Specifically, Assembly Bill (AB) 32, and more recently Senate Bill (SB) 32, have established statewide GHG emissions reduction targets. Accordingly, the CARB has prepared the Climate Change Scoping Plan for California (Scoping Plan), which was approved in 2008 and updated in 2014. The Scoping Plan provides the outline for actions to reduce California's GHG emissions and achieve the emissions reductions targets required by AB 32. In concert with statewide efforts to reduce GHG emissions, air districts, counties, and local jurisdictions throughout the State have implemented their own policies and plans to achieve emissions reductions in line with the Scoping Plan and emissions reductions targets, including AB 32 and SB 32.

As a means of achieving the regional GHG emissions reductions goals required by AB 32, on October 13, 2016, the PCAPCD adopted GHG emissions thresholds to help the district attain the GHG reduction goals established by AB 32 and SB 32. The common unit of measurement for GHG, used by PCAPCD, is expressed in terms of annual metric tons of CO₂ equivalents (MTCO₂e/yr). The updated thresholds begin with a screening emission level of 1,100 MT CO₂e/yr. Any project below the 1,100 MT CO₂e/yr threshold is judged by the PCAPCD as having a less-than-significant impact on GHG emissions within the District, and thus would not conflict with any state or regional GHG emissions reduction goals. Projects that would result in emissions above the 1,100 MT CO₂e/yr threshold would not necessarily result in substantial impacts, if certain efficiency

thresholds are met. The efficiency thresholds, which are calculated on a per capita or square foot basis, are presented in Table 4.

Table 4			
PCAPCD Operational Thresholds of Significance			
Efficiency Thresholds			
Residential (MT CO₂e/capita)		Non-Residential (MT CO₂e/1,000 sf)	
Urban	Rural	Urban	Rural
4.5	5.5	26.5	27.3
<i>Source: Placer County Air Pollution Control District. Placer County Air Pollution Control District Policy. Review of Land Use Projects Under CEQA. October 13, 2016.</i>			

Projects that fall below the 1,100 MT CO₂e/yr threshold or meet the efficiency thresholds are considered to be in keeping with statewide GHG emissions reduction targets, which would ensure that the proposed project would not inhibit the State's achievement of GHG emissions reductions. Thus, projects with emissions below the 1,100 MT CO₂e/yr threshold or below the efficiency thresholds presented in Table 4, are considered to result in less-than-significant impacts in regards to GHG emissions within the District and thus would not conflict with any state or regional GHG emissions reduction goals. Finally, the PCAPCD has also established a Bright Line Cap, which shall be the maximum limit for any proposed project. The Bright Line Cap is 10,000 MT CO₂e/yr for all types of projects.

Implementation of the proposed project would cumulatively contribute to increases of GHG emissions. Estimated GHG emissions attributable to future development would be primarily associated with increases of carbon dioxide (CO₂) and, to a lesser extent, other GHG pollutants, such as methane (CH₄) and nitrous oxide (N₂O) associated with area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. The primary source of GHG emissions for the project would be mobile source emissions.

Buildout of the proposed project would contribute to increases of GHG emissions that are associated with global climate change during construction and operations. The proposed project's short-term construction-related and long-term operational GHG emissions are presented below.

Short-Term Construction GHG Emissions

Construction-related GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change, as global climate change is inherently a cumulative effect that occurs over a long period of time and is quantified on a yearly basis. However, the proposed project's construction GHG emissions have been estimated and compared to the PCAPCD's operational thresholds of significance for informational purposes. The proposed project's total construction-related GHG emissions are presented in Table 5. The construction modeling assumptions are described in the Air Quality section above and in Appendix A.

Table 5		
Total Unmitigated Project Construction GHG Emissions		
	Construction GHG Emissions (MTCO₂e)	Threshold of Significance (MTCO₂e/yr)
Total Construction-related GHG Emissions	850.63	1,100
<i>Source: CalEEMod, February 2017 (see Appendix A).</i>		

As shown in Table 5 above, the proposed project's total unmitigated construction-related GHG emissions would be below the applicable 1,100 MT CO₂e/yr threshold. It should be noted that construction activity would occur over two years, thus the maximum annual construction emissions related to the proposed project would only be 520.82 MTCO₂e/yr. Accordingly, the proposed project would not be expected to have a significant impact related to GHG emissions during construction.

Long-Term Operational GHG Emissions

The proposed project's estimated operational GHG emissions are presented in Table 6.

Table 6	
Unmitigated Project Operational GHG Emissions	
Emission Source	Annual GHG Emissions (MTCO₂e/yr)
Area	0.01
Energy	320.27
Mobile	1,223.37
Emergency Generator	2.57
Solid Waste	407.35
Water	25.52
TOTAL ANNUAL GHG EMISSIONS	1,979.10
<i>Source: CalEEMod, February 2017 (see Appendix A).</i>	

As shown in the table, the proposed project would result in operational GHG emissions in excess of the 1,100 MTCO₂e threshold. Accordingly, the project must be further reviewed under the efficiency thresholds presented in Table 4. The PCAPCD maintains efficiency thresholds for both urban and rural commercial developments. Because the proposed project is located within the City of Roseville, and is surrounded by existing developments, the project is considered to be located in an urban setting. The efficiency thresholds adopted by PCAPCD rely on GHG emissions in MTCO₂e per 1,000 sf of commercial space to determine significance for commercial projects. As such, the proposed project's estimated annual operational emissions of 1,979.10 MTCO₂e must be divided by the floor area of the proposed medical office building. The proposed project would include 75,000 sf of medical office space. Thus, the proposed project would result in an efficiency rate of 26.39 MTCO₂e/1,000 sf. The PCAPCD urban commercial efficiency threshold is 26.5 MTCO₂e/1,000 sf.

Therefore, the proposed project would result in operational GHG emissions below the applicable PCAPCD efficiency thresholds. Because the project's unmitigated annual GHG emissions would be below the applicable PCAPCD efficiency threshold per capita

per year threshold, the proposed project would be considered to result in a ***less-than-significant*** impact related to GHG emissions and global climate change.

APPENDIX A

CALEEMOD RESULTS

Roseville MOB - Placer County APCD Air District, Summary Report

Roseville MOB
Placer County APCD, Summary Report**1.0 Project Characteristics**

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	75.00	1000sqft	1.50	75,000.00	0
Parking Lot	453.00	Space	4.20	181,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	74
Climate Zone	2			Operational Year	2018
Utility Company	Roseville Electric				
CO2 Intensity (lb/MW hr)	616.63	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments

Only CalEEMod defaults were used.

Roseville MOB - Placer County APCD Air District, Summary Report

Project Characteristics - *

Land Use - *

Vehicle Trips - *per KDA

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Mobile Land Use Mitigation -

Construction Phase - Applicant provided construction schedule

Grading - *

Stationary Sources - Emergency Generators and Fire Pumps -

Area Mitigation -

2.0 Peak Daily Emissions

Peak Daily Construction Emissions

Peak Daily Construction Emissions

Roseville MOB - Placer County APCD Air District, Summary Report

[illegible]

Peak Daily Operational Emissions

Peak Daily Operational Emissions

[illegible]

Roseville MOB - Placer County APCD Air District, Summary Report

3.0 Annual GHG Emissions

Annual GHG**Annual GHG**

		Unmitigated				Mitigated			
		CO2	CH4	N2O	CO2e	CO2	CH4	N2O	CO2e
GHG Activity	Year	MT/yr							
Construction	2017	328.4133	0.0560	0.0000	329.8122	328.4131	0.0560	0.0000	329.8119
Construction	2018	518.8850	0.0772	0.0000	520.8157	518.8846	0.0772	0.0000	520.8153
Operational	2018	1,857.2940	10.1368	0.0111	2,114.0304	1,723.7991	10.0912	0.0101	1,979.0985
	Total								
	Significance Threshold								
	Exceed Significance?								

Roseville MOB - Placer County APCD Air District, Annual

Roseville MOB
Placer County APCD Air District, Annual**1.0 Project Characteristics**

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	75.00	1000sqft	1.50	75,000.00	0
Parking Lot	453.00	Space	4.20	181,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	74
Climate Zone	2			Operational Year	2018
Utility Company	Roseville Electric				
CO2 Intensity (lb/MW hr)	616.63	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Roseville MOB - Placer County APCD Air District, Annual

Project Characteristics - *

Land Use - *

Vehicle Trips - *per KDA

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Mobile Land Use Mitigation -

Construction Phase - Applicant provided construction schedule

Grading - *

Stationary Sources - Emergency Generators and Fire Pumps -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	20.00	343.00
tblConstructionPhase	NumDays	230.00	343.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	7.00
tblConstructionPhase	NumDays	10.00	2.00
tblConstructionPhase	PhaseEndDate	8/22/2018	11/19/2018
tblConstructionPhase	PhaseEndDate	6/27/2018	11/5/2018
tblConstructionPhase	PhaseEndDate	8/9/2017	7/3/2017
tblConstructionPhase	PhaseEndDate	7/25/2018	7/12/2017
tblConstructionPhase	PhaseEndDate	7/12/2017	6/2/2017
tblConstructionPhase	PhaseStartDate	7/26/2018	7/27/2017
tblConstructionPhase	PhaseStartDate	8/10/2017	7/13/2017
tblConstructionPhase	PhaseStartDate	7/13/2017	6/3/2017

Roseville MOB - Placer County APCD Air District, Annual

tblConstructionPhase	PhaseStartDate	6/28/2018	7/4/2017
tblConstructionPhase	PhaseStartDate	6/29/2017	6/1/2017
tblGrading	AcresOfGrading	10.50	5.70
tblGrading	MaterialExported	0.00	1.00
tblLandUse	LotAcreage	1.72	1.50
tblLandUse	LotAcreage	4.08	4.20
tblProjectCharacteristics	CO2IntensityFactor	793.8	616.63
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	480.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	4.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	14.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	DV_TP	30.00	40.00
tblVehicleTrips	PR_TP	60.00	50.00
tblVehicleTrips	WD_TR	36.13	31.44

2.0 Emissions Summary

Roseville MOB - Placer County APCD Air District, Annual

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.4301	2.6224	1.8349	3.6100e-003	0.1595	0.1480	0.3075	0.0654	0.1391	0.2045	0.0000	328.4133	328.4133	0.0560	0.0000	329.8122
2018	0.6608	3.4919	2.7289	5.7600e-003	0.1352	0.1883	0.3235	0.0367	0.1781	0.2148	0.0000	518.8850	518.8850	0.0772	0.0000	520.8156
Maximum	0.6608	3.4919	2.7289	5.7600e-003	0.1595	0.1883	0.3235	0.0654	0.1781	0.2148	0.0000	518.8850	518.8850	0.0772	0.0000	520.8156

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.4301	2.6224	1.8349	3.6100e-003	0.1595	0.1480	0.3075	0.0654	0.1391	0.2045	0.0000	328.4131	328.4131	0.0560	0.0000	329.8120
2018	0.6608	3.4919	2.7289	5.7600e-003	0.1352	0.1883	0.3235	0.0367	0.1781	0.2148	0.0000	518.8846	518.8846	0.0772	0.0000	520.8153
Maximum	0.6608	3.4919	2.7289	5.7600e-003	0.1595	0.1883	0.3235	0.0654	0.1781	0.2148	0.0000	518.8846	518.8846	0.0772	0.0000	520.8153

[illegible]

Roseville MOB - Placer County APCD Air District, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-1-2017	8-31-2017	1.2485	1.2485
2	9-1-2017	11-30-2017	1.3564	1.3564
3	12-1-2017	2-28-2018	1.2517	1.2517
4	3-1-2018	5-31-2018	1.2266	1.2266
5	6-1-2018	8-31-2018	1.2248	1.2248
6	9-1-2018	9-30-2018	0.3994	0.3994
		Highest	1.3564	1.3564

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3424	5.0000e-005	4.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.4300e-003	9.4300e-003	3.0000e-005	0.0000	0.0101
Energy	6.6900e-003	0.0608	0.0511	3.6000e-004		4.6200e-003	4.6200e-003		4.6200e-003	4.6200e-003	0.0000	325.6060	325.6060	0.0135	3.7400e-003	327.0566
Mobile	0.9798	2.1489	8.8682	0.0149	1.1512	0.0191	1.1703	0.3086	0.0180	0.3266	0.0000	1,345.713 3	1,345.713 3	0.0984	0.0000	1,348.173 4
Stationary	5.5100e-003	0.0154	0.0141	3.0000e-005		8.1000e-004	8.1000e-004		8.1000e-004	8.1000e-004	0.0000	2.5590	2.5590	3.6000e-004	0.0000	2.5679
Waste						0.0000	0.0000		0.0000	0.0000	164.4227	0.0000	164.4227	9.7171	0.0000	407.3502
Water						0.0000	0.0000		0.0000	0.0000	2.9857	15.9980	18.9837	0.3074	7.4000e-003	28.8731
Total	1.3344	2.2252	8.9383	0.0152	1.1512	0.0245	1.1757	0.3086	0.0235	0.3320	167.4084	1,689.885 6	1,857.294 0	10.1368	0.0111	2,114.031 3

Roseville MOB - Placer County APCD Air District, Annual

2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3205	5.0000e-005	4.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.4300e-003	9.4300e-003	3.0000e-005	0.0000	0.0101
Energy	6.3600e-003	0.0579	0.0486	3.5000e-004		4.4000e-003	4.4000e-003		4.4000e-003	4.4000e-003	0.0000	318.8555	318.8555	0.0132	3.6400e-003	320.2725
Mobile	0.9373	2.0128	8.2177	0.0135	1.0361	0.0174	1.0535	0.2777	0.0164	0.2941	0.0000	1,221.0983	1,221.0983	0.0910	0.0000	1,223.3741
Stationary	5.5100e-003	0.0154	0.0141	3.0000e-005		8.1000e-004	8.1000e-004		8.1000e-004	8.1000e-004	0.0000	2.5590	2.5590	3.6000e-004	0.0000	2.5679
Waste						0.0000	0.0000		0.0000	0.0000	164.4227	0.0000	164.4227	9.7171	0.0000	407.3502
Water						0.0000	0.0000		0.0000	0.0000	2.6167	14.2375	16.8542	0.2694	6.4800e-003	25.5222
Total	1.2697	2.0861	8.2853	0.0139	1.0361	0.0226	1.0587	0.2777	0.0217	0.2994	167.0393	1,556.7597	1,723.7991	10.0912	0.0101	1,979.0970

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	4.85	6.25	7.31	9.06	10.00	7.70	9.95	10.00	7.68	9.83	0.22	7.88	7.19	0.45	9.16	6.38

3.0 Construction Detail**Construction Phase**

Roseville MOB - Placer County APCD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2017	6/2/2017	5	2	
2	Grading	Grading	6/3/2017	7/3/2017	5	21	
3	Building Construction	Building Construction	7/13/2017	11/5/2018	5	343	
4	Paving	Paving	7/4/2017	7/12/2017	5	7	
5	Architectural Coating	Architectural Coating	7/27/2017	11/19/2018	5	343	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 5.7

Acres of Paving: 4.2

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 112,500; Non-Residential Outdoor: 37,500; Striped Parking Area: 10,872 (Architectural Coating – sqft)

OffRoad Equipment

Roseville MOB - Placer County APCD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	100.00	42.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Roseville MOB - Placer County APCD Air District, Annual

3.2 Site Preparation - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0181	0.0000	0.0181	9.9300e-003	0.0000	9.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.9600e-003	0.0523	0.0235	4.0000e-005		2.8800e-003	2.8800e-003		2.6500e-003	2.6500e-003	0.0000	3.5334	3.5334	1.0800e-003	0.0000	3.5605
Total	4.9600e-003	0.0523	0.0235	4.0000e-005	0.0181	2.8800e-003	0.0210	9.9300e-003	2.6500e-003	0.0126	0.0000	3.5334	3.5334	1.0800e-003	0.0000	3.5605

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	6.0000e-005	6.7000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1338	0.1338	0.0000	0.0000	0.1339
Total	9.0000e-005	6.0000e-005	6.7000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1338	0.1338	0.0000	0.0000	0.1339

Roseville MOB - Placer County APCD Air District, Annual

3.2 Site Preparation - 2017**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0181	0.0000	0.0181	9.9300e-003	0.0000	9.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.9600e-003	0.0523	0.0235	4.0000e-005		2.8800e-003	2.8800e-003		2.6500e-003	2.6500e-003	0.0000	3.5334	3.5334	1.0800e-003	0.0000	3.5605
Total	4.9600e-003	0.0523	0.0235	4.0000e-005	0.0181	2.8800e-003	0.0210	9.9300e-003	2.6500e-003	0.0126	0.0000	3.5334	3.5334	1.0800e-003	0.0000	3.5605

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	6.0000e-005	6.7000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1338	0.1338	0.0000	0.0000	0.1339
Total	9.0000e-005	6.0000e-005	6.7000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1338	0.1338	0.0000	0.0000	0.1339

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3.3 Grading - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0663	0.0000	0.0663	0.0351	0.0000	0.0351	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0322	0.3558	0.1796	3.1000e-004		0.0187	0.0187		0.0172	0.0172	0.0000	28.9374	28.9374	8.8700e-003	0.0000	29.1591
Total	0.0322	0.3558	0.1796	3.1000e-004	0.0663	0.0187	0.0849	0.0351	0.0172	0.0523	0.0000	28.9374	28.9374	8.8700e-003	0.0000	29.1591

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.5000e-004	5.7000e-004	5.8800e-003	1.0000e-005	1.2400e-003	1.0000e-005	1.2500e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.1704	1.1704	4.0000e-005	0.0000	1.1714
Total	7.5000e-004	5.7000e-004	5.8800e-003	1.0000e-005	1.2400e-003	1.0000e-005	1.2500e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.1704	1.1704	4.0000e-005	0.0000	1.1714

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3.3 Grading - 2017**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0663	0.0000	0.0663	0.0351	0.0000	0.0351	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0322	0.3558	0.1796	3.1000e-004		0.0187	0.0187		0.0172	0.0172	0.0000	28.9374	28.9374	8.8700e-003	0.0000	29.1591
Total	0.0322	0.3558	0.1796	3.1000e-004	0.0663	0.0187	0.0849	0.0351	0.0172	0.0523	0.0000	28.9374	28.9374	8.8700e-003	0.0000	29.1591

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.5000e-004	5.7000e-004	5.8800e-003	1.0000e-005	1.2400e-003	1.0000e-005	1.2500e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.1704	1.1704	4.0000e-005	0.0000	1.1714
Total	7.5000e-004	5.7000e-004	5.8800e-003	1.0000e-005	1.2400e-003	1.0000e-005	1.2500e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.1704	1.1704	4.0000e-005	0.0000	1.1714

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3.4 Building Construction - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1900	1.6198	1.1091	1.6400e-003		0.1091	0.1091		0.1024	0.1024	0.0000	146.7006	146.7006	0.0361	0.0000	147.6042
Total	0.1900	1.6198	1.1091	1.6400e-003		0.1091	0.1091		0.1024	0.1024	0.0000	146.7006	146.7006	0.0361	0.0000	147.6042

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0149	0.3728	0.0874	7.6000e-004	0.0167	3.1700e-003	0.0199	4.8400e-003	3.0300e-003	7.8800e-003	0.0000	72.1978	72.1978	4.2300e-003	0.0000	72.3036
Worker	0.0289	0.0219	0.2278	5.0000e-004	0.0479	3.4000e-004	0.0482	0.0128	3.1000e-004	0.0131	0.0000	45.3287	45.3287	1.5200e-003	0.0000	45.3667
Total	0.0439	0.3948	0.3152	1.2600e-003	0.0646	3.5100e-003	0.0681	0.0176	3.3400e-003	0.0209	0.0000	117.5265	117.5265	5.7500e-003	0.0000	117.6703

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3.4 Building Construction - 2017**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1900	1.6198	1.1091	1.6400e-003		0.1091	0.1091		0.1024	0.1024	0.0000	146.7005	146.7005	0.0361	0.0000	147.6040
Total	0.1900	1.6198	1.1091	1.6400e-003		0.1091	0.1091		0.1024	0.1024	0.0000	146.7005	146.7005	0.0361	0.0000	147.6040

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0149	0.3728	0.0874	7.6000e-004	0.0167	3.1700e-003	0.0199	4.8400e-003	3.0300e-003	7.8800e-003	0.0000	72.1978	72.1978	4.2300e-003	0.0000	72.3036
Worker	0.0289	0.0219	0.2278	5.0000e-004	0.0479	3.4000e-004	0.0482	0.0128	3.1000e-004	0.0131	0.0000	45.3287	45.3287	1.5200e-003	0.0000	45.3667
Total	0.0439	0.3948	0.3152	1.2600e-003	0.0646	3.5100e-003	0.0681	0.0176	3.3400e-003	0.0209	0.0000	117.5265	117.5265	5.7500e-003	0.0000	117.6703

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3.4 Building Construction - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2961	2.5846	1.9426	2.9700e-003		0.1657	0.1657		0.1558	0.1558	0.0000	262.7328	262.7328	0.0644	0.0000	264.3420
Total	0.2961	2.5846	1.9426	2.9700e-003		0.1657	0.1657		0.1558	0.1558	0.0000	262.7328	262.7328	0.0644	0.0000	264.3420

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0233	0.6340	0.1387	1.3700e-003	0.0303	4.4600e-003	0.0348	8.7700e-003	4.2700e-003	0.0130	0.0000	130.2295	130.2295	7.1600e-003	0.0000	130.4086
Worker	0.0462	0.0345	0.3585	8.8000e-004	0.0868	6.0000e-004	0.0874	0.0231	5.5000e-004	0.0237	0.0000	79.7589	79.7589	2.3900e-003	0.0000	79.8188
Total	0.0695	0.6685	0.4972	2.2500e-003	0.1171	5.0600e-003	0.1221	0.0319	4.8200e-003	0.0367	0.0000	209.9884	209.9884	9.5500e-003	0.0000	210.2273

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3.4 Building Construction - 2018**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2961	2.5846	1.9426	2.9700e-003		0.1657	0.1657		0.1558	0.1558	0.0000	262.7325	262.7325	0.0644	0.0000	264.3417
Total	0.2961	2.5846	1.9426	2.9700e-003		0.1657	0.1657		0.1558	0.1558	0.0000	262.7325	262.7325	0.0644	0.0000	264.3417

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0233	0.6340	0.1387	1.3700e-003	0.0303	4.4600e-003	0.0348	8.7700e-003	4.2700e-003	0.0130	0.0000	130.2295	130.2295	7.1600e-003	0.0000	130.4086
Worker	0.0462	0.0345	0.3585	8.8000e-004	0.0868	6.0000e-004	0.0874	0.0231	5.5000e-004	0.0237	0.0000	79.7589	79.7589	2.3900e-003	0.0000	79.8188
Total	0.0695	0.6685	0.4972	2.2500e-003	0.1171	5.0600e-003	0.1221	0.0319	4.8200e-003	0.0367	0.0000	209.9884	209.9884	9.5500e-003	0.0000	210.2273

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3.5 Paving - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.8100e-003	0.0725	0.0526	8.0000e-005		4.0600e-003	4.0600e-003		3.7300e-003	3.7300e-003	0.0000	7.4001	7.4001	2.2700e-003	0.0000	7.4568
Paving	5.5000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0123	0.0725	0.0526	8.0000e-005		4.0600e-003	4.0600e-003		3.7300e-003	3.7300e-003	0.0000	7.4001	7.4001	2.2700e-003	0.0000	7.4568

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-004	1.9000e-004	1.9600e-003	0.0000	4.1000e-004	0.0000	4.2000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3901	0.3901	1.0000e-005	0.0000	0.3905
Total	2.5000e-004	1.9000e-004	1.9600e-003	0.0000	4.1000e-004	0.0000	4.2000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3901	0.3901	1.0000e-005	0.0000	0.3905

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3.5 Paving - 2017**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.8100e-003	0.0725	0.0526	8.0000e-005		4.0600e-003	4.0600e-003		3.7300e-003	3.7300e-003	0.0000	7.4001	7.4001	2.2700e-003	0.0000	7.4568
Paving	5.5000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0123	0.0725	0.0526	8.0000e-005		4.0600e-003	4.0600e-003		3.7300e-003	3.7300e-003	0.0000	7.4001	7.4001	2.2700e-003	0.0000	7.4568

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-004	1.9000e-004	1.9600e-003	0.0000	4.1000e-004	0.0000	4.2000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3901	0.3901	1.0000e-005	0.0000	0.3905
Total	2.5000e-004	1.9000e-004	1.9600e-003	0.0000	4.1000e-004	0.0000	4.2000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3901	0.3901	1.0000e-005	0.0000	0.3905

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3.6 Architectural Coating - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1217					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0186	0.1224	0.1046	1.7000e-004		9.7100e-003	9.7100e-003		9.7100e-003	9.7100e-003	0.0000	14.2982	14.2982	1.5100e-003	0.0000	14.3360
Total	0.1404	0.1224	0.1046	1.7000e-004		9.7100e-003	9.7100e-003		9.7100e-003	9.7100e-003	0.0000	14.2982	14.2982	1.5100e-003	0.0000	14.3360

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3100e-003	4.0300e-003	0.0418	9.0000e-005	8.8000e-003	6.0000e-005	8.8600e-003	2.3400e-003	6.0000e-005	2.4000e-003	0.0000	8.3227	8.3227	2.8000e-004	0.0000	8.3296
Total	5.3100e-003	4.0300e-003	0.0418	9.0000e-005	8.8000e-003	6.0000e-005	8.8600e-003	2.3400e-003	6.0000e-005	2.4000e-003	0.0000	8.3227	8.3227	2.8000e-004	0.0000	8.3296

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3.6 Architectural Coating - 2017**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1217					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0186	0.1224	0.1046	1.7000e-004		9.7100e-003	9.7100e-003		9.7100e-003	9.7100e-003	0.0000	14.2982	14.2982	1.5100e-003	0.0000	14.3359
Total	0.1404	0.1224	0.1046	1.7000e-004		9.7100e-003	9.7100e-003		9.7100e-003	9.7100e-003	0.0000	14.2982	14.2982	1.5100e-003	0.0000	14.3359

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3100e-003	4.0300e-003	0.0418	9.0000e-005	8.8000e-003	6.0000e-005	8.8600e-003	2.3400e-003	6.0000e-005	2.4000e-003	0.0000	8.3227	8.3227	2.8000e-004	0.0000	8.3296
Total	5.3100e-003	4.0300e-003	0.0418	9.0000e-005	8.8000e-003	6.0000e-005	8.8600e-003	2.3400e-003	6.0000e-005	2.4000e-003	0.0000	8.3227	8.3227	2.8000e-004	0.0000	8.3296

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3.6 Architectural Coating - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2511					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0345	0.2317	0.2142	3.4000e-004		0.0174	0.0174		0.0174	0.0174	0.0000	29.4901	29.4901	2.8000e-003	0.0000	29.5602
Total	0.2856	0.2317	0.2142	3.4000e-004		0.0174	0.0174		0.0174	0.0174	0.0000	29.4901	29.4901	2.8000e-003	0.0000	29.5602

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.6600e-003	7.2000e-003	0.0749	1.8000e-004	0.0181	1.2000e-004	0.0183	4.8300e-003	1.1000e-004	4.9400e-003	0.0000	16.6736	16.6736	5.0000e-004	0.0000	16.6861
Total	9.6600e-003	7.2000e-003	0.0749	1.8000e-004	0.0181	1.2000e-004	0.0183	4.8300e-003	1.1000e-004	4.9400e-003	0.0000	16.6736	16.6736	5.0000e-004	0.0000	16.6861

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3.6 Architectural Coating - 2018**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2511					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0345	0.2317	0.2142	3.4000e-004		0.0174	0.0174		0.0174	0.0174	0.0000	29.4901	29.4901	2.8000e-003	0.0000	29.5602
Total	0.2856	0.2317	0.2142	3.4000e-004		0.0174	0.0174		0.0174	0.0174	0.0000	29.4901	29.4901	2.8000e-003	0.0000	29.5602

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.6600e-003	7.2000e-003	0.0749	1.8000e-004	0.0181	1.2000e-004	0.0183	4.8300e-003	1.1000e-004	4.9400e-003	0.0000	16.6736	16.6736	5.0000e-004	0.0000	16.6861
Total	9.6600e-003	7.2000e-003	0.0749	1.8000e-004	0.0181	1.2000e-004	0.0183	4.8300e-003	1.1000e-004	4.9400e-003	0.0000	16.6736	16.6736	5.0000e-004	0.0000	16.6861

4.0 Operational Detail - Mobile

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4.1 Mitigation Measures Mobile

Increase Transit Accessibility

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.9373	2.0128	8.2177	0.0135	1.0361	0.0174	1.0535	0.2777	0.0164	0.2941	0.0000	1,221.098 3	1,221.098 3	0.0910	0.0000	1,223.374 1
Unmitigated	0.9798	2.1489	8.8682	0.0149	1.1512	0.0191	1.1703	0.3086	0.0180	0.3266	0.0000	1,345.713 3	1,345.713 3	0.0984	0.0000	1,348.173 4

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Medical Office Building	2,358.00	672.00	116.25	3,126,921	2,814,229
Parking Lot	0.00	0.00	0.00		
Total	2,358.00	672.00	116.25	3,126,921	2,814,229

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Medical Office Building	9.50	7.30	7.30	29.60	51.40	19.00	50	40	10
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Medical Office Building	0.472854	0.047686	0.207327	0.157858	0.035960	0.007313	0.016190	0.010860	0.000931	0.000377	0.034753	0.000753	0.007138
Parking Lot	0.472854	0.047686	0.207327	0.157858	0.035960	0.007313	0.016190	0.010860	0.000931	0.000377	0.034753	0.000753	0.007138

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	255.8735	255.8735	0.0120	2.4900e-003	256.9163
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	259.4082	259.4082	0.0122	2.5200e-003	260.4654
NaturalGas Mitigated	6.3600e-003	0.0579	0.0486	3.5000e-004		4.4000e-003	4.4000e-003		4.4000e-003	4.4000e-003	0.0000	62.9820	62.9820	1.2100e-003	1.1500e-003	63.3562
NaturalGas Unmitigated	6.6900e-003	0.0608	0.0511	3.6000e-004		4.6200e-003	4.6200e-003		4.6200e-003	4.6200e-003	0.0000	66.1978	66.1978	1.2700e-003	1.2100e-003	66.5912

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5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Medical Office Building	1.2405e+006	6.6900e-003	0.0608	0.0511	3.6000e-004		4.6200e-003	4.6200e-003		4.6200e-003	4.6200e-003	0.0000	66.1978	66.1978	1.2700e-003	1.2100e-003	66.5912
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		6.6900e-003	0.0608	0.0511	3.6000e-004		4.6200e-003	4.6200e-003		4.6200e-003	4.6200e-003	0.0000	66.1978	66.1978	1.2700e-003	1.2100e-003	66.5912

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Medical Office Building	1.18024e+006	6.3600e-003	0.0579	0.0486	3.5000e-004		4.4000e-003	4.4000e-003		4.4000e-003	4.4000e-003	0.0000	62.9820	62.9820	1.2100e-003	1.1500e-003	63.3562
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		6.3600e-003	0.0579	0.0486	3.5000e-004		4.4000e-003	4.4000e-003		4.4000e-003	4.4000e-003	0.0000	62.9820	62.9820	1.2100e-003	1.1500e-003	63.3562

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5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Medical Office Building	768000	214.8086	0.0101	2.0900e-003	215.6840
Parking Lot	159456	44.5996	2.1000e-003	4.3000e-004	44.7814
Total		259.4082	0.0122	2.5200e-003	260.4654

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Medical Office Building	755363	211.2739	9.9400e-003	2.0600e-003	212.1349
Parking Lot	159456	44.5996	2.1000e-003	4.3000e-004	44.7814
Total		255.8735	0.0120	2.4900e-003	256.9163

6.0 Area Detail**6.1 Mitigation Measures Area**

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Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3205	5.0000e-005	4.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.4300e-003	9.4300e-003	3.0000e-005	0.0000	0.0101
Unmitigated	0.3424	5.0000e-005	4.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.4300e-003	9.4300e-003	3.0000e-005	0.0000	0.0101

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6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0373					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3046					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.7000e-004	5.0000e-005	4.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.4300e-003	9.4300e-003	3.0000e-005	0.0000	0.0101
Total	0.3424	5.0000e-005	4.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.4300e-003	9.4300e-003	3.0000e-005	0.0000	0.0101

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0373					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2827					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.7000e-004	5.0000e-005	4.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.4300e-003	9.4300e-003	3.0000e-005	0.0000	0.0101
Total	0.3205	5.0000e-005	4.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.4300e-003	9.4300e-003	3.0000e-005	0.0000	0.0101

7.0 Water Detail

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7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	16.8542	0.2694	6.4800e-003	25.5222
Unmitigated	18.9837	0.3074	7.4000e-003	28.8731

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Medical Office Building	9.41104 / 1.79258	18.9837	0.3074	7.4000e-003	28.8731
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		18.9837	0.3074	7.4000e-003	28.8731

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7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Medical Office Building	8.24784 / 1.79258	16.8542	0.2694	6.4800e-003	25.5222
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		16.8542	0.2694	6.4800e-003	25.5222

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	164.4227	9.7171	0.0000	407.3502
Unmitigated	164.4227	9.7171	0.0000	407.3502

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8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Medical Office Building	810	164.4227	9.7171	0.0000	407.3502
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		164.4227	9.7171	0.0000	407.3502

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Medical Office Building	810	164.4227	9.7171	0.0000	407.3502
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		164.4227	9.7171	0.0000	407.3502

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	4	14	480	0.73	Diesel

Boilers

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

Equipment Type	Number
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10.1 Stationary Sources**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (300 - 600 HP)	5.5100e-003	0.0154	0.0141	3.0000e-005		8.1000e-004	8.1000e-004		8.1000e-004	8.1000e-004	0.0000	2.5590	2.5590	3.6000e-004	0.0000	2.5679
Total	5.5100e-003	0.0154	0.0141	3.0000e-005		8.1000e-004	8.1000e-004		8.1000e-004	8.1000e-004	0.0000	2.5590	2.5590	3.6000e-004	0.0000	2.5679

11.0 Vegetation

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Roseville MOB
Placer County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	75.00	1000sqft	1.50	75,000.00	0
Parking Lot	453.00	Space	4.20	181,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	74
Climate Zone	2			Operational Year	2018
Utility Company	Roseville Electric				
CO2 Intensity (lb/MW hr)	616.63	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Roseville MOB - Placer County APCD Air District, Summer

Project Characteristics - *

Land Use - *

Vehicle Trips - *per KDA

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Mobile Land Use Mitigation -

Construction Phase - Applicant provided construction schedule

Grading - *

Stationary Sources - Emergency Generators and Fire Pumps -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	20.00	343.00
tblConstructionPhase	NumDays	230.00	343.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	7.00
tblConstructionPhase	NumDays	10.00	2.00
tblConstructionPhase	PhaseEndDate	8/22/2018	11/19/2018
tblConstructionPhase	PhaseEndDate	6/27/2018	11/5/2018
tblConstructionPhase	PhaseEndDate	8/9/2017	7/3/2017
tblConstructionPhase	PhaseEndDate	7/25/2018	7/12/2017
tblConstructionPhase	PhaseEndDate	7/12/2017	6/2/2017
tblConstructionPhase	PhaseStartDate	7/26/2018	7/27/2017
tblConstructionPhase	PhaseStartDate	8/10/2017	7/13/2017
tblConstructionPhase	PhaseStartDate	7/13/2017	6/3/2017

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tblConstructionPhase	PhaseStartDate	6/28/2018	7/4/2017
tblConstructionPhase	PhaseStartDate	6/29/2017	6/1/2017
tblGrading	AcresOfGrading	10.50	5.70
tblGrading	MaterialExported	0.00	1.00
tblLandUse	LotAcreage	1.72	1.50
tblLandUse	LotAcreage	4.08	4.20
tblProjectCharacteristics	CO2IntensityFactor	793.8	616.63
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	480.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	4.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	14.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	DV_TP	30.00	40.00
tblVehicleTrips	PR_TP	60.00	50.00
tblVehicleTrips	WD_TR	36.13	31.44

2.0 Emissions Summary

Roseville MOB - Placer County APCD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	6.4945	52.3323	26.3464	0.0534	18.2142	2.8796	21.0937	9.9699	2.6492	12.6191	0.0000	5,331.6498	5,331.6498	1.1987	0.0000	5,351.4211
2018	5.9196	31.3574	24.9357	0.0530	1.2703	1.6969	2.9671	0.3434	1.6047	1.9481	0.0000	5,265.8165	5,265.8165	0.7675	0.0000	5,285.0040
Maximum	6.4945	52.3323	26.3464	0.0534	18.2142	2.8796	21.0937	9.9699	2.6492	12.6191	0.0000	5,331.6498	5,331.6498	1.1987	0.0000	5,351.4211

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	6.4945	52.3323	26.3464	0.0534	18.2142	2.8796	21.0937	9.9699	2.6492	12.6191	0.0000	5,331.6498	5,331.6498	1.1987	0.0000	5,351.4211
2018	5.9196	31.3574	24.9357	0.0530	1.2703	1.6969	2.9671	0.3434	1.6047	1.9481	0.0000	5,265.8165	5,265.8165	0.7675	0.0000	5,285.0040
Maximum	6.4945	52.3323	26.3464	0.0534	18.2142	2.8796	21.0937	9.9699	2.6492	12.6191	0.0000	5,331.6498	5,331.6498	1.1987	0.0000	5,351.4211

[illegible]

Roseville MOB - Placer County APCD Air District, Summer

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.8787	5.1000e-004	0.0547	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1156	0.1156	3.2000e-004		0.1235
Energy	0.0367	0.3332	0.2799	2.0000e-003		0.0253	0.0253		0.0253	0.0253		399.8388	399.8388	7.6600e-003	7.3300e-003	402.2149
Mobile	8.5662	14.5824	64.4383	0.1150	8.6781	0.1372	8.8153	2.3174	0.1295	2.4469		11,491.2988	11,491.2988	0.7636		11,510.3894
Stationary	3.1504	8.8065	8.0340	0.0151		0.4635	0.4635		0.4635	0.4635		1,611.8671	1,611.8671	0.2260		1,617.5167
Total	13.6320	23.7226	72.8069	0.1321	8.6781	0.6263	9.3044	2.3174	0.6185	2.9359		13,503.1203	13,503.1203	0.9976	7.3300e-003	13,530.2445

Roseville MOB - Placer County APCD Air District, Summer

2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.3465	5.1000e-004	0.0547	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1156	0.1156	3.2000e-004		0.1235
Energy	0.0349	0.3170	0.2663	1.9000e-003		0.0241	0.0241		0.0241	0.0241		380.4150	380.4150	7.2900e-003	6.9700e-003	382.6756
Mobile	8.2687	13.6861	59.3628	0.1043	7.8103	0.1252	7.9355	2.0857	0.1181	2.2038		10,423.6768	10,423.6768	0.7041		10,441.2785
Stationary	3.1504	8.8065	8.0340	0.0151		0.4635	0.4635		0.4635	0.4635		1,611.8671	1,611.8671	0.2260		1,617.5167
Total	16.8004	22.8101	67.7177	0.1214	7.8103	0.6130	8.4233	2.0857	0.6059	2.6916		12,416.0744	12,416.0744	0.9377	6.9700e-003	12,441.5943

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	-23.24	3.85	6.99	8.15	10.00	2.12	9.47	10.00	2.04	8.32	0.00	8.05	8.05	6.01	4.91	8.05

3.0 Construction Detail**Construction Phase**

Roseville MOB - Placer County APCD Air District, Summer

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2017	6/2/2017	5	2	
2	Grading	Grading	6/3/2017	7/3/2017	5	21	
3	Building Construction	Building Construction	7/13/2017	11/5/2018	5	343	
4	Paving	Paving	7/4/2017	7/12/2017	5	7	
5	Architectural Coating	Architectural Coating	7/27/2017	11/19/2018	5	343	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 5.7

Acres of Paving: 4.2

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 112,500; Non-Residential Outdoor: 37,500; Striped Parking Area: 10,872 (Architectural Coating – sqft)

OffRoad Equipment

Roseville MOB - Placer County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	100.00	42.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Roseville MOB - Placer County APCD Air District, Summer

3.2 Site Preparation - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483		3,894.950 0	3,894.950 0	1.1934		3,924.785 2
Total	4.9608	52.2754	23.4554	0.0380	18.0663	2.8786	20.9449	9.9307	2.6483	12.5790		3,894.950 0	3,894.950 0	1.1934		3,924.785 2

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0950	0.0569	0.7469	1.6200e-003	0.1479	1.0000e-003	0.1489	0.0392	9.3000e-004	0.0402		161.5102	161.5102	5.3200e-003		161.6433
Total	0.0950	0.0569	0.7469	1.6200e-003	0.1479	1.0000e-003	0.1489	0.0392	9.3000e-004	0.0402		161.5102	161.5102	5.3200e-003		161.6433

Roseville MOB - Placer County APCD Air District, Summer

3.2 Site Preparation - 2017**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483	0.0000	3,894.9500	3,894.9500	1.1934		3,924.7852
Total	4.9608	52.2754	23.4554	0.0380	18.0663	2.8786	20.9449	9.9307	2.6483	12.5790	0.0000	3,894.9500	3,894.9500	1.1934		3,924.7852

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0950	0.0569	0.7469	1.6200e-003	0.1479	1.0000e-003	0.1489	0.0392	9.3000e-004	0.0402		161.5102	161.5102	5.3200e-003		161.6433
Total	0.0950	0.0569	0.7469	1.6200e-003	0.1479	1.0000e-003	0.1489	0.0392	9.3000e-004	0.0402		161.5102	161.5102	5.3200e-003		161.6433

Roseville MOB - Placer County APCD Air District, Summer

3.3 Grading - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3099	0.0000	6.3099	3.3413	0.0000	3.3413			0.0000			0.0000
Off-Road	3.0705	33.8868	17.1042	0.0297		1.7774	1.7774		1.6352	1.6352		3,037.910 7	3,037.910 7	0.9308		3,061.180 9
Total	3.0705	33.8868	17.1042	0.0297	6.3099	1.7774	8.0874	3.3413	1.6352	4.9766		3,037.910 7	3,037.910 7	0.9308		3,061.180 9

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0792	0.0474	0.6224	1.3500e-003	0.1232	8.3000e-004	0.1241	0.0327	7.7000e-004	0.0335		134.5919	134.5919	4.4300e-003		134.7027
Total	0.0792	0.0474	0.6224	1.3500e-003	0.1232	8.3000e-004	0.1241	0.0327	7.7000e-004	0.0335		134.5919	134.5919	4.4300e-003		134.7027

Roseville MOB - Placer County APCD Air District, Summer

3.3 Grading - 2017**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3099	0.0000	6.3099	3.3413	0.0000	3.3413			0.0000			0.0000
Off-Road	3.0705	33.8868	17.1042	0.0297		1.7774	1.7774		1.6352	1.6352	0.0000	3,037.910 7	3,037.910 7	0.9308		3,061.180 9
Total	3.0705	33.8868	17.1042	0.0297	6.3099	1.7774	8.0874	3.3413	1.6352	4.9766	0.0000	3,037.910 7	3,037.910 7	0.9308		3,061.180 9

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0792	0.0474	0.6224	1.3500e-003	0.1232	8.3000e-004	0.1241	0.0327	7.7000e-004	0.0335		134.5919	134.5919	4.4300e-003		134.7027
Total	0.0792	0.0474	0.6224	1.3500e-003	0.1232	8.3000e-004	0.1241	0.0327	7.7000e-004	0.0335		134.5919	134.5919	4.4300e-003		134.7027

Roseville MOB - Placer County APCD Air District, Summer

3.4 Building Construction - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791		2,650.9797	2,650.9797	0.6531		2,667.3078
Total	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791		2,650.9797	2,650.9797	0.6531		2,667.3078

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2399	5.9890	1.3163	0.0127	0.2845	0.0515	0.3360	0.0819	0.0493	0.1312		1,322.4871	1,322.4871	0.0725		1,324.3007
Worker	0.5279	0.3162	4.1496	9.0200e-003	0.8215	5.5700e-003	0.8270	0.2179	5.1400e-003	0.2230		897.2791	897.2791	0.0296		898.0181
Total	0.7678	6.3051	5.4659	0.0217	1.1060	0.0571	1.1631	0.2998	0.0545	0.3542		2,219.7662	2,219.7662	0.1021		2,222.3188

Roseville MOB - Placer County APCD Air District, Summer

3.4 Building Construction - 2017**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791	0.0000	2,650.979 7	2,650.979 7	0.6531		2,667.307 8
Total	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791	0.0000	2,650.979 7	2,650.979 7	0.6531		2,667.307 8

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2399	5.9890	1.3163	0.0127	0.2845	0.0515	0.3360	0.0819	0.0493	0.1312		1,322.487 1	1,322.487 1	0.0725		1,324.300 7
Worker	0.5279	0.3162	4.1496	9.0200e-003	0.8215	5.5700e-003	0.8270	0.2179	5.1400e-003	0.2230		897.2791	897.2791	0.0296		898.0181
Total	0.7678	6.3051	5.4659	0.0217	1.1060	0.0571	1.1631	0.2998	0.0545	0.3542		2,219.766 2	2,219.766 2	0.1021		2,222.318 8

Roseville MOB - Placer County APCD Air District, Summer

3.4 Building Construction - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.935 1	2,620.935 1	0.6421		2,636.988 3
Total	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.935 1	2,620.935 1	0.6421		2,636.988 3

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2065	5.6324	1.1478	0.0126	0.2845	0.0400	0.3245	0.0819	0.0383	0.1202		1,317.363 0	1,317.363 0	0.0676		1,319.054 0
Worker	0.4676	0.2743	3.6277	8.7600e-003	0.8215	5.3900e-003	0.8269	0.2179	4.9700e-003	0.2229		871.7249	871.7249	0.0258		872.3705
Total	0.6740	5.9068	4.7755	0.0214	1.1060	0.0454	1.1514	0.2998	0.0432	0.3430		2,189.087 9	2,189.087 9	0.0935		2,191.424 5

Roseville MOB - Placer County APCD Air District, Summer

3.4 Building Construction - 2018**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099	0.0000	2,620.935 1	2,620.935 1	0.6421		2,636.988 3
Total	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099	0.0000	2,620.935 1	2,620.935 1	0.6421		2,636.988 3

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2065	5.6324	1.1478	0.0126	0.2845	0.0400	0.3245	0.0819	0.0383	0.1202		1,317.363 0	1,317.363 0	0.0676		1,319.054 0
Worker	0.4676	0.2743	3.6277	8.7600e-003	0.8215	5.3900e-003	0.8269	0.2179	4.9700e-003	0.2229		871.7249	871.7249	0.0258		872.3705
Total	0.6740	5.9068	4.7755	0.0214	1.1060	0.0454	1.1514	0.2998	0.0432	0.3430		2,189.087 9	2,189.087 9	0.0935		2,191.424 5

Roseville MOB - Placer County APCD Air District, Summer

3.5 Paving - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9449	20.7178	15.0320	0.0228		1.1592	1.1592		1.0665	1.0665		2,330.646 1	2,330.646 1	0.7141		2,348.498 8
Paving	1.5720					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	3.5169	20.7178	15.0320	0.0228		1.1592	1.1592		1.0665	1.0665		2,330.646 1	2,330.646 1	0.7141		2,348.498 8

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0792	0.0474	0.6224	1.3500e-003	0.1232	8.3000e-004	0.1241	0.0327	7.7000e-004	0.0335		134.5919	134.5919	4.4300e-003		134.7027
Total	0.0792	0.0474	0.6224	1.3500e-003	0.1232	8.3000e-004	0.1241	0.0327	7.7000e-004	0.0335		134.5919	134.5919	4.4300e-003		134.7027

Roseville MOB - Placer County APCD Air District, Summer

3.5 Paving - 2017**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9449	20.7178	15.0320	0.0228		1.1592	1.1592		1.0665	1.0665	0.0000	2,330.646 1	2,330.646 1	0.7141		2,348.498 8
Paving	1.5720					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	3.5169	20.7178	15.0320	0.0228		1.1592	1.1592		1.0665	1.0665	0.0000	2,330.646 1	2,330.646 1	0.7141		2,348.498 8

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0792	0.0474	0.6224	1.3500e-003	0.1232	8.3000e-004	0.1241	0.0327	7.7000e-004	0.0335		134.5919	134.5919	4.4300e-003		134.7027
Total	0.0792	0.0474	0.6224	1.3500e-003	0.1232	8.3000e-004	0.1241	0.0327	7.7000e-004	0.0335		134.5919	134.5919	4.4300e-003		134.7027

Roseville MOB - Placer County APCD Air District, Summer

3.6 Architectural Coating - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.1739					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.1909
Total	2.5062	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.1909

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1056	0.0632	0.8299	1.8000e-003	0.1643	1.1100e-003	0.1654	0.0436	1.0300e-003	0.0446		179.4558	179.4558	5.9100e-003		179.6036
Total	0.1056	0.0632	0.8299	1.8000e-003	0.1643	1.1100e-003	0.1654	0.0436	1.0300e-003	0.0446		179.4558	179.4558	5.9100e-003		179.6036

Roseville MOB - Placer County APCD Air District, Summer

3.6 Architectural Coating - 2017**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.1739					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.1909
Total	2.5062	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.1909

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1056	0.0632	0.8299	1.8000e-003	0.1643	1.1100e-003	0.1654	0.0436	1.0300e-003	0.0446		179.4558	179.4558	5.9100e-003		179.6036
Total	0.1056	0.0632	0.8299	1.8000e-003	0.1643	1.1100e-003	0.1654	0.0436	1.0300e-003	0.0446		179.4558	179.4558	5.9100e-003		179.6036

Roseville MOB - Placer County APCD Air District, Summer

3.6 Architectural Coating - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.1739					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	2.4725	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0935	0.0549	0.7255	1.7500e-003	0.1643	1.0800e-003	0.1654	0.0436	9.9000e-004	0.0446		174.3450	174.3450	5.1700e-003		174.4741
Total	0.0935	0.0549	0.7255	1.7500e-003	0.1643	1.0800e-003	0.1654	0.0436	9.9000e-004	0.0446		174.3450	174.3450	5.1700e-003		174.4741

Roseville MOB - Placer County APCD Air District, Summer

3.6 Architectural Coating - 2018**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.1739					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
Total	2.4725	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0935	0.0549	0.7255	1.7500e-003	0.1643	1.0800e-003	0.1654	0.0436	9.9000e-004	0.0446		174.3450	174.3450	5.1700e-003		174.4741
Total	0.0935	0.0549	0.7255	1.7500e-003	0.1643	1.0800e-003	0.1654	0.0436	9.9000e-004	0.0446		174.3450	174.3450	5.1700e-003		174.4741

4.0 Operational Detail - Mobile

Roseville MOB - Placer County APCD Air District, Summer

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.2687	13.6861	59.3628	0.1043	7.8103	0.1252	7.9355	2.0857	0.1181	2.2038		10,423.6768	10,423.6768	0.7041		10,441.2785
Unmitigated	8.5662	14.5824	64.4383	0.1150	8.6781	0.1372	8.8153	2.3174	0.1295	2.4469		11,491.2988	11,491.2988	0.7636		11,510.3894

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Medical Office Building	2,358.00	672.00	116.25	3,126,921	2,814,229
Parking Lot	0.00	0.00	0.00		
Total	2,358.00	672.00	116.25	3,126,921	2,814,229

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Medical Office Building	9.50	7.30	7.30	29.60	51.40	19.00	50	40	10
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Roseville MOB - Placer County APCD Air District, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Medical Office Building	0.472854	0.047686	0.207327	0.157858	0.035960	0.007313	0.016190	0.010860	0.000931	0.000377	0.034753	0.000753	0.007138
Parking Lot	0.472854	0.047686	0.207327	0.157858	0.035960	0.007313	0.016190	0.010860	0.000931	0.000377	0.034753	0.000753	0.007138

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0349	0.3170	0.2663	1.9000e-003		0.0241	0.0241		0.0241	0.0241		380.4150	380.4150	7.2900e-003	6.9700e-003	382.6756
NaturalGas Unmitigated	0.0367	0.3332	0.2799	2.0000e-003		0.0253	0.0253		0.0253	0.0253		399.8388	399.8388	7.6600e-003	7.3300e-003	402.2149

Roseville MOB - Placer County APCD Air District, Summer

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Medical Office Building	3398.63	0.0367	0.3332	0.2799	2.0000e-003		0.0253	0.0253		0.0253	0.0253		399.8388	399.8388	7.6600e-003	7.3300e-003	402.2149
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0367	0.3332	0.2799	2.0000e-003		0.0253	0.0253		0.0253	0.0253		399.8388	399.8388	7.6600e-003	7.3300e-003	402.2149

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Medical Office Building	3.23353	0.0349	0.3170	0.2663	1.9000e-003		0.0241	0.0241		0.0241	0.0241		380.4150	380.4150	7.2900e-003	6.9700e-003	382.6756
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0349	0.3170	0.2663	1.9000e-003		0.0241	0.0241		0.0241	0.0241		380.4150	380.4150	7.2900e-003	6.9700e-003	382.6756

6.0 Area Detail**6.1 Mitigation Measures Area**

Roseville MOB - Placer County APCD Air District, Summer

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.3465	5.1000e-004	0.0547	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1156	0.1156	3.2000e-004		0.1235
Unmitigated	1.8787	5.1000e-004	0.0547	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1156	0.1156	3.2000e-004		0.1235

Roseville MOB - Placer County APCD Air District, Summer

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2043					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6692					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.2200e-003	5.1000e-004	0.0547	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1156	0.1156	3.2000e-004		0.1235
Total	1.8787	5.1000e-004	0.0547	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1156	0.1156	3.2000e-004		0.1235

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2043					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.1369					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.2200e-003	5.1000e-004	0.0547	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1156	0.1156	3.2000e-004		0.1235
Total	5.3465	5.1000e-004	0.0547	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1156	0.1156	3.2000e-004		0.1235

7.0 Water Detail

Roseville MOB - Placer County APCD Air District, Summer

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

8.0 Waste Detail**8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	4	14	480	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number
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Roseville MOB - Placer County APCD Air District, Summer

10.1 Stationary Sources**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (300 - 600 HP)	3.1504	8.8065	8.0340	0.0151		0.4635	0.4635		0.4635	0.4635		1,611.867 1	1,611.867 1	0.2260		1,617.516 7
Total	3.1504	8.8065	8.0340	0.0151		0.4635	0.4635		0.4635	0.4635		1,611.867 1	1,611.867 1	0.2260		1,617.516 7

11.0 Vegetation

Roseville MOB - Placer County APCD Air District, Winter

Roseville MOB
Placer County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	75.00	1000sqft	1.50	75,000.00	0
Parking Lot	453.00	Space	4.20	181,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	74
Climate Zone	2			Operational Year	2018
Utility Company	Roseville Electric				
CO2 Intensity (lb/MW hr)	616.63	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Roseville MOB - Placer County APCD Air District, Winter

Project Characteristics - *

Land Use - *

Vehicle Trips - *per KDA

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Mobile Land Use Mitigation -

Construction Phase - Applicant provided construction schedule

Grading - *

Stationary Sources - Emergency Generators and Fire Pumps -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	20.00	343.00
tblConstructionPhase	NumDays	230.00	343.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	7.00
tblConstructionPhase	NumDays	10.00	2.00
tblConstructionPhase	PhaseEndDate	8/22/2018	11/19/2018
tblConstructionPhase	PhaseEndDate	6/27/2018	11/5/2018
tblConstructionPhase	PhaseEndDate	8/9/2017	7/3/2017
tblConstructionPhase	PhaseEndDate	7/25/2018	7/12/2017
tblConstructionPhase	PhaseEndDate	7/12/2017	6/2/2017
tblConstructionPhase	PhaseStartDate	7/26/2018	7/27/2017
tblConstructionPhase	PhaseStartDate	8/10/2017	7/13/2017
tblConstructionPhase	PhaseStartDate	7/13/2017	6/3/2017

Roseville MOB - Placer County APCD Air District, Winter

tblConstructionPhase	PhaseStartDate	6/28/2018	7/4/2017
tblConstructionPhase	PhaseStartDate	6/29/2017	6/1/2017
tblGrading	AcresOfGrading	10.50	5.70
tblGrading	MaterialExported	0.00	1.00
tblLandUse	LotAcreage	1.72	1.50
tblLandUse	LotAcreage	4.08	4.20
tblProjectCharacteristics	CO2IntensityFactor	793.8	616.63
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	480.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	4.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	14.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	DV_TP	30.00	40.00
tblVehicleTrips	PR_TP	60.00	50.00
tblVehicleTrips	WD_TR	36.13	31.44

2.0 Emissions Summary

Roseville MOB - Placer County APCD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	6.4914	52.3469	26.2057	0.0518	18.2142	2.8796	21.0937	9.9699	2.6492	12.6191	0.0000	5,171.4288	5,171.4288	1.1984	0.0000	5,191.3553
2018	5.9136	31.5266	24.7802	0.0514	1.2703	1.6978	2.9680	0.3434	1.6056	1.9489	0.0000	5,107.7476	5,107.7476	0.7735	0.0000	5,127.0857
Maximum	6.4914	52.3469	26.2057	0.0518	18.2142	2.8796	21.0937	9.9699	2.6492	12.6191	0.0000	5,171.4288	5,171.4288	1.1984	0.0000	5,191.3553

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	6.4914	52.3469	26.2057	0.0518	18.2142	2.8796	21.0937	9.9699	2.6492	12.6191	0.0000	5,171.4288	5,171.4288	1.1984	0.0000	5,191.3553
2018	5.9136	31.5266	24.7802	0.0514	1.2703	1.6978	2.9680	0.3434	1.6056	1.9489	0.0000	5,107.7476	5,107.7476	0.7735	0.0000	5,127.0857
Maximum	6.4914	52.3469	26.2057	0.0518	18.2142	2.8796	21.0937	9.9699	2.6492	12.6191	0.0000	5,171.4288	5,171.4288	1.1984	0.0000	5,191.3553

[illegible]

Roseville MOB - Placer County APCD Air District, Winter

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.8787	5.1000e-004	0.0547	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1156	0.1156	3.2000e-004		0.1235
Energy	0.0367	0.3332	0.2799	2.0000e-003		0.0253	0.0253		0.0253	0.0253		399.8388	399.8388	7.6600e-003	7.3300e-003	402.2149
Mobile	6.9302	16.0390	68.7250	0.1050	8.6781	0.1384	8.8165	2.3174	0.1306	2.4480		10,482.0935	10,482.0935	0.8213		10,502.6258
Stationary	3.1504	8.8065	8.0340	0.0151		0.4635	0.4635		0.4635	0.4635		1,611.8671	1,611.8671	0.2260		1,617.5167
Total	11.9960	25.1793	77.0935	0.1222	8.6781	0.6275	9.3056	2.3174	0.6196	2.9371		12,493.9150	12,493.9150	1.0553	7.3300e-003	12,522.4809

Roseville MOB - Placer County APCD Air District, Winter

2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.3465	5.1000e-004	0.0547	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1156	0.1156	3.2000e-004		0.1235
Energy	0.0349	0.3170	0.2663	1.9000e-003		0.0241	0.0241		0.0241	0.0241		380.4150	380.4150	7.2900e-003	6.9700e-003	382.6756
Mobile	6.6102	15.0088	63.8891	0.0953	7.8103	0.1264	7.9367	2.0857	0.1192	2.2049		9,509.964 2	9,509.964 2	0.7614		9,528.998 1
Stationary	3.1504	8.8065	8.0340	0.0151		0.4635	0.4635		0.4635	0.4635		1,611.867 1	1,611.867 1	0.2260		1,617.516 7
Total	15.1420	24.1328	72.2440	0.1124	7.8103	0.6142	8.4245	2.0857	0.6070	2.6927		11,502.36 19	11,502.36 19	0.9950	6.9700e-003	11,529.31 39

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	-26.23	4.16	6.29	8.04	10.00	2.11	9.47	10.00	2.03	8.32	0.00	7.94	7.94	5.72	4.91	7.93

3.0 Construction Detail**Construction Phase**

Roseville MOB - Placer County APCD Air District, Winter

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2017	6/2/2017	5	2	
2	Grading	Grading	6/3/2017	7/3/2017	5	21	
3	Building Construction	Building Construction	7/13/2017	11/5/2018	5	343	
4	Paving	Paving	7/4/2017	7/12/2017	5	7	
5	Architectural Coating	Architectural Coating	7/27/2017	11/19/2018	5	343	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 5.7

Acres of Paving: 4.2

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 112,500; Non-Residential Outdoor: 37,500; Striped Parking Area: 10,872 (Architectural Coating – sqft)

OffRoad Equipment

Roseville MOB - Placer County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	100.00	42.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Roseville MOB - Placer County APCD Air District, Winter

3.2 Site Preparation - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483		3,894.950 0	3,894.950 0	1.1934		3,924.785 2
Total	4.9608	52.2754	23.4554	0.0380	18.0663	2.8786	20.9449	9.9307	2.6483	12.5790		3,894.950 0	3,894.950 0	1.1934		3,924.785 2

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0927	0.0715	0.6883	1.4500e-003	0.1479	1.0000e-003	0.1489	0.0392	9.3000e-004	0.0402		143.8409	143.8409	4.9700e-003		143.9650
Total	0.0927	0.0715	0.6883	1.4500e-003	0.1479	1.0000e-003	0.1489	0.0392	9.3000e-004	0.0402		143.8409	143.8409	4.9700e-003		143.9650

Roseville MOB - Placer County APCD Air District, Winter

3.2 Site Preparation - 2017**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483	0.0000	3,894.9500	3,894.9500	1.1934		3,924.7852
Total	4.9608	52.2754	23.4554	0.0380	18.0663	2.8786	20.9449	9.9307	2.6483	12.5790	0.0000	3,894.9500	3,894.9500	1.1934		3,924.7852

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0927	0.0715	0.6883	1.4500e-003	0.1479	1.0000e-003	0.1489	0.0392	9.3000e-004	0.0402		143.8409	143.8409	4.9700e-003		143.9650
Total	0.0927	0.0715	0.6883	1.4500e-003	0.1479	1.0000e-003	0.1489	0.0392	9.3000e-004	0.0402		143.8409	143.8409	4.9700e-003		143.9650

Roseville MOB - Placer County APCD Air District, Winter

3.3 Grading - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3099	0.0000	6.3099	3.3413	0.0000	3.3413			0.0000			0.0000
Off-Road	3.0705	33.8868	17.1042	0.0297		1.7774	1.7774		1.6352	1.6352		3,037.910 7	3,037.910 7	0.9308		3,061.180 9
Total	3.0705	33.8868	17.1042	0.0297	6.3099	1.7774	8.0874	3.3413	1.6352	4.9766		3,037.910 7	3,037.910 7	0.9308		3,061.180 9

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0773	0.0596	0.5736	1.2100e-003	0.1232	8.3000e-004	0.1241	0.0327	7.7000e-004	0.0335		119.8674	119.8674	4.1400e-003		119.9709
Total	0.0773	0.0596	0.5736	1.2100e-003	0.1232	8.3000e-004	0.1241	0.0327	7.7000e-004	0.0335		119.8674	119.8674	4.1400e-003		119.9709

Roseville MOB - Placer County APCD Air District, Winter

3.3 Grading - 2017**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3099	0.0000	6.3099	3.3413	0.0000	3.3413			0.0000			0.0000
Off-Road	3.0705	33.8868	17.1042	0.0297		1.7774	1.7774		1.6352	1.6352	0.0000	3,037.910 7	3,037.910 7	0.9308		3,061.180 9
Total	3.0705	33.8868	17.1042	0.0297	6.3099	1.7774	8.0874	3.3413	1.6352	4.9766	0.0000	3,037.910 7	3,037.910 7	0.9308		3,061.180 9

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0773	0.0596	0.5736	1.2100e-003	0.1232	8.3000e-004	0.1241	0.0327	7.7000e-004	0.0335		119.8674	119.8674	4.1400e-003		119.9709
Total	0.0773	0.0596	0.5736	1.2100e-003	0.1232	8.3000e-004	0.1241	0.0327	7.7000e-004	0.0335		119.8674	119.8674	4.1400e-003		119.9709

Roseville MOB - Placer County APCD Air District, Winter

3.4 Building Construction - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791		2,650.9797	2,650.9797	0.6531		2,667.3078
Total	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791		2,650.9797	2,650.9797	0.6531		2,667.3078

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2522	6.0954	1.5664	0.0122	0.2845	0.0526	0.3371	0.0819	0.0503	0.1322		1,280.0617	1,280.0617	0.0811		1,282.0896
Worker	0.5151	0.3971	3.8240	8.0400e-003	0.8215	5.5700e-003	0.8270	0.2179	5.1400e-003	0.2230		799.1160	799.1160	0.0276		799.8058
Total	0.7673	6.4925	5.3904	0.0203	1.1060	0.0582	1.1641	0.2998	0.0554	0.3552		2,079.1778	2,079.1778	0.1087		2,081.8954

Roseville MOB - Placer County APCD Air District, Winter

3.4 Building Construction - 2017**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791	0.0000	2,650.979 7	2,650.979 7	0.6531		2,667.307 8
Total	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791	0.0000	2,650.979 7	2,650.979 7	0.6531		2,667.307 8

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2522	6.0954	1.5664	0.0122	0.2845	0.0526	0.3371	0.0819	0.0503	0.1322		1,280.061 7	1,280.061 7	0.0811		1,282.089 6
Worker	0.5151	0.3971	3.8240	8.0400e-003	0.8215	5.5700e-003	0.8270	0.2179	5.1400e-003	0.2230		799.1160	799.1160	0.0276		799.8058
Total	0.7673	6.4925	5.3904	0.0203	1.1060	0.0582	1.1641	0.2998	0.0554	0.3552		2,079.177 8	2,079.177 8	0.1087		2,081.895 4

Roseville MOB - Placer County APCD Air District, Winter

3.4 Building Construction - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.935 1	2,620.935 1	0.6421		2,636.988 3
Total	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.935 1	2,620.935 1	0.6421		2,636.988 3

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2176	5.7176	1.3774	0.0122	0.2845	0.0409	0.3254	0.0819	0.0391	0.1210		1,273.954 4	1,273.954 4	0.0760		1,275.854 8
Worker	0.4533	0.3443	3.3069	7.8000e-003	0.8215	5.3900e-003	0.8269	0.2179	4.9700e-003	0.2229		776.1746	776.1746	0.0239		776.7712
Total	0.6709	6.0620	4.6842	0.0200	1.1060	0.0463	1.1523	0.2998	0.0441	0.3439		2,050.129 1	2,050.129 1	0.0999		2,052.626 0

Roseville MOB - Placer County APCD Air District, Winter

3.4 Building Construction - 2018**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099	0.0000	2,620.935 1	2,620.935 1	0.6421		2,636.988 3
Total	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099	0.0000	2,620.935 1	2,620.935 1	0.6421		2,636.988 3

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2176	5.7176	1.3774	0.0122	0.2845	0.0409	0.3254	0.0819	0.0391	0.1210		1,273.954 4	1,273.954 4	0.0760		1,275.854 8
Worker	0.4533	0.3443	3.3069	7.8000e-003	0.8215	5.3900e-003	0.8269	0.2179	4.9700e-003	0.2229		776.1746	776.1746	0.0239		776.7712
Total	0.6709	6.0620	4.6842	0.0200	1.1060	0.0463	1.1523	0.2998	0.0441	0.3439		2,050.129 1	2,050.129 1	0.0999		2,052.626 0

Roseville MOB - Placer County APCD Air District, Winter

3.5 Paving - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9449	20.7178	15.0320	0.0228		1.1592	1.1592		1.0665	1.0665		2,330.646 1	2,330.646 1	0.7141		2,348.498 8
Paving	1.5720					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	3.5169	20.7178	15.0320	0.0228		1.1592	1.1592		1.0665	1.0665		2,330.646 1	2,330.646 1	0.7141		2,348.498 8

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0773	0.0596	0.5736	1.2100e-003	0.1232	8.3000e-004	0.1241	0.0327	7.7000e-004	0.0335		119.8674	119.8674	4.1400e-003		119.9709
Total	0.0773	0.0596	0.5736	1.2100e-003	0.1232	8.3000e-004	0.1241	0.0327	7.7000e-004	0.0335		119.8674	119.8674	4.1400e-003		119.9709

Roseville MOB - Placer County APCD Air District, Winter

3.5 Paving - 2017**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9449	20.7178	15.0320	0.0228		1.1592	1.1592		1.0665	1.0665	0.0000	2,330.646 1	2,330.646 1	0.7141		2,348.498 8
Paving	1.5720					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	3.5169	20.7178	15.0320	0.0228		1.1592	1.1592		1.0665	1.0665	0.0000	2,330.646 1	2,330.646 1	0.7141		2,348.498 8

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0773	0.0596	0.5736	1.2100e-003	0.1232	8.3000e-004	0.1241	0.0327	7.7000e-004	0.0335		119.8674	119.8674	4.1400e-003		119.9709
Total	0.0773	0.0596	0.5736	1.2100e-003	0.1232	8.3000e-004	0.1241	0.0327	7.7000e-004	0.0335		119.8674	119.8674	4.1400e-003		119.9709

Roseville MOB - Placer County APCD Air District, Winter

3.6 Architectural Coating - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.1739					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.1909
Total	2.5062	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.1909

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1030	0.0794	0.7648	1.6100e-003	0.1643	1.1100e-003	0.1654	0.0436	1.0300e-003	0.0446		159.8232	159.8232	5.5200e-003		159.9612
Total	0.1030	0.0794	0.7648	1.6100e-003	0.1643	1.1100e-003	0.1654	0.0436	1.0300e-003	0.0446		159.8232	159.8232	5.5200e-003		159.9612

Roseville MOB - Placer County APCD Air District, Winter

3.6 Architectural Coating - 2017**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.1739					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.1909
Total	2.5062	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.1909

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1030	0.0794	0.7648	1.6100e-003	0.1643	1.1100e-003	0.1654	0.0436	1.0300e-003	0.0446		159.8232	159.8232	5.5200e-003		159.9612
Total	0.1030	0.0794	0.7648	1.6100e-003	0.1643	1.1100e-003	0.1654	0.0436	1.0300e-003	0.0446		159.8232	159.8232	5.5200e-003		159.9612

Roseville MOB - Placer County APCD Air District, Winter

3.6 Architectural Coating - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.1739					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	2.4725	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0907	0.0689	0.6614	1.5600e-003	0.1643	1.0800e-003	0.1654	0.0436	9.9000e-004	0.0446		155.2349	155.2349	4.7700e-003		155.3542
Total	0.0907	0.0689	0.6614	1.5600e-003	0.1643	1.0800e-003	0.1654	0.0436	9.9000e-004	0.0446		155.2349	155.2349	4.7700e-003		155.3542

Roseville MOB - Placer County APCD Air District, Winter

3.6 Architectural Coating - 2018**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.1739					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
Total	2.4725	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0907	0.0689	0.6614	1.5600e-003	0.1643	1.0800e-003	0.1654	0.0436	9.9000e-004	0.0446		155.2349	155.2349	4.7700e-003		155.3542
Total	0.0907	0.0689	0.6614	1.5600e-003	0.1643	1.0800e-003	0.1654	0.0436	9.9000e-004	0.0446		155.2349	155.2349	4.7700e-003		155.3542

4.0 Operational Detail - Mobile

Roseville MOB - Placer County APCD Air District, Winter

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.6102	15.0088	63.8891	0.0953	7.8103	0.1264	7.9367	2.0857	0.1192	2.2049		9,509.964 2	9,509.964 2	0.7614		9,528.998 1
Unmitigated	6.9302	16.0390	68.7250	0.1050	8.6781	0.1384	8.8165	2.3174	0.1306	2.4480		10,482.09 35	10,482.09 35	0.8213		10,502.62 58

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Medical Office Building	2,358.00	672.00	116.25	3,126,921	2,814,229
Parking Lot	0.00	0.00	0.00		
Total	2,358.00	672.00	116.25	3,126,921	2,814,229

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Medical Office Building	9.50	7.30	7.30	29.60	51.40	19.00	50	40	10
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Roseville MOB - Placer County APCD Air District, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Medical Office Building	0.472854	0.047686	0.207327	0.157858	0.035960	0.007313	0.016190	0.010860	0.000931	0.000377	0.034753	0.000753	0.007138
Parking Lot	0.472854	0.047686	0.207327	0.157858	0.035960	0.007313	0.016190	0.010860	0.000931	0.000377	0.034753	0.000753	0.007138

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0349	0.3170	0.2663	1.9000e-003		0.0241	0.0241		0.0241	0.0241		380.4150	380.4150	7.2900e-003	6.9700e-003	382.6756
NaturalGas Unmitigated	0.0367	0.3332	0.2799	2.0000e-003		0.0253	0.0253		0.0253	0.0253		399.8388	399.8388	7.6600e-003	7.3300e-003	402.2149

Roseville MOB - Placer County APCD Air District, Winter

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Medical Office Building	3398.63	0.0367	0.3332	0.2799	2.0000e-003		0.0253	0.0253		0.0253	0.0253		399.8388	399.8388	7.6600e-003	7.3300e-003	402.2149
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0367	0.3332	0.2799	2.0000e-003		0.0253	0.0253		0.0253	0.0253		399.8388	399.8388	7.6600e-003	7.3300e-003	402.2149

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Medical Office Building	3.23353	0.0349	0.3170	0.2663	1.9000e-003		0.0241	0.0241		0.0241	0.0241		380.4150	380.4150	7.2900e-003	6.9700e-003	382.6756
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0349	0.3170	0.2663	1.9000e-003		0.0241	0.0241		0.0241	0.0241		380.4150	380.4150	7.2900e-003	6.9700e-003	382.6756

6.0 Area Detail**6.1 Mitigation Measures Area**

Roseville MOB - Placer County APCD Air District, Winter

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.3465	5.1000e-004	0.0547	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1156	0.1156	3.2000e-004		0.1235
Unmitigated	1.8787	5.1000e-004	0.0547	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1156	0.1156	3.2000e-004		0.1235

Roseville MOB - Placer County APCD Air District, Winter

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2043					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6692					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.2200e-003	5.1000e-004	0.0547	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1156	0.1156	3.2000e-004		0.1235
Total	1.8787	5.1000e-004	0.0547	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1156	0.1156	3.2000e-004		0.1235

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2043					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.1369					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.2200e-003	5.1000e-004	0.0547	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1156	0.1156	3.2000e-004		0.1235
Total	5.3465	5.1000e-004	0.0547	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1156	0.1156	3.2000e-004		0.1235

7.0 Water Detail

Roseville MOB - Placer County APCD Air District, Winter

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

8.0 Waste Detail**8.1 Mitigation Measures Waste**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	4	14	480	0.73	Diesel

Boilers

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

Equipment Type	Number
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Roseville MOB - Placer County APCD Air District, Winter

10.1 Stationary Sources**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (300 - 600 HP)	3.1504	8.8065	8.0340	0.0151		0.4635	0.4635		0.4635	0.4635		1,611.867 1	1,611.867 1	0.2260		1,617.516 7
Total	3.1504	8.8065	8.0340	0.0151		0.4635	0.4635		0.4635	0.4635		1,611.867 1	1,611.867 1	0.2260		1,617.516 7

11.0 Vegetation

Roseville MOB
Placer County APCD Air District, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	4	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	10	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Air Compressors	5.31000E-002	3.54030E-001	3.18770E-001	5.10000E-004	2.71000E-002	2.71000E-002	0.00000E+000	4.37884E+001	4.37884E+001	4.31000E-003	0.00000E+000	4.38962E+001
Cranes	9.05300E-002	1.07918E+000	3.94210E-001	8.70000E-004	4.72500E-002	4.34700E-002	0.00000E+000	7.94950E+001	7.94950E+001	2.46100E-002	0.00000E+000	8.01102E+001
Excavators	3.71000E-003	4.11400E-002	3.50300E-002	5.00000E-005	2.02000E-003	1.86000E-003	0.00000E+000	5.02845E+000	5.02845E+000	1.54000E-003	0.00000E+000	5.06697E+000
Forklifts	9.76600E-002	8.56180E-001	6.30110E-001	7.90000E-004	6.92300E-002	6.36900E-002	0.00000E+000	7.21894E+001	7.21894E+001	2.23500E-002	0.00000E+000	7.27481E+001
Generator Sets	9.06200E-002	7.26840E-001	6.44250E-001	1.13000E-003	4.72800E-002	4.72800E-002	0.00000E+000	9.69331E+001	9.69331E+001	7.30000E-003	0.00000E+000	9.71155E+001
Graders	5.62000E-003	7.84400E-002	2.05700E-002	7.00000E-005	2.56000E-003	2.35000E-003	0.00000E+000	6.48925E+000	6.48925E+000	1.99000E-003	0.00000E+000	6.53896E+000
Pavers	2.62000E-003	2.93400E-002	2.06500E-002	3.00000E-005	1.44000E-003	1.33000E-003	0.00000E+000	3.05128E+000	3.05128E+000	9.30000E-004	0.00000E+000	3.07466E+000
Paving Equipment	2.01000E-003	2.28600E-002	1.80300E-002	3.00000E-005	1.14000E-003	1.05000E-003	0.00000E+000	2.64594E+000	2.64594E+000	8.10000E-004	0.00000E+000	2.66621E+000
Rollers	2.18000E-003	2.03100E-002	1.39400E-002	2.00000E-005	1.47000E-003	1.35000E-003	0.00000E+000	1.70292E+000	1.70292E+000	5.20000E-004	0.00000E+000	1.71596E+000
Rubber Tired Dozers	1.66200E-002	1.80450E-001	6.24600E-002	1.20000E-004	8.83000E-003	8.13000E-003	0.00000E+000	1.07034E+001	1.07034E+001	3.28000E-003	0.00000E+000	1.07854E+001
Tractors/Loaders/ Backhoes	1.39160E-001	1.35824E+000	1.14609E+000	1.51000E-003	9.88200E-002	9.09100E-002	0.00000E+000	1.38786E+002	1.38786E+002	4.29300E-002	0.00000E+000	1.39859E+002
Welders	7.93700E-002	2.92040E-001	3.22090E-001	4.40000E-004	2.03400E-002	2.03400E-002	0.00000E+000	3.22798E+001	3.22798E+001	6.47000E-003	0.00000E+000	3.24417E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Air Compressors	5.31000E-002	3.54030E-001	3.18770E-001	5.10000E-004	2.71000E-002	2.71000E-002	0.00000E+000	4.37883E+001	4.37883E+001	4.31000E-003	0.00000E+000	4.38961E+001
Cranes	9.05300E-002	1.07918E+000	3.94210E-001	8.70000E-004	4.72500E-002	4.34700E-002	0.00000E+000	7.94949E+001	7.94949E+001	2.46100E-002	0.00000E+000	8.01101E+001
Excavators	3.71000E-003	4.11400E-002	3.50300E-002	5.00000E-005	2.02000E-003	1.86000E-003	0.00000E+000	5.02845E+000	5.02845E+000	1.54000E-003	0.00000E+000	5.06697E+000
Forklifts	9.76600E-002	8.56180E-001	6.30110E-001	7.90000E-004	6.92300E-002	6.36900E-002	0.00000E+000	7.21893E+001	7.21893E+001	2.23500E-002	0.00000E+000	7.27480E+001
Generator Sets	9.06200E-002	7.26840E-001	6.44250E-001	1.13000E-003	4.72800E-002	4.72800E-002	0.00000E+000	9.69330E+001	9.69330E+001	7.30000E-003	0.00000E+000	9.71154E+001
Graders	5.62000E-003	7.84400E-002	2.05700E-002	7.00000E-005	2.56000E-003	2.35000E-003	0.00000E+000	6.48925E+000	6.48925E+000	1.99000E-003	0.00000E+000	6.53895E+000
Pavers	2.62000E-003	2.93400E-002	2.06500E-002	3.00000E-005	1.44000E-003	1.33000E-003	0.00000E+000	3.05128E+000	3.05128E+000	9.30000E-004	0.00000E+000	3.07465E+000
Paving Equipment	2.01000E-003	2.28600E-002	1.80300E-002	3.00000E-005	1.14000E-003	1.05000E-003	0.00000E+000	2.64594E+000	2.64594E+000	8.10000E-004	0.00000E+000	2.66621E+000
Rollers	2.18000E-003	2.03100E-002	1.39400E-002	2.00000E-005	1.47000E-003	1.35000E-003	0.00000E+000	1.70292E+000	1.70292E+000	5.20000E-004	0.00000E+000	1.71596E+000
Rubber Tired Dozers	1.66200E-002	1.80450E-001	6.24600E-002	1.20000E-004	8.83000E-003	8.13000E-003	0.00000E+000	1.07034E+001	1.07034E+001	3.28000E-003	0.00000E+000	1.07854E+001
Tractors/Loaders/Balckhoes	1.39160E-001	1.35824E+000	1.14609E+000	1.51000E-003	9.88200E-002	9.09100E-002	0.00000E+000	1.38786E+002	1.38786E+002	4.29300E-002	0.00000E+000	1.39859E+002
Welders	7.93700E-002	2.92040E-001	3.22090E-001	4.40000E-004	2.03400E-002	2.03400E-002	0.00000E+000	3.22798E+001	3.22798E+001	6.47000E-003	0.00000E+000	3.24417E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.14186E-006	1.14186E-006	0.00000E+000	0.00000E+000	1.36686E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.25794E-006	1.25794E-006	0.00000E+000	0.00000E+000	1.12345E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.10820E-006	1.10820E-006	0.00000E+000	0.00000E+000	1.09969E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23797E-006	1.23797E-006	0.00000E+000	0.00000E+000	1.13267E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.52930E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	3.25239E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.34281E-007	9.34281E-007	0.00000E+000	0.00000E+000	9.27178E-007
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.22491E-006	1.22491E-006	0.00000E+000	0.00000E+000	1.21551E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23916E-006	1.23916E-006	0.00000E+000	0.00000E+000	1.23298E-006

Fugitive Dust Mitigation

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

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

No	Clean Paved Road	% PM Reduction	0.00				
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		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.03	0.01	0.03	0.01	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.18	0.05	0.18	0.05	0.00	0.00
Grading	Fugitive Dust	0.07	0.04	0.07	0.04	0.00	0.00
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.02	0.01	0.02	0.01	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	7.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.36	1.36	1.31	1.19	1.36
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	4.33	6.33	7.34	9.23	8.75	8.78	0.00	9.26	9.26	7.50	0.00	9.26
Natural Gas	4.93	4.87	4.86	2.78	4.76	4.76	0.00	4.86	4.86	4.72	4.96	4.86
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	12.36	11.00	11.22	12.35	12.43	11.61
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting: Suburban Center

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00	0.00	0.00	
No	Land Use	Increase Diversity	0.11	0.33		
No	Land Use	Improve Walkability Design	0.00	0.00		
No	Land Use	Improve Destination Accessibility	0.00	0.00		
Yes	Land Use	Increase Transit Accessibility	0.16	0.25		
No	Land Use	Integrate Below Market Rate Housing	0.00	0.00		
	Land Use	Land Use SubTotal	0.10			

No	Neighborhood Enhancements	Improve Pedestrian Network	2.00	Project Site and Connecting Off-Site		
No	Neighborhood Enhancements	Provide Traffic Calming Measures	0.00			
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00	0.00		
No	Transit Improvements	Expand Transit Network	0.00	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		0.00	
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.10			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"	4.50			
No	Commute	Workplace Parking Charge		0.00		
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00		2.00	
No	Commute	Provide Ride Sharing Program	10.00			
	Commute	Commute Subtotal	0.00			

No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.10			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
Yes	Use Low VOC Cleaning Supplies	
Yes	Use Low VOC Paint (Residential Interior)	100.00
Yes	Use Low VOC Paint (Residential Exterior)	100.00
Yes	Use Low VOC Paint (Non-residential Interior)	100.00
Yes	Use Low VOC Paint (Non-residential Exterior)	100.00
Yes	Use Low VOC Paint (Parking)	100.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	5.00	
No	Install High Efficiency Lighting	0.00	
No	On-site Renewable	0.00	0.00

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

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
Yes	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
Yes	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

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

**PERSONAL COMMUNICATION BETWEEN WAYNE SHIJO,
PROJECT MANAGER, KD ANDERSON AND ASSOCIATES, INC.
AND ROD STINSON, DIVISION MANAGER/AIR QUALITY
SPECIALIST, RANEY PLANNING AND MANAGEMENT**

Subject: FW: Eureka Road MOB

From: Wayne Shijo <WShijo@kdanderson.com>

Date: February 8, 2017 at 5:01:47 PM PST

To: 'Rod Stinson' <rods@raneymanagement.com>

Cc: "Travis Batts (Travis@pappasinvestments.com)" <Travis@pappasinvestments.com>

Subject: RE: Eureka Road MOB

Rod -

The purpose of this E-mail message is to address primary, diverted, and pass-by trips for the Eureka Gateway Medical Office Building project in Roseville. In particular, the following describes reasons why the percent of diverted trips to the Eureka Gateway project may be expected to be higher than default values from the CalEEMod emissions model.

The CalEEMod model includes default values for primary, diverted, and pass-by trip percentages. These percentages are presented in your E-mail message below. The default percentages are based on statewide or national averages, and do not account for site-specific or project-specific factors. Two reasons why the percent of diverted trips to the Eureka Gateway Medical Office Building project may be higher than the CalEEMod default values are:

- the relocation of the UC Davis Medical Group, and
- the presence of nearby high-volume roadways.

Each of these reasons are described below.

Relocation. The UC Davis Medical Group is currently located at 2261 Douglas Boulevard. This location is on Douglas Boulevard between Eureka Road and East Roseville Parkway. The UC Davis Medical Group proposes to relocate to the Eureka Gateway Medical Office Building, which is approximately 0.6 miles away from their current location. As an existing land use, the UC Davis Medical Group has an established presence and it is likely that, with the relocation, patients and employees would geographically shift (i.e., divert) their travel to the new location. Because the UC Davis Medical Group at the Eureka Gateway Medical Office Building would be a relocated use, rather than a new land use, it is likely the percentage of diverted trips would be higher than average - higher than the CalEEMod default values.

High-Volume Roadways. The Eureka Gateway Medical Office Building project site is located less than a mile away from three major roadways:

- Interstate 80 (I-80) is a ten-lane interstate freeway located 0.75 miles from the project site,
- Douglas Boulevard is a six-lane arterial roadway located 0.5 miles from the project site, and
- Sunrise Avenue is a six-lane arterial roadway located 0.4 miles from the project site.

These three high-volume roadways are a substantial source of potential diverted trips to the Eureka Gateway Medical Office Building project. An example of a diverted trip would involve a driver who currently makes commute trips along I-80 even without the project. With

implementation of the Eureka Gateway Medical Office Building, this driver would divert from I-80, and make an intermediate stop at the project site on the way to or from work for a medical appointment. As shown in the CalEEMod default values, travel for an average medical office building will include some diverted trips. The key aspect to diverted trips is having a nearby major transportation corridor. The unusual aspect of Eureka Gateway Medical Office Building project is having three major transportation corridors within one mile.

Because of the presence of three major transportation corridors within one mile, the Eureka Gateway Medical Office Building project is considered to have a larger-than-average source of potential diverted trips. This larger-than-average source of diverted trips would be expected to then result in a higher-than-average percentage of diverted trips.

With the short-distance relocation of the UC Davis Medical Group and the presence of three nearby high-volume roadways, it would be reasonable to expect the percentage of diverted trips to the Eureka Gateway Medical Office Building project would be higher than average. It would be reasonable to expect diverted trip percentages consistent with those adjusted percentage presented in your E-mail message below.

Please let me know if you have any questions about this matter.

Wayne

Wayne Shijo
KD Anderson & Associates
3853 Taylor Road, Suite G
Loomis, CA 95650

Phone: 916/660-1555
Cell: 916/205-7032
Fax: 916/660-1535

From: Rod Stinson [<mailto:rods@raneymanagement.com>]
Sent: Tuesday, February 07, 2017 2:03 PM
To: Wayne Shijo
Subject: Eureka Road MOB

Wayne,

To recap, the default Trip Purpose Percentages have been adjusted as follows:

	Default	Adjusted
Primary	60	50
Diverted	30	40
Pass-by	10	10

Based on my discussion with you, we made these changes to better reflect the project location as well as to capture the fact that some of these trips are not "new" trips to the area. Please feel free to call if you have any questions.

Thanks!

Rod Stinson

Division Manager/Air Quality Specialist



1501 Sports Drive, Suite A
Sacramento, CA 95834
Office: 916.372.6100
Fax: 916.419.6108

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Initial Study - Attachment 2

January 30, 2017

Mr. Travis Batts
Pappas Gateway LP, a California Limited Partnership
555 University Avenue, Suite 200
Sacramento, CA 95825

Subject: *Eureka Gateway Medical Office Building Project Trip Generation Study*

Dear Mr. Batts:

On behalf of KD Anderson & Associates, I am pleased to submit this letter report on vehicle trip generation associated with the Eureka Gateway Medical Office Building project. This report presents estimates of the number of vehicle trips that would be generated by the proposed project, and estimates of the effectiveness of measures that would reduce the number of vehicle trips.

Executive Summary

This letter report presents an estimate of the effectiveness of potential measures to reduce the number of vehicle trips generated by the Eureka Gateway Medical Office Building project. Overall, these measures may be expected to reduce vehicle trips by:

- 13.0 percent for the daily period,
- 30.2 percent for inbound trips during the a.m. peak hour,
- 10.2 percent for outbound trips during the a.m. peak hour,
- 12.2 percent for inbound trips during the p.m. peak hour, and
- 22.6 percent for outbound trips during the p.m. peak hour.

The enclosed **Table 1** presents a summary of the vehicle trip reduction percentages.

Project Understanding

Our understanding is the Eureka Gateway Medical Office Building project involves a structure with a maximum building size of 75,000 square feet of medical office land uses. The project site is 5.7 acres in size located northeast of Eureka Road and southeast of Rocky Ridge Drive in the City of Roseville. The current project site plan anticipates 453 parking stalls.

A traffic impact study has been prepared for the Eureka Gateway Medical Office Building project. The traffic impact study uses trip generation estimates based on the Institute of Transportation Engineers (ITE) *Trip Generation Manual*. While the ITE *Trip Generation*

Manual is an industry-standard reference document, it reflects nationwide average trip generation rates, and does not reflect application of specific trip reduction measures. Trip reduction measures, also referred to as Transportation Systems Management (TSM) measures, may be considered for the Eureka Gateway Medical Office Building project.

Several TSM measures which would reduce the number of vehicle trips generated by the Eureka Gateway Medical Office Building project are being contemplated. The following is a brief description of measures being contemplated for the proposed project.

- Short-term and long-term bicycle parking facilities would be installed. Bicycle parking facilities would be installed adjacent to the east and west building entrances. The project site plan includes 24 bicycle parking spaces.
- Designated carpool, vanpool and Clean Air vehicle parking spaces would be provided.
- The project will work the City of Roseville towards producing a TSM Plan. This integrated and cooperative approach will promote alternative transportation options to reduce traffic congestion and improve air quality.
- Seating areas will be provided at the main entrance of the building, for Dial-a-Ride and other ride share services for passenger pick up. (Dial-A-Ride is a shared ride transit service that operates within the city limits of Roseville).
- An electric vehicle charging station will be provided.
- An existing pad for a future transit bus stop is located on the southeast side of Rocky Ridge Drive, approximately 125 feet from one of the project site driveways.
- The northern corner of the Eureka Gateway Medical Office Building project site is located approximately 230 feet from the eastern corner of the existing Rosemeade at Olympus Pointe site. Rosemeade at Olympus Pointe includes 465 multiple family dwelling units. The Eureka Gateway Medical Office Building project site and the Rosemeade at Olympus Pointe site are connected by an existing sidewalk and an existing bicycle lane along Rocky Ridge Drive.
- The Eureka Gateway Medical Office Building project site is walkable from other existing and planned commercial uses. Existing restaurants and retail centers are present to the north, south, and west of the project site. Pedestrian connectivity from the street and a designated path along landscaped areas would be provided.

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- The current project site plan anticipates 453 parking stalls, which would be 9.4 percent less than the 500 spaces that would be calculated using the Roseville Municipal Code rate of one space per 150 building square feet applied to the maximum 75,000 square feet building size. The reduced number of parking spaces would encourage carpooling and public transit use.

Baseline Trip Generation Estimates

The enclosed **Table 2** and **Table 3** present trip generation estimates for the Eureka Gateway Medical Office Building project. These estimates are for a baseline condition – these estimates do not include any reductions associated with TSM measures. The estimates presented in **Table 2** and **Table 3** are based on the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 9th Edition*. While the *Trip Generation Manual, 9th Edition* is an industry-standard reference document, it reflects nationwide average trip generation rates, and does not reflect application of specific trip reduction measures.

As shown in **Table 3**, the Eureka Gateway Medical Office Building project would generate:

- 2,710 trips per day,
- 179 trips during the a.m. peak hour, and
- 268 trips during the p.m. peak hour.

Information Sources

Trip reduction estimates presented in this letter report are based on information from several sources. These sources are described below.

Mixed Land Use Internal Trips. The Eureka Gateway Medical Office Building project and the Rosemeade at Olympus Pointe residential complex east of the project site are separate projects. However, the proposed project and residential complex are in close proximity to each other. In addition, the two areas are connected by an existing sidewalk and existing bicycle lane along Rocky Ridge Drive. Both the Eureka Gateway Medical Office Building and the Rosemeade at Olympus Pointe residential complex have vehicle access points along Rocky Ridge Drive. As a result, some travel would occur between the proposed project site and the residential complex.

Travel between the Eureka Gateway Medical Office Building site and the Rosemeade at Olympus Pointe complex was estimated using methods presented in the August 2010 ITE Journal article *Improved Estimation of Internal Trip Capture for Mixed Use Development*.

Individual Transportation Systems Management Measures. As noted above, baseline trip generation estimates based on the ITE *Trip Generation Manual* do not include the effect of TSM measures. This letter report presents estimates of the effectiveness of TSM measures contemplated for the Eureka Gateway Medical Office Building project.

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The estimates of the effectiveness of TSM measures are based on methods presented in the California Air Pollution Control Officers Association (CAPCOA) report *Quantifying Greenhouse Gas Mitigation Measures: A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures*. The CAPCOA report provides methods for quantifying emission reductions from a specified list of mitigation measures, primarily focused on project-level mitigation.

A list of transportation measures from the CAPCOA report was provided for your review. Based on this review, a list of potential TSM measures was identified for the Eureka Gateway Medical Office Building project, and an assessment of these measures is presented in this letter report.

Transportation Systems Management Plans. The City of Roseville Transportation Systems Management Ordinance established the City's TSM Program. The TSM Program requires the preparation of TSM Plans for development projects anticipated to employ 50 or more employees at the work location.

As noted above, a TSM Plan will be prepared for the Eureka Gateway Medical Office Building project. TSM Plans previously prepared for two projects were reviewed for this letter report:

- the TSM Plan for the Sutter Roseville Medical Center – One Medical Plaza; and
- the TSM Plan for the Kaiser Permanente Medical Campus, Medical Office Buildings and Hospitals – 1600 Eureka Road and the Riverside Medical Offices – 1001 Riverside Avenue.

Both of these projects include land use types similar to the Eureka Gateway Medical Office Building project, and are considered possible prototypes for the Eureka Gateway Medical Office Building project TSM Plan.

Mixed Land Use Internal Trips

Methods presented in the previously-cited article *Improved Estimation of Internal Trip Capture for Mixed Use Development* were used to estimate the number of trips that would occur between the Eureka Gateway Medical Office Building project site and the Rosemeade at Olympus Pointe residential complex east of the project site. Because these trips would be made between the proposed project site and the adjacent residential area, these trips would be localized to the immediately adjacent roadways. Expressed as a percentage of baseline trips generated by the proposed project, these trips would be:

- 3% of inbound trips and 0% of outbound trips during the a.m. peak hour, and
- 2% of inbound trips and 0% of outbound trips during the p.m. peak hour.

The article *Improved Estimation of Internal Trip Capture for Mixed Use Development* does not provide a method for estimating mixed land use internal trips during the daily period. However,

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based on the a.m. peak hour and p.m. peak hour estimates, it would be reasonable to expect 2% of inbound trips and 0% of outbound trips over the daily period would be made between the project site and the residential neighborhood.

The percent reduction estimates described above are shown in **Table 1**.

Increase Location Efficiency

As noted above, the CAPCOA report provides methods for quantifying the effectiveness of TSM measures. Some of the measures presented in the report are grouped together. Some measures are sub-measures intended to be components of other measures. The Increase Location Efficiency measure (CAPCOA measure number LUT-2) is one such measure.

The CAPCOA report notes the Increase Location Efficiency is “not intended as a separate strategy, rather a documentation of empirical data to justify the ‘cap’ for all land use/location strategies.” That is, the Increase Location Efficiency measure sets the maximum overall amount of reduction for a group of component measures. For projects in suburban areas, the CAPCOA report sets a maximum overall reduction of 10 percent for all land use/location measures.

For the Eureka Gateway Medical Office Building project, the 10 percent maximum is applied to the following three measures:

- Locate Project near Bike Path/Bike Lane (CAPCOA measure number LUT-8),
- Improve Design of Development (CAPCOA measure number LUT-9), and
- Provide Bike Parking in Non-Residential Projects (CAPCOA measure number SDT-6).

As shown in **Table 1**, these three measures are estimated to result in a combined 7.2 percent reduction ($0.6 + 6 + 0.6 = 7.2$). This combine reduction is consistent with the overall 10 percent maximum. The following describes the three measures listed above in more detail.

Locate Project near Bike Path/Bike Lane

The CAPCOA report notes the measure Locate Project near Bike Path/Bike Lane (CAPCOA measure number LUT-8) applies to projects with access to existing or planned bicycle facilities. The measure specifically applies to projects within one-half mile of bicycle paths (referred to as Class I facilities) or bicycle lanes (Class II facilities), and specifically applies to projects with access to a network of offsite facilities.

Bicycle lanes currently are present along both sides of Rocky Ridge Drive and Eureka Road adjacent to the project site. Bicycle lanes currently are also present along both sides of East Roseville Parkway and Lead Hill Boulevard, which provide access to other nearby land uses (e.g., the Rosemeade at Olympus Pointe complex). In addition, the Eureka Gateway Medical Office Building project site is across Rocky Ridge Drive from the Stone Point Master Plan area, which includes a system of bicycle lanes and bicycle trails throughout the Master Plan area.

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The CAPCOA report estimates this measure would result in a 0.625 percent reduction in vehicle travel. This amount is shown as 0.6 percent in **Table 1**.

Improve Design of Development

In describing the measure Improve Design of Development (CAPCOA measure number LUT-9), the CAPCOA report notes,

“Improved street network characteristics within a neighborhood include street accessibility, usually measured in terms of average block size, proportion of fourway intersections, or number of intersections per square mile. Design is also measured in terms of sidewalk coverage, building setbacks, street widths, pedestrian crossings, presence of street trees, and a host of other physical variables that differentiate pedestrian-oriented environments from auto-oriented environments.”

As noted earlier in this letter report, the northern corner of the Eureka Gateway Medical Office Building project site is located approximately 230 feet from the eastern corner of the existing Rosemeade at Olympus Pointe site. The project site and Rosemeade at Olympus Pointe are connected by an existing sidewalk and an existing bicycle lane along Rocky Ridge Drive.

The Eureka Gateway Medical Office Building project site is walkable from other existing and planned commercial uses. Existing restaurants and retail centers are present to the north, south, and west of the project site. Existing pedestrian crosswalks are provided at the following intersections:

- Rocky Ridge Drive & Eureka Road,
- Lead Hill Boulevard & Eureka Road, and
- Rocky Ridge Road & Stone Point Drive.

In addition, pedestrian-protected right turn islands are provided on all four corners of the first two intersections listed above.

The Eureka Gateway Medical Office Building project site provides pedestrian connectivity from the adjacent roadways and a designated path along landscaped areas.

Based on methods presented in the CAPCOA report, this measure is estimated to result in a 6 percent reduction in vehicle travel. This amount is shown in **Table 1**.

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Provide Bike Parking in Non-Residential Projects

The Eureka Gateway Medical Office Building project would include short-term and long-term bicycle parking facilities. As noted earlier in this letter report, the project would provide 24 bicycle parking spaces adjacent to the east and west building entrances.

The measure Provide Bike Parking in Non-Residential Projects (CAPCOA measure number SDT-6) would work in conjunction with other TSM measures, for example the Locate Project near Bike Path/Bike Lane measure (CAPCOA measure number LUT-8).

The CAPCOA report estimates this measure would result in a 0.625 percent reduction in vehicle travel. This amount is shown as 0.6 percent in **Table 1**.

Provide Pedestrian Network Improvements

In describing the measure Provide Pedestrian Network Improvements (CAPCOA measure number SDT-1), the CAPCOA report notes the measure applies where, “The project will provide a pedestrian access network that internally links all uses and connects to all existing or planned external streets and pedestrian facilities contiguous with the project site.”

As shown in the project site plan, the proposed project includes sidewalks along project site frontages on Rocky Ridge Drive and Eureka Road. In addition, on-site pedestrian features (e.g., walkways and trees) and the pedestrian access connections to adjacent uses west and southeast of the project site would provide a pedestrian-oriented environment.

Based on methods presented in the CAPCOA report, this measure is estimated to result in a 2 percent reduction in vehicle travel. This amount is shown in **Table 1**.

Provide Traffic Calming Measures

As described in the CAPCOA report, the measure Provide Traffic Calming Measures (CAPCOA measure number SDT-2) includes marked crosswalks at intersections, and marked crosswalks across adjacent roadways. Marked crosswalks are currently present at following intersections:

- Rocky Ridge Drive & Eureka Road,
- Lead Hill Boulevard & Eureka Road, and
- Rocky Ridge Road & Stone Point Drive.

These crosswalks provide pedestrian across adjacent roadways. In addition, pedestrian-protected right turn islands are provided on all four corners of the first two intersections listed above.

Based on methods presented in the CAPCOA report, this measure is estimate to result in a 0.5 percent reduction in vehicle travel. This amount is shown in **Table 1**.

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Provide Electric Vehicle Parking

In describing the measure Provide Electric Vehicle Parking (CAPCOA measure number SDT-8), the CAPCOA report notes the measure applies where, “This project will implement accessible electric vehicle parking. The project will provide conductive/inductive electric vehicle charging stations and signage prohibiting parking for non-electric vehicles.”

As noted earlier in this letter report, the Eureka Gateway Medical Office Building project would provide electric vehicle charging stations.

In the CAPCOA report, the measure Provide Electric Vehicle Parking may be considered to be a part of Implement a Neighborhood Electric Vehicle (NEV) Network (CAPCOA measure number SDT-3). However, based on methods presented in the CAPCOA report, this measure with internal project site connectors, not part of an external network, is estimated to result in a 0.5 percent reduction in vehicle travel. This amount is shown in **Table 1**.

Transportation Systems Management Plans

As noted earlier in this letter report, the City of Roseville TSM Ordinance established the City’s TSM Program and requires the preparation of TSM Plans for development projects anticipated to employ 50 or more employees at the work location. Therefore, a TSM Plan will be prepared for the Eureka Gateway Medical Office Building project.

The measures included in the Eureka Gateway Medical Office Building project TSM Plan are expected to be similar to those included in TSM Plans for two previous projects with similar types of land uses: the Sutter Roseville Medical Center, and the Kaiser Permanente Medical Campus.

TSM Plans prepared in compliance with the City of Roseville TSM Ordinance are required to include measures that would reduce home-to-work commuting by 20 percent.

The City of Roseville TSM Program is consistent with the measure Implement Commute Trip Reduction Program – Required Implementation/Monitoring (CAPCOA measure number TRT-2) presented in the CAPCOA report. The Eureka Gateway Medical Office Building TSM Plan is expected to include several other measures included in the CAPCOA report:

- Provide Ride-Sharing Programs (CAPCOA measure number TRT-3),
- Implement Subsidized or Discounted Transit Program (CAPCOA measure number TRT-4),
- Encourage Telecommuting and Alternative Work Schedules (CAPCOA measure number TRT-6),

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- Implement Preferential Parking Permit Program (CAPCOA measure number TRT-8),
- Provide Local Shuttles (CAPCOA measure number TST-6) (The project would provide a seating area at the main entrance for City of Roseville dial-a-ride passengers.), and

In estimating the effectiveness of the TSM Plan, it is important to note the 20 percent reduction applies to home-to-work commute trips, rather than the overall number of trips generated by the proposed project. The 20 percent reduction applies to commute travel associated with employees at the project site, but does not apply to patients and visitors for example.

The number of employees that would work at the Eureka Gateway Medical Office Building project is not known at this time. However, for this letter report, data included in the Sutter Roseville Medical Center TSM Plan were used to estimate the number of employees. The Sutter Roseville Medical Center TSM Plan notes the four medical office building components would include 217,450 building square feet, and these medical office buildings would include 350 employees. This results in a ratio of approximately 621 building square feet per employee ($217,450 / 350 \approx 621$). Applying this square feet per employee ratio to the Eureka Gateway Medical Office Building project with 75,000 building square feet results in an estimate of 121 employees ($75,000 / 621 \approx 121$).

For baseline conditions in this letter report, each of the 121 employees is assumed to generate:

- one inbound commute trip in the a.m. peak hour,
- one outbound commute trip in the p.m. peak hour, and
- a total of two commute trips per day.

With the TSM Plan resulting in a 20 percent reduction in commute trips, this would result in the following trip reductions:

- a reduction of 58 inbound trips in the a.m. peak hour ($121 \times 0.20 \approx 24$),
- a reduction of 58 outbound trips in the p.m. peak hour ($121 \times 0.20 \approx 24$), and
- a reduction of 48 trips per day ($24 + 24 = 48$).

Dividing the number of reduced trips by the number of trips generated by the proposed project shown in **Table 3** results in the following percentages:

- a reduction of 17.0 percent of inbound trips in the a.m. peak hour ($24 / 141 = 0.170 = 17.0\%$),
- a reduction of 12.4 percent of outbound trips in the p.m. peak hour ($24 / 193 = 0.124 = 12.4\%$), and

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- a reduction of 1.8 percent over the daily period ($48 / 2,710 = 0.018 = 1.8\%$).

The percent reductions calculated above are shown in **Table 1**.

Estimated Trip Reduction

Table 4 shows the application of trip reduction percentages presented in **Table 1** to the trip generation estimates presented in **Table 3**.

Closing

Thank you for providing KD Anderson & Associates with this opportunity to provide you with trip generation analysis services on the Eureka Gateway Medical Office Building project. We hope these services and this letter report are helpful to you and your project. Please let me know if you have any questions about this letter report or would like to discuss the results described above.

Sincerely,

KD Anderson & Associates, Inc.



Wayne Shijo
Project Manager

enclosures

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Table 1. Summary of Vehicle Trip Reductions Due to TSM Measures

Trip Reduction Measure and CAPCOA Measure Number	Percent Reduction by Time Periods				
	Daily	AM Peak Hour		PM Peak Hour	
		Inbound	Outbound	Inbound	Outbound
Mixed Land Use Internal Trips	1%	3%	0%	2%	0%
<u>Increase Location Efficiency (LUT-2)</u>					
Locate Project near Bike Path/Bike Lane (LUT-8)	0.6%	0.6%	0.6%	0.6%	0.6%
Improve Design of Development (LUT-9)	6%	6%	6%	6%	6%
Provide Bike Parking in Non-Residential Projects (SDT-6)	0.6%	0.6%	0.6%	0.6%	0.6%
Provide Pedestrian Network Improvements (SDT-1)	2%	2%	2%	2%	2%
Provide Traffic Calming Measures (SDT-2)	0.5%	0.5%	0.5%	0.5%	0.5%
Provide Electric Vehicle Parking	0.5%	0.5%	0.5%	0.5%	0.5%
<u>Implement Commute Trip Reduction Program - Required Implementation/Monitoring (TRT-2)</u>					
City of Roseville TSM Plan, which includes the following: Provide Ride-Sharing Programs (TRT-3) Implement Subsidized or Discounted Transit Program (TRT-4) Encourage Telecommuting and Alternative Work Schedules (TRT-6) Implement Preferential Parking Permit Program (TRT-8) Provide Local Shuttles (TST-6)	1.8%	17.0%	0.0%	0.0%	12.4%
TOTAL	13.0%	30.2%	10.2%	12.2%	22.6%

Table 2. Trip Generation Rates

Land Use and ITE Land Use Code Units		Trips per Unit						
		Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Medical-Dental Office Building (ITE Code 720)	1,000 Square Feet (KSF)	36.13	1.89	0.50	2.39	1.00	2.57	3.57

Source: Institute of Transportation Engineers *Trip Generation Manual 9th Edition* .
Note: Trip generation rates are based on average rates.

Table 3. Trip Generation Estimates

Land Use and ITE Land Use Code Quantity		Trips Generated						
		Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Medical-Dental Office Building (ITE Code 720)	75 KSF	2,710	141	38	179	75	193	268

Source: Institute of Transportation Engineers *Trip Generation Manual 9th Edition* .
Total may not equal the sum of components due to rounding.

Table 4. Trip Reduction Estimates

[illegible]

To: Marc Stout, P.E.

From: Joe Cryer
Matt Weir, P.E., T.E., PTOE

Re: *Eureka Road Medical Office Building (PL16-0169)*
Traffic Evaluation
Roseville, California

Date: December 16, 2016

Per your request and authorization, we have prepared this traffic evaluation for the above referenced project.

Project Understanding

Kimley-Horn understands that the project proposes to construct a 75,000 square foot (maximum size) medical office building on the vacant site located in the southeast corner of the Eureka Road intersection with Rocky Ridge Drive in Roseville (see **Exhibit 1**). The purpose of this analysis is to evaluate the proposed project's access points, and a primary adjacent intersection, to determine the amount of storage and/or driveway treatments that are necessary to ensure safe and efficient operations.

Study Facilities and Evaluation Parameters

The following four intersections (see **Exhibit 2**) are included in this access evaluation. **Exhibit 3** details the study intersections' geometries while **Exhibit 4** details the volumes for Intersections #1-#3 (Existing (2016)) and Intersection #4 (Cumulative (2035)). Traffic counts are provided in **Attachment A**. For each location, traffic/access control and the primary evaluation parameter(s) are described below:

1. Eureka Road @ Southern Site Access Driveway
 - o Right-in/right-out
 - o Primary considerations are the need for a right-turn deceleration lane and the minimum required throat depth (MRTD)
2. Eureka Road @ Northern Site Access Driveway/Existing Retail Driveway
 - o Right-in/right-out
 - o Primary considerations are the need for a right-turn deceleration lane, the MRTD, and interaction with the existing retail uses
3. Rocky Ridge Drive @ Site Access Driveway/Existing Retail Driveway
 - o Full access, side-street stop control
 - o Primary considerations are the need for a right-turn deceleration lane, the MRTD, and interaction with the existing retail uses
4. Eureka Road @ Rocky Ridge Drive
 - o Existing traffic signal
 - o Primary consideration is build-out (year 2035) volume mix with project volumes, with a focus on the left and U-turn movements

The access evaluation was conducted for the weekday AM and PM peak- hours for the following conditions:

- A. Existing (2016) plus Full, Proposed Project (75-ksf) Conditions with direct internal connectivity from Rocky Ridge Drive⁺
- B. Existing (2016) plus Full, Proposed Project (75-ksf) Conditions with no direct internal connectivity from Rocky Ridge Drive⁺
- C. Cumulative (2035) plus Full, Proposed Project (75-ksf) Conditions with direct internal connectivity from Rocky Ridge Drive⁺⁺
- D. Cumulative (2035) plus Full, Proposed Project (75-ksf) Conditions with no direct internal connectivity from Rocky Ridge Drive⁺⁺

⁺ Study intersections #1-#3 only

⁺⁺ Study intersection #4 only

The access evaluation was performed for the time periods and analysis scenarios listed above. Kimley-Horn applied methods defined in the *Highway Capacity Manual (HCM)*, using Synchro 9 traffic analysis software.

Assessment of Proposed Project

Trip Generation

The number of trips anticipated to be generated by the proposed project were approximated using *Trip Generation Manual, 9th Edition* published by the Institute of Transportation Engineers (ITE). **Table 1** presents the trip generation data for the proposed project.

Table 1 – Proposed Project Trip Generation

Land Use (ITE Code)	Size (ksf)	Daily Trips	AM Peak-Hour				PM Peak-Hour					
			Total Trips	IN		OUT		Total Trips	IN		OUT	
				%	Trips	%	Trips		%	Trips	%	Trips
Medical-Dental Office Building (720)	75.0	2,710	179	79%	141	21%	38	268	28%	75	72%	193
Total Trips:		2,710	179		141		38	268		75		193
Source: Trip Generation Manual, 9 th Edition, ITE.												

As reflected in **Table 1**, the proposed project is anticipated to generate 179 AM peak-hour and 268 PM peak-hour trips.

Trip Distribution

The distribution of project traffic was developed based on existing project area roadway volumes, general knowledge of project area traffic patterns, the proposed project layout, guidance from *Transportation and Land Development, 2nd Edition* published by ITE, and engineering judgment. Project trips were assigned to the study intersections and the surrounding roadway network according to these patterns. The assignment of project trips to the site driveways accounts for the anticipated building orientation (front of building better served by Driveway #2) and the two internal access points to the adjacent commercial properties. Furthermore, under conditions without full access at Intersection #3, a small portion of the site trips are assumed to “cut through” the adjacent property to enter and exit the site.

Project only volumes for Existing (2016) and Cumulative (2035) plus Proposed Project Conditions with full access at Intersection #3, and Existing (2016) and Cumulative (2035) plus Proposed Project Conditions

with no direct access at Intersection #3 are reflected in **Exhibit 5** and **Exhibit 6**, respectively. Combined volumes for Existing (2016) and Cumulative (2035) plus Proposed Project Conditions with full access at Intersection #3 are reflected in **Exhibit 7** while volumes for Existing (2016) and Cumulative (2035) plus Proposed Project Conditions with no direct access at Intersection #3 are reflected in **Exhibit 8**.

Traffic Assessment Methodology

As previously discussed, the focus of this traffic evaluation is on vehicle queuing entering the site and the Minimum Required Throat Depth (MRTD) at each project site driveway. For this evaluation, the City's guidelines¹ were referenced to determine the driveways' MRTD and median left-turn storage required for entering vehicles. In addition, these guidelines were referenced to determine the need for right-turn deceleration lanes. Finally, Synchro was used to evaluate the anticipated operations at the signalized study intersection of Eureka Road and Rocky Ridge Drive (Intersection #4) under Cumulative (2035) conditions.

Minimum Required Throat Depth (MRTD) & Median Left-Turn Storage

MRTDs were calculated for all three site driveways (Intersections #1-#3) for the two different driveway access conditions at Intersection #3. **Table 2** through **Table 5** summarize the findings of the MRTD evaluation based on the City's guidelines. Additionally, the minimum storage lengths were calculated for the median left-turns entering the project site at Driveway #3. Although assumed to be used under both access conditions, due to the higher number of left and u-turns at the existing Eureka Road median left-turn pocket located south of Intersection #1 (shown in **Table 4** and **Table 5** as Intersection #5) under the conditions without full access at Intersection #3, the minimum storage lengths associated with these volumes were also calculated.

Table 2 – MRTD and Left-Turn Storage for Full Access Configuration at Intersection #3, AM Peak-Hour

INT	TS	Lanes	Speed	ConflVol (Left, Maj)	ConflVol (Left, Minor)	ConflVol (Right)	LT In	RT In	LT Out	RT Out	RT%	Required Storage	Minimum Required Throat Depth (MRTD)
1						482		13		7		-	50
2						480		58		49		-	75
3	1	2	40	432	688	432	32	137	35	64		75	-
3	1	2	40	432	688	432	32	137	35	64	65%	-	50

Note: All volumes for conflicting movements come from cumulative turning movement volumes provided by the City from their future year model for the Eureka Rd/Rocky Ridge Dr intersection

Table 3 – MRTD and Left-Turn Storage for Full Access Configuration at Intersection #3, PM Peak-Hour

INT	TS	Lanes	Speed	ConflVol (Left, Maj)	ConflVol (Left, Minor)	ConflVol (Right)	LT In	RT In	LT Out	RT Out	RT%	Required Storage	Minimum Required Throat Depth (MRTD)
1						509		11		40		-	75
2						519		66		135		-	125
3	1	2	40	456	708	456	28	81	73	93		50	-
3	1	2	40	456	708	456	28	81	73	93	56%	-	100

Note: All volumes for conflicting movements come from cumulative turning movement volumes provided by the City from their future year model for the Eureka Rd/Rocky Ridge Dr intersection

¹ Section 4 Traffic Impact Studies, City of Roseville Design Standards, January 2016.

Table 4 – MRTD and Left-Turn Storage for No Access Configuration at Intersection #3, AM Peak-Hour

INT	TS	Lanes	Speed	ConflVol (Left, Maj)	ConflVol (Left, Minor)	ConflVol (Right)	LT In	RT In	LT Out	RT Out	RT%	Required Storage	Minimum Required Throat Depth (MRTD)
1						497		25		12		-	50
2						492		91		60		-	75
3	1	2	40	346	589	346	19	48	22	41		50	-
3	1	2	40	346	589	346	19	48	22	41	65%	-	25
5	1	3	45	1526			180	0		10		175	-

Note: All volumes for conflicting movements come from cumulative turning movement volumes provided by the City from their future year model for the Eureka Rd/Rocky Ridge Dr intersection

Table 5 – MRTD and Left-Turn Storage for No Access Configuration at Intersection #3, PM Peak-Hour

INT	TS	Lanes	Speed	ConflVol (Left, Maj)	ConflVol (Left, Minor)	ConflVol (Right)	LT In	RT In	LT Out	RT Out	RT%	Required Storage	Minimum Required Throat Depth (MRTD)
1						516		17		52		-	75
2						528		81		192		-	150
3	1	2	40	443	967	443	20	44	28	29		50	-
3	1	2	40	443	967	443	20	44	28	29	51%	-	50
5	1	3	45	1598			100	0		20		100	-

Note: All volumes for conflicting movements come from cumulative turning movement volumes provided by the City from their future year model for the Eureka Rd/Rocky Ridge Dr intersection

MRTD

- Intersection #1 (right-in/right-out), as currently proposed per **Exhibit 2**, has a throat depth of 50-feet, which is less than the minimum required distance of 75-feet (PM peak-hour under both access conditions) that was calculated for the outbound right-turn. Based on the calculations the existing throat depth is insufficient for both access conditions.
- Intersection #2 (right-in/right-out), as currently proposed per **Exhibit 2**, has a throat depth of 50-feet, which is less than the minimum distance of 150-feet (PM peak-hour under the “No Access” conditions) that was calculated for the outbound right-turn. Based on the calculations the existing throat depth is insufficient for both access conditions.
- Intersection #3 (full access), as currently proposed per **Exhibit 2**, has a throat depth of 50-feet, which is less than the minimum distance of 100-feet (PM peak-hour under the “Full Access” conditions) that was calculated for the outbound right- and left-turns. Based on the calculations the existing throat depth is insufficient under these conditions. However, under the “No Access” conditions, this intersection has a throat depth that is consistent with the 50-foot requirement.

Left-Turn Storage

- The existing storage for the left-turns attempting to enter the project at Intersection #3 is sufficient for the calculated required distance of 75-feet (AM peak-hour under the “Full Access” conditions).
- The existing storage for the left-turns attempting to enter the project at Intersection #5 (location as described above) is sufficient for the calculated required distance of 175-feet (AM peak-hour under the “No Access” conditions).

Right-Turn Deceleration Lane

According to the City's guidelines², a right-turn deceleration lane is required when all four of the following conditions are satisfied:

- The driveway is located on an arterial or expressway.
- Right turn ingress volume is expected to exceed fifty (50) during peak hour flows on the roadway. For right turn ingress volumes between ten (10) and fifty (50) a right turn curb taper shall be constructed in conformance with the Standard Drawings.
- There is ample room and frontage to fit a deceleration lane as determined by the City Engineer.
- The travel speed of the roadway, as determined by the City Engineer, equals or exceeds 45 mph.

The requirements and the conditions at Intersections #1-#3 are summarized in **Table 6** and **Table 7** below. Based on these guidelines, Intersection #2 satisfies the requirements for consideration of a right-turn deceleration lane under both access conditions.

Table 6 – Rocky Ridge Drive Deceleration Lane

Scenario	Time Period	Located on Arterial or Expressway?	Right Turn Volume	Right Turn Volume over 50?	Ample Room and Frontage?	85th Percentile Travel Speed	Travel Speed ≥ 45 mph?	Deceleration Lane Appropriate?
Intersection #3 With Access	AM	Yes	137	Yes	Yes	43.5	No	No
	PM	Yes	81	Yes	Yes	43.5	No	No
Intersection #3 With No Access	AM	Yes	48	No	Yes	43.5	No	No
	PM	Yes	44	No	Yes	43.5	No	No

Table 7 – Eureka Road Deceleration Lane

Scenario	Time Period	Located on Arterial or Expressway?	Right Turn Volume	Right Turn Volume over 50?	Ample Room and Frontage?	85th Percentile Travel Speed	Travel Speed ≥ 45 mph?	Deceleration Lane Appropriate?
Intersection #1 With Access	AM	Yes	13	No	Yes	46.2	Yes	No
	PM	Yes	11	No	Yes	46.2	Yes	No
Intersection #1 With No Access	AM	Yes	25	No	Yes	46.2	Yes	No
	PM	Yes	17	No	Yes	46.2	Yes	No
Intersection #2 With Access	AM	Yes	58	Yes	Yes	46.2	Yes	Yes
	PM	Yes	66	Yes	Yes	46.2	Yes	Yes
Intersection #2 With No Access	AM	Yes	91	Yes	Yes	46.2	Yes	Yes
	PM	Yes	81	Yes	Yes	46.2	Yes	Yes

Signalized Intersection Queuing and Operations

In an effort to confirm the adequacy of the existing configuration at the intersection of Eureka Road and Rocky Ridge Drive (Intersection #4), Synchro was used to determine the anticipated 95th percentile vehicle queues, delay, and Level of Service (LOS) under Cumulative (2035) Conditions. **Table 8** summarizes the delay and LOS at the intersection while **Table 9** summarizes the queuing for select movements. Analysis worksheets are provided in **Attachment B** (Full Access) and **Attachment C** (No Access).

² Section 5 Traffic Impact Studies, City of Roseville Design Standards, January 2016.

Table 8 – Intersection Level of Service for Cumulative (2035) Conditions

ID	Intersection	Peak Hour	Cumulative (2035) Full Access		Cumulative (2035) No Access	
			Delay (sec)	LOS	Delay (sec)	LOS
4	Eureka Rd @ Rocky Ridge Dr	AM	27.4	C	26.2	C
		PM	34.8	C	33.9	C

As shown in **Table 8**, the intersection is shown to operate at acceptable LOS C during both peak-hours under both access conditions. Furthermore, **Table 9** displays that the queuing is acceptable for all movements in all scenarios.

Table 9 – Intersection Queuing for Cumulative (2035) Conditions

Intersection / Analysis Scenario	Movement	AM Peak-Hour		PM Peak-Hour	
		Available Storage (ft)	95 th % Queue (ft)	Available Storage (ft)	95 th % Queue (ft)
#4, Eureka Rd @ Rocky Ridge Dr	NBL/NBU				
Cumulative (2035) with Full Access		220	39	220	68
Cumulative (2035) with No Access			56		100
	SBL				
Cumulative (2035) with Full Access		230	168	230	146
Cumulative (2035) with No Access			89		123
	WBL				
Cumulative (2035) with Full Access		185	81	185	169
Cumulative (2035) with No Access			86		152
Source: <i>Highway Capacity Manual (HCM)</i> methodology per Synchro® v9.					
Note: For approaches with dual left-turn lanes, the longest queue length is reported.					

Conclusions

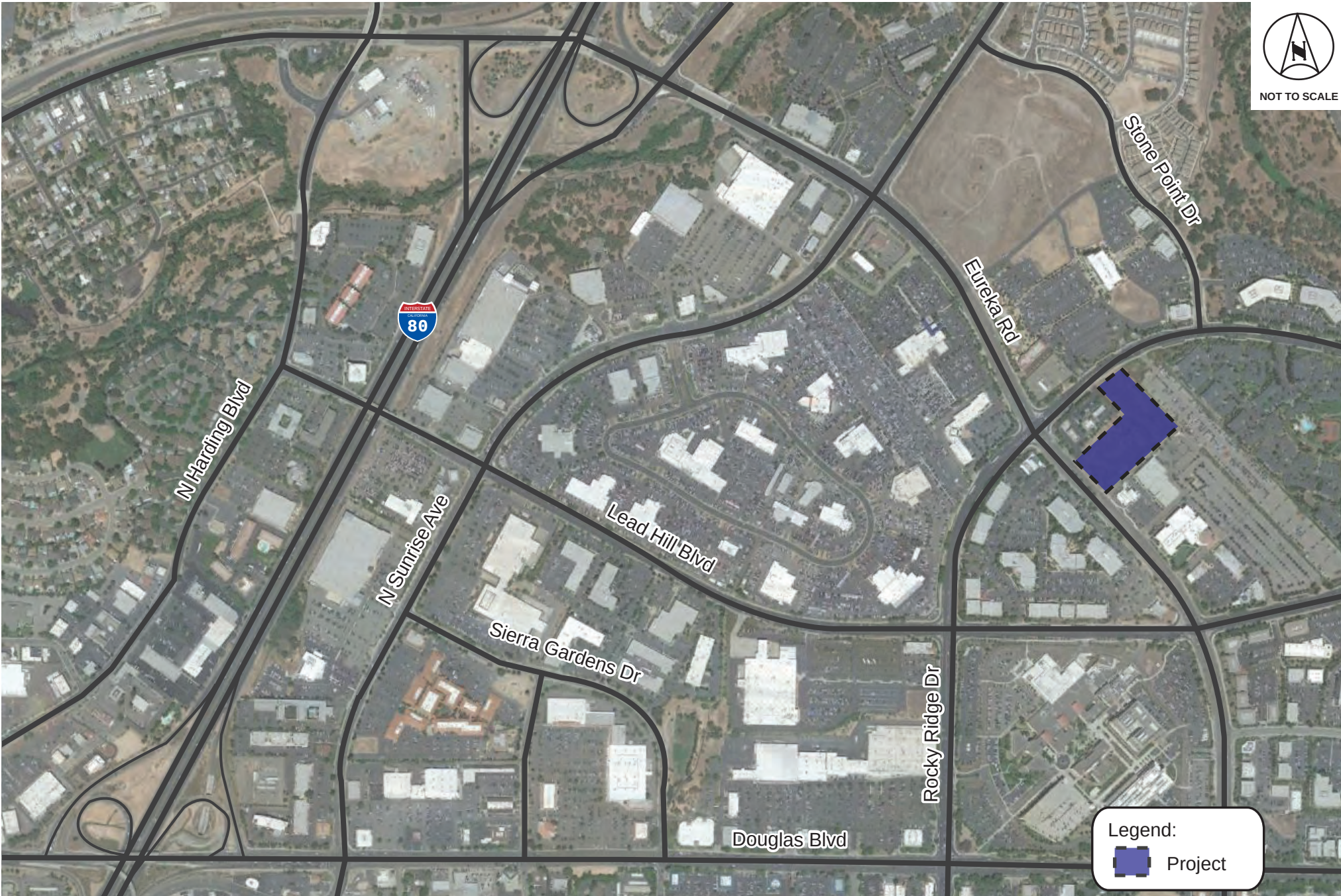
The following are the primary conclusions based on the analyses discussed herein:

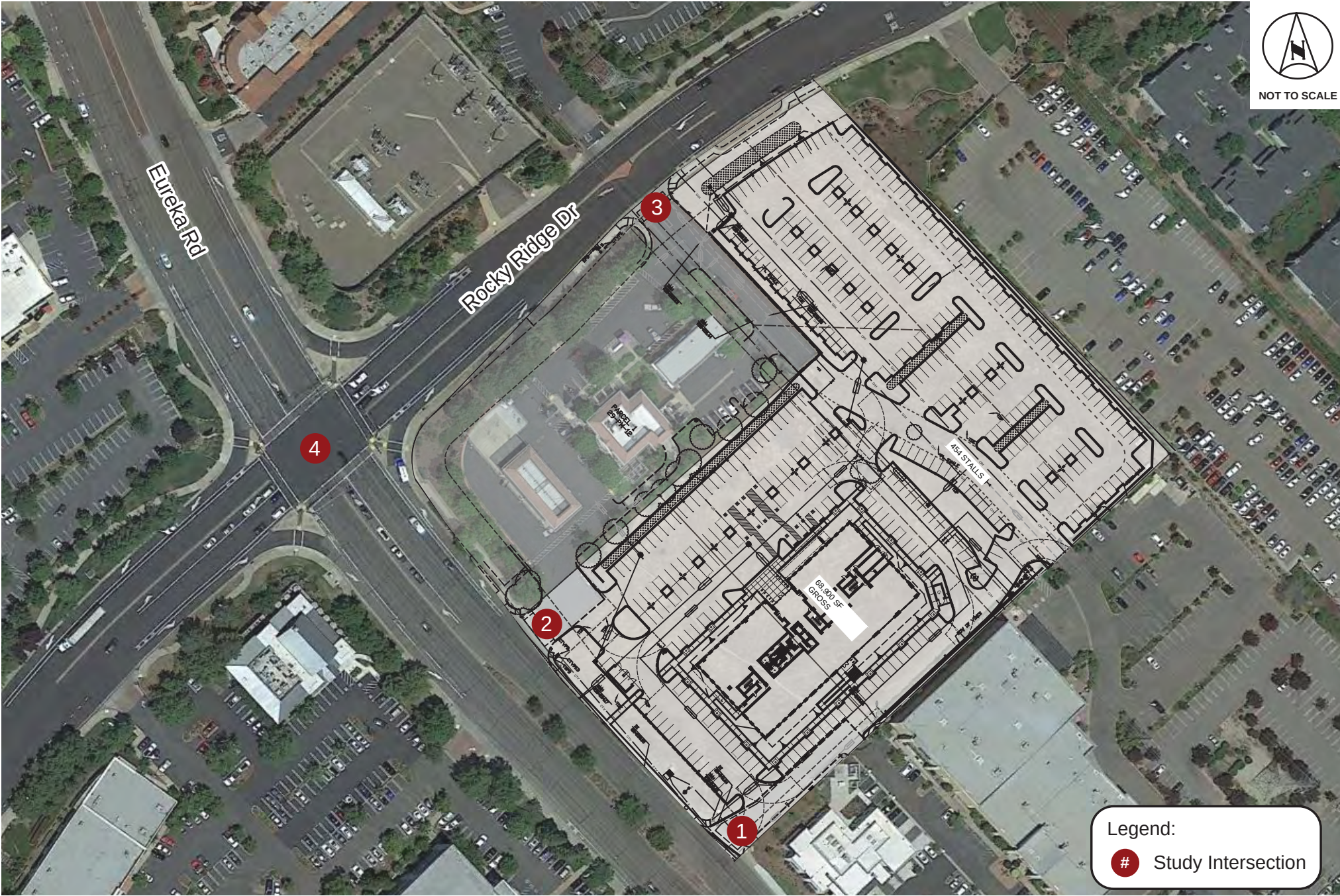
- The three site driveways have deficient Minimum Required Throat Depth (MRTD), with the exception of the Rocky Ridge Drive driveway (Intersection #3) under the conditions where full access is not provided at this location. In all cases, the MRTD should be provided by considering “KEEP CLEAR” signing and striping to minimize the potential for driveway blockage. More specifically, while the use of a narrow raised median is appropriate at Intersection #1, due to the existing use of Intersection #2 and Intersection #3, raised medians would likely result in turn movement restrictions and access impacts for the existing, adjacent uses. As such, treatments at these two locations (Intersections #2 and #3) should be limited to signing and striping to discourage vehicles from blocking ingress movements.
- The main Eureka Road driveway (Intersection #2) satisfies the City’s guidelines for requiring a right-turn deceleration lane. This condition does not exist today, and is triggered under both access conditions. However, considering the driveway’s proximity to Intersection #1 (construction of a right-turn deceleration lane at Intersection #2 would likely extend back to Intersection #1 and necessitate reconstruction of both driveways), construction of a right turn curb taper in a manner consistent with the City’s Standard Drawings would be considered adequate treatment for the right-turn movement into this driveway.
- The Eureka Road intersection with Rocky Ridge Drive (Intersection #4) is shown to operate at LOS C or better and have adequate storage length under Cumulative (2035) conditions to accommodate the proposed project.

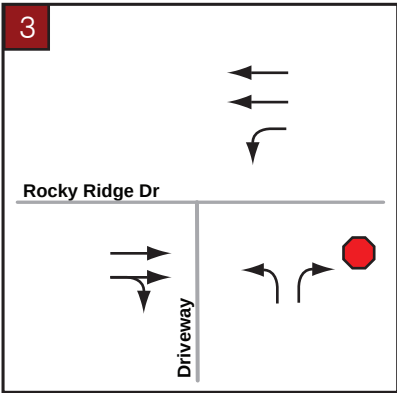
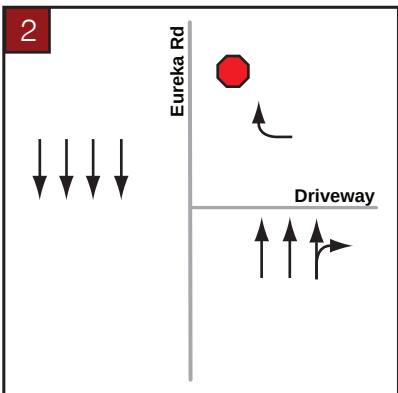
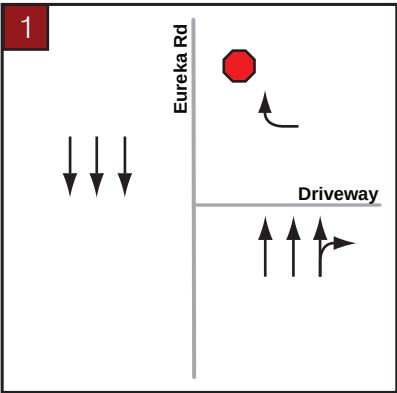
Attachments:

- Exhibit 1** – Vicinity Map
- Exhibit 2** – Intersections and Site Plan
- Exhibit 3** – Study Intersections, Traffic Control, and Lane Geometries
- Exhibit 4** – No Project Volumes
- Exhibit 5** – Project Only Volumes, Full Access
- Exhibit 6** – Project Only Volumes, No Access
- Exhibit 7** – Existing/Cumulative plus Full Access Project Volumes
- Exhibit 8** – Existing/Cumulative plus No Access Project Volumes

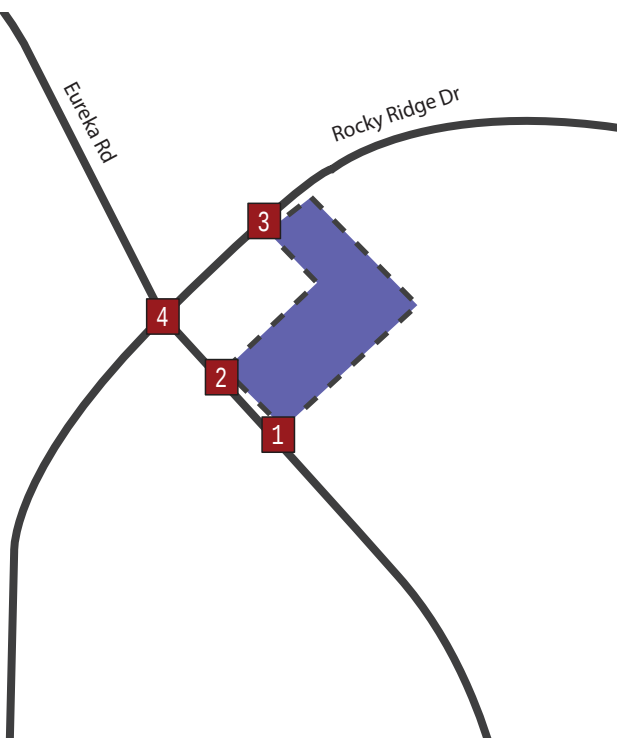
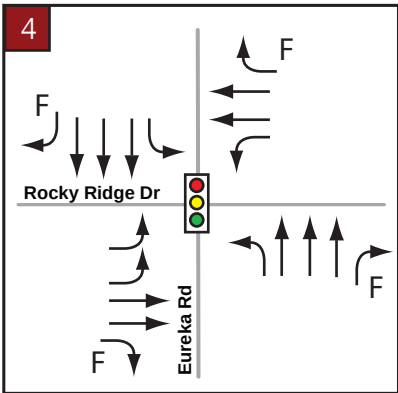
- Attachment A** – Traffic Count Data Sheets
- Attachment B** – Cumulative Full Access Conditions
- Attachment C** – Cumulative No Access Conditions







Cumulative (2035) Configuration:

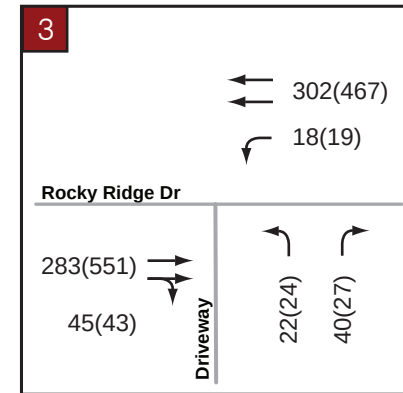
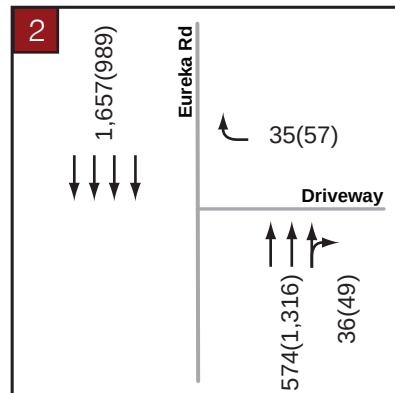
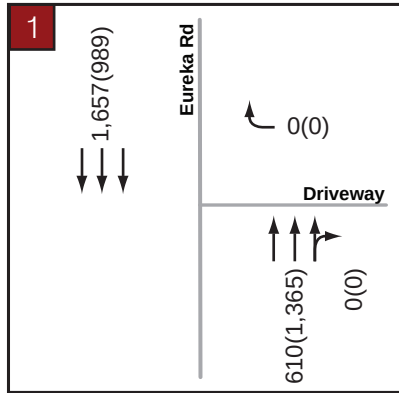


LEGEND	
#	Study Intersection
	Project
	Signalized Study Intersection
F	Free Right
	Stop-controlled Approach

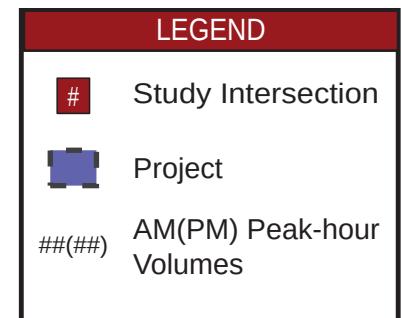
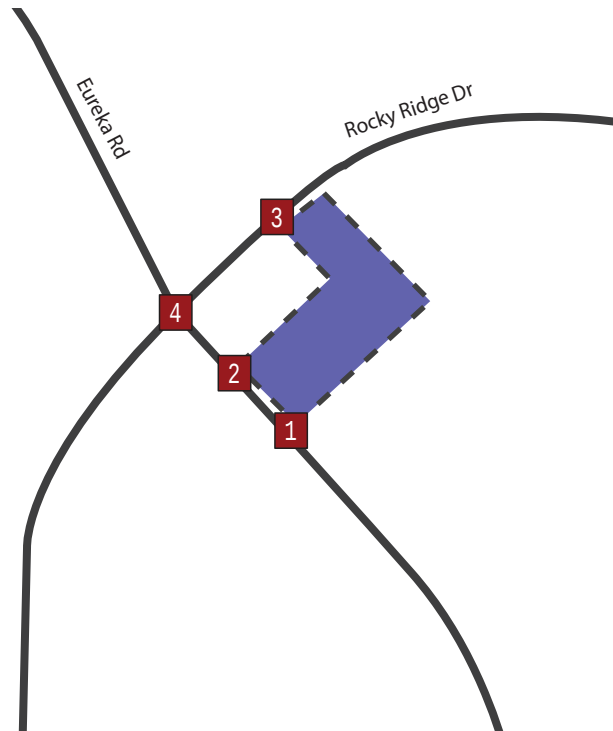
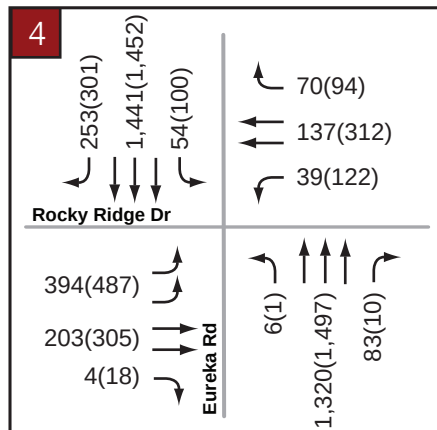


NOT TO SCALE

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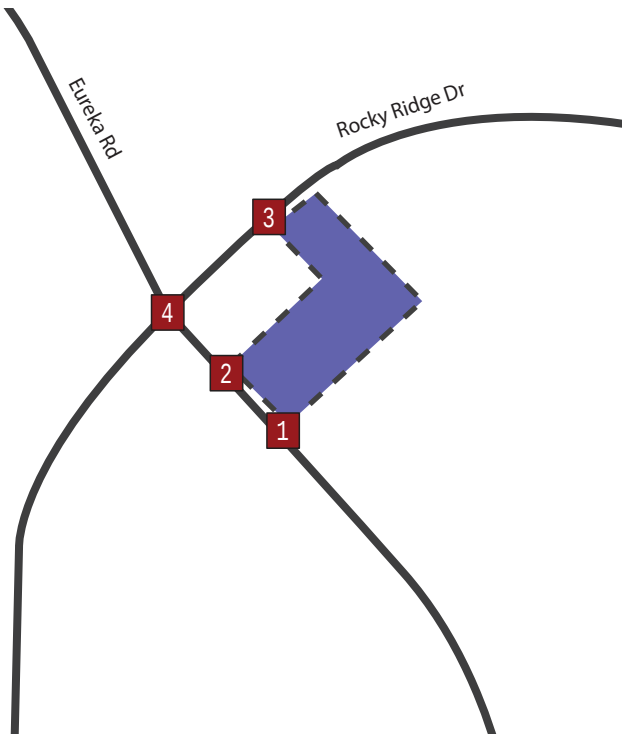
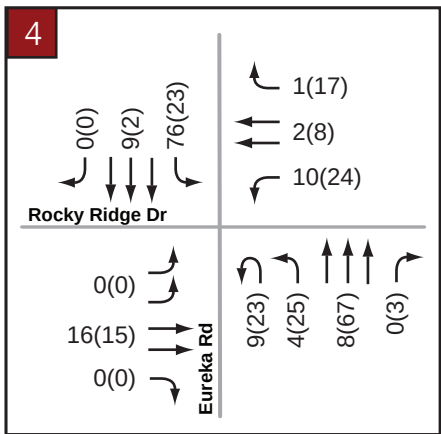
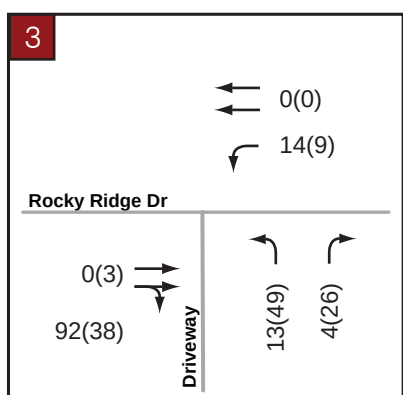
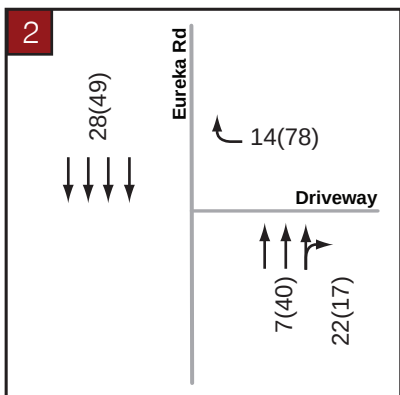
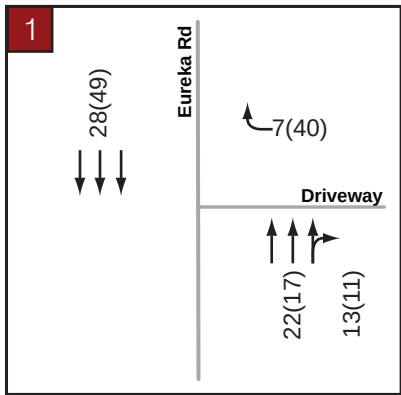


Cumulative (2035):





NOT TO SCALE



LEGEND

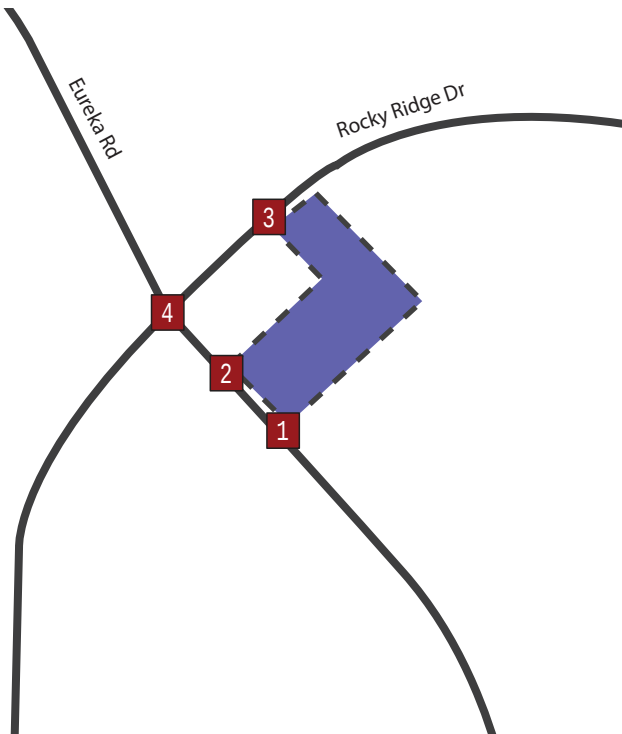
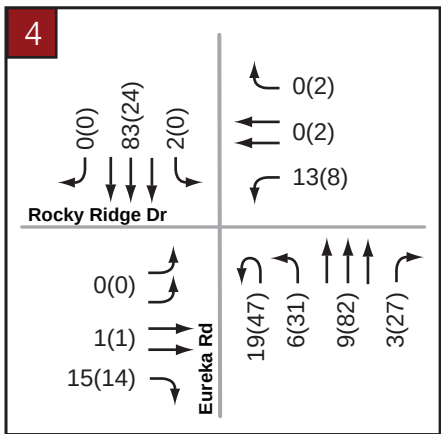
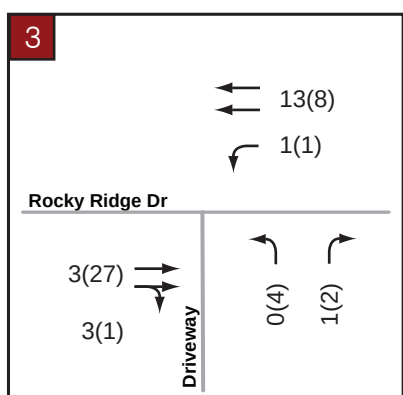
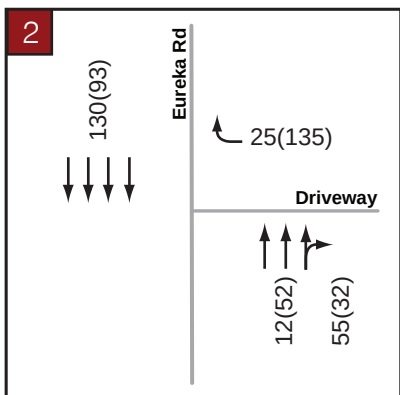
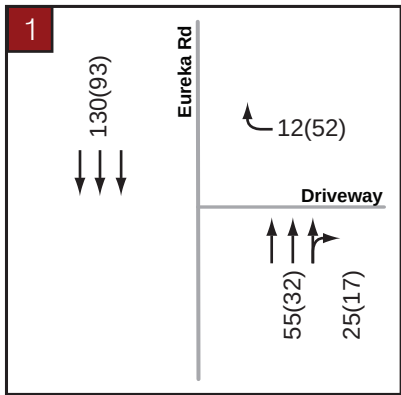
Study Intersection

Project

##(##) AM(PM) Peak-hour Volumes



NOT TO SCALE



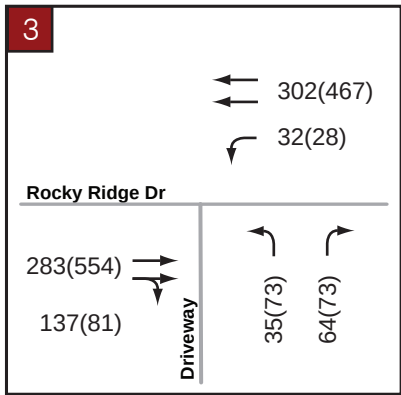
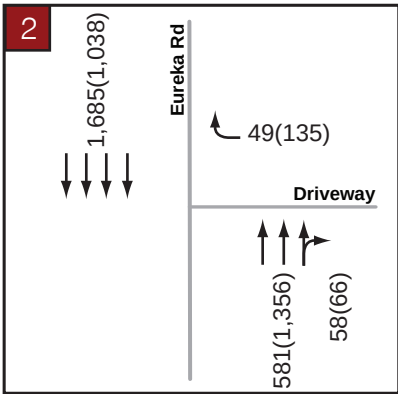
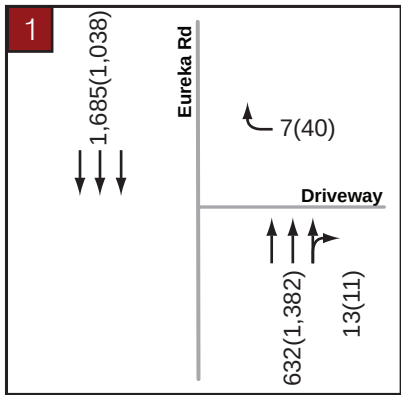
LEGEND

- # Study Intersection
- Project
- ##(##) AM(PM) Peak-hour Volumes

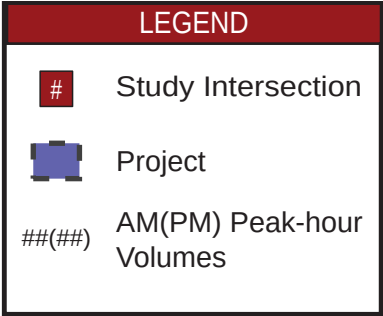
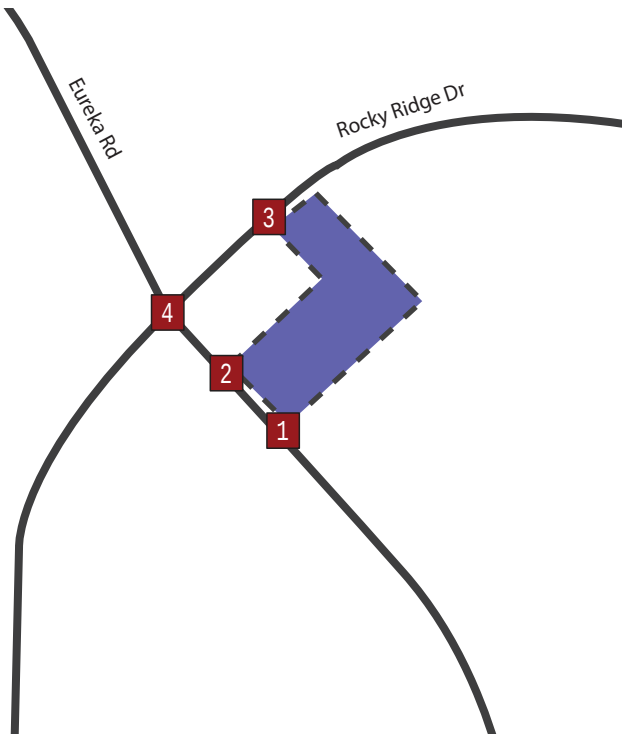
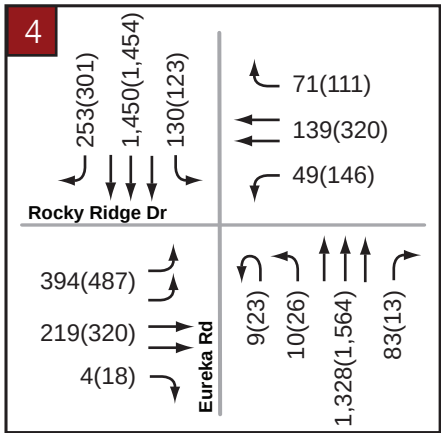


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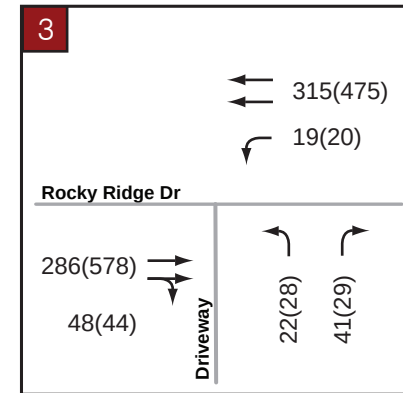
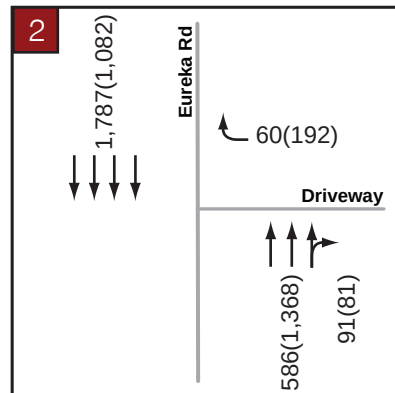
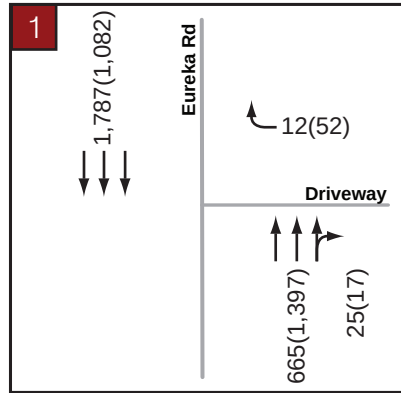
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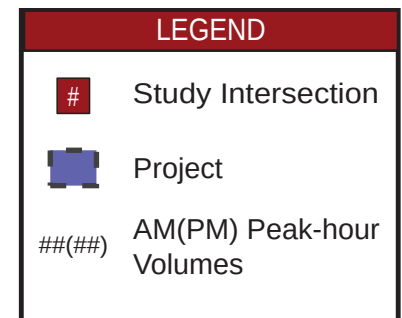
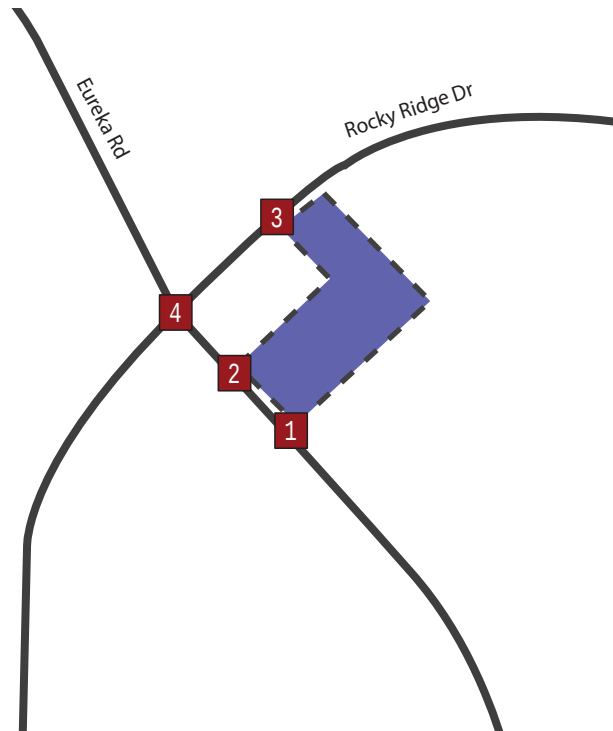
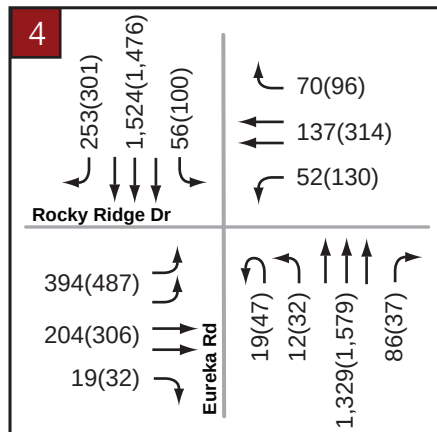


NOT TO SCALE

Existing (2016):



Cumulative (2035):



Attachment A
Traffic Count Data Sheets

ALL TRAFFIC DATA

City of Roseville
All Vehicles & Utturns On Unshifted
Nothing On Bank 1
Nothing On Bank 2

(916) 771-8700

orders@atdtraffic.com

File Name : 16-7721-001 Eureka Rd & Eastern Dwy

Date : 10/4/2016

Unshifted Count = All Vehicles & Utturns

	Eureka Rd Southbound					Eastern Dwy Westbound					Eureka Rd Northbound					Eastern Dwy Eastbound					Total	Utturns Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
7:00	0	0	0	0	0	0	0	10	0	10	0	0	7	0	7	0	0	0	0	0	17	0
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7:30	0	0	0	0	0	0	0	11	0	11	0	0	6	0	6	0	0	0	0	0	17	0
7:45	0	0	0	0	0	0	0	9	0	9	0	0	10	0	10	0	0	0	0	0	19	0
Total	0	0	0	0	0	0	0	37	0	37	0	0	33	0	33	0	0	0	0	0	70	0
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16:45	0	0	0	0	0	0	0	10	0	10	0	0	8	0	8	0	0	0	0	0	18	0
Total	0	0	0	0	0	0	0	36	0	36	0	0	28	0	28	0	0	0	0	0	64	0
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Grand Total	0	0	0	0	0	0	0	164	0	164	0	0	145	0	145	0	0	0	0	0	309	0
Apprch %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%	0.0%		0.0%	0.0%	100.0%	0.0%		0.0%	0.0%	0.0%	0.0%			
Total %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	53.1%	0.0%	53.1%	0.0%	0.0%	46.9%	0.0%	46.9%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	

AM PEAK HOUR	Eureka Rd Southbound					Eastern Dwy Westbound					Eureka Rd Northbound					Eastern Dwy Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:15 to 08:15																					
Peak Hour For Entire Intersection Begins at 07:15																					
7:15	0	0	0	0	0	0	0	7	0	7	0	0	10	0	10	0	0	0	0	0	17
7:30	0	0	0	0	0	0	0	11	0	11	0	0	6	0	6	0	0	0	0	0	17
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8:00	0	0	0	0	0	0	0	8	0	8	0	0	10	0	10	0	0	0	0	0	18
Total Volume	0	0	0	0	0	0	0	35	0	35	0	0	36	0	36	0	0	0	0	0	71
% App Total	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%	0.0%		0.0%	0.0%	100.0%	0.0%		0.0%	0.0%	0.0%	0.0%		
PHF	.000	.000	.000	.000	.000	.000	.000	.795	.000	.795	.000	.000	.900	.000	.900	.000	.000	.000	.000	.000	.934

PM PEAK HOUR	Eureka Rd Southbound					Eastern Dwy Westbound					Eureka Rd Northbound					Eastern Dwy Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
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Total Volume	0	0	0	0	0	0	0	57	0	57	0	0	49	0	49	0	0	0	0	0	106
% App Total	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%	0.0%		0.0%	0.0%	100.0%	0.0%		0.0%	0.0%	0.0%	0.0%		
PHF	.000	.000	.000	.000	.000	.000	.000	.891	.000	.891	.000	.000	.817	.000	.817	.000	.000	.000	.000	.000	.855

ALL TRAFFIC DATA

City of Roseville

All Vehicles & Uturns On Unshifted

Nothing On Bank 1

Nothing On Bank 2

(916) 771-8700

orders@atdtraffic.com

File Name : 16-7721-002 Southern Dwy & Rocky Ridge Dr

Date : 10/4/2016

Unshifted Count = All Vehicles & Uturns

	Southern Dwy Southbound					Rocky Ridge Dr Westbound					Southern Dwy Northbound					Rocky Ridge Dr Eastbound					Total	Uturns Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
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Total	0	0	0	0	0	12	0	0	0	12	21	0	25	0	46	0	0	34	0	34	92	0
8:00	0	0	0	0	0	7	0	0	0	7	4	0	7	0	11	0	0	13	0	13	31	0
8:15	0	0	0	0	0	5	0	0	0	5	8	0	11	0	19	0	0	16	0	16	40	0
8:30	0	0	0	0	0	3	0	0	0	3	4	0	10	0	14	0	0	11	0	11	28	0
8:45	0	0	0	0	0	8	0	0	0	8	7	0	6	0	13	0	0	5	0	5	26	0
Total	0	0	0	0	0	23	0	0	0	23	23	0	34	0	57	0	0	45	0	45	125	0
16:00	0	0	0	0	0	3	0	0	0	3	6	0	14	0	20	0	0	10	0	10	33	0
16:15	0	0	0	0	0	4	0	0	0	4	2	0	8	0	10	0	0	11	0	11	25	0
16:30	0	0	0	0	0	3	0	0	0	3	5	0	10	0	15	0	0	9	0	9	27	0
16:45	0	0	0	0	0	3	0	0	0	3	5	0	8	0	13	0	0	9	0	9	25	0
Total	0	0	0	0	0	13	0	0	0	13	18	0	40	0	58	0	0	39	0	39	110	0
17:00	0	0	0	0	0	7	0	0	0	7	7	0	7	0	14	0	0	10	0	10	31	0
17:15	0	0	0	0	0	3	0	0	0	3	6	0	7	0	13	0	0	13	0	13	29	0
17:30	0	0	0	0	0	6	0	0	0	6	6	0	5	0	11	0	0	11	0	11	28	0
17:45	0	0	0	0	0	4	0	0	0	4	8	0	3	0	11	0	0	5	0	5	20	0
Total	0	0	0	0	0	20	0	0	0	20	27	0	22	0	49	0	0	39	0	39	108	0
Grand Total	0	0	0	0	0	68	0	0	0	68	89	0	121	0	210	0	0	157	0	157	435	0
Apprch %	0.0%	0.0%	0.0%	0.0%		100.0%	0.0%	0.0%	0.0%		42.4%	0.0%	57.6%	0.0%		0.0%	0.0%	100.0%	0.0%			
Total %	0.0%	0.0%	0.0%	0.0%	0.0%	15.6%	0.0%	0.0%	0.0%	15.6%	20.5%	0.0%	27.8%	0.0%	48.3%	0.0%	0.0%	36.1%	0.0%	36.1%	100.0%	

AM PEAK HOUR	Southern Dwy Southbound					Rocky Ridge Dr Westbound					Southern Dwy Northbound					Rocky Ridge Dr Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	0	0	0	0	0	3	0	0	0	3	6	0	12	0	18	0	0	5	0	5	26
8:00	0	0	0	0	0	7	0	0	0	7	4	0	7	0	11	0	0	13	0	13	31
8:15	0	0	0	0	0	5	0	0	0	5	8	0	11	0	19	0	0	16	0	16	40
8:30	0	0	0	0	0	3	0	0	0	3	4	0	10	0	14	0	0	11	0	11	28
Total Volume	0	0	0	0	0	18	0	0	0	18	22	0	40	0	62	0	0	45	0	45	125
% App Total	0.0%	0.0%	0.0%	0.0%		100.0%	0.0%	0.0%	0.0%		35.5%	0.0%	64.5%	0.0%		0.0%	0.0%	100.0%	0.0%		
PHF	.000	.000	.000	.000	.000	.643	.000	.000	.000	.643	.688	.000	.833	.000	.816	.000	.000	.703	.000	.703	.781

PM PEAK HOUR	Southern Dwy Southbound					Rocky Ridge Dr Westbound					Southern Dwy Northbound					Rocky Ridge Dr Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	0	0	0	0	0	3	0	0	0	3	5	0	8	0	13	0	0	9	0	9	25
17:00	0	0	0	0	0	7	0	0	0	7	7	0	7	0	14	0	0	10	0	10	31
17:15	0	0	0	0	0	3	0	0	0	3	6	0	7	0	13	0	0	13	0	13	29
17:30	0	0	0	0	0	6	0	0	0	6	6	0	5	0	11	0	0	11	0	11	28
Total Volume	0	0	0	0	0	19	0	0	0	19	24	0	27	0	51	0	0	43	0	43	113
% App Total	0.0%	0.0%	0.0%	0.0%		100.0%	0.0%	0.0%	0.0%		47.1%	0.0%	52.9%	0.0%		0.0%	0.0%	100.0%	0.0%		
PHF	.000	.000	.000	.000	.000	.679	.000	.000	.000	.679	.857	.000	.844	.000	.911	.000	.000	.827	.000	.827	.911

Turning Movement Volume Report

10/13/2016

Eureka & Rocky Ridge

Intersection: 39

	NW				SE				NE				SW				Int.
Date & Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Total
10/04/16 07:00-07:14	5	115	2	122	16	230	43	289	27	27	0	54	6	31	18	55	520
10/04/16 07:15-07:29	4	120	3	127	16	261	43	320	24	38	3	65	5	62	18	85	597
10/04/16 07:30-07:44	6	156	5	167	27	269	50	346	46	44	1	91	10	51	10	71	675
10/04/16 07:45-07:59	11	154	10	175	17	330	90	437	35	57	3	95	13	52	11	76	783
10/04/16 08:00-08:14	5	135	3	143	26	463	69	558	40	38	1	79	11	52	6	69	849
10/04/16 08:15-08:29	9	120	3	132	25	419	73	517	34	52	4	90	11	45	12	68	807
10/04/16 08:30-08:44	9	146	4	159	27	385	59	471	45	66	5	116	12	79	20	111	857
10/04/16 08:45-08:59	11	132	6	149	22	302	60	384	33	54	1	88	14	65	12	91	712
Total:	60	1,078	36	1,174	176	2,659	487	3,322	284	376	18	678	82	437	107	626	5,800
Approach %:	5%	91%	3%		5%	80%	14%		41%	55%	2%		13%	69%	17%		
Int. %:	1%	18%	0%	20%	3%	45%	8%	57%	4%	6%	0%	11%	1%	7%	1%	10%	

Turning Movement Volume Report

10/13/2016

Eureka & Rocky Ridge

Intersection: 39

	NW				SE				NE				SW				Int.
Date & Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Total
10/04/16 16:00-16:14	25	300	10	335	26	224	65	315	81	73	7	161	18	71	31	120	931
10/04/16 16:15-16:29	19	245	6	270	32	198	62	292	92	67	7	166	11	63	18	92	820
10/04/16 16:30-16:44	14	308	6	328	23	198	63	284	112	111	7	230	11	67	28	106	948
10/04/16 16:45-16:59	17	256	12	285	31	183	68	282	102	80	2	184	10	56	25	91	842
10/04/16 17:00-17:14	8	425	10	443	36	246	83	365	118	148	6	272	16	89	51	156	1,236
10/04/16 17:15-17:29	17	324	21	362	32	176	74	282	95	99	5	199	15	79	31	125	968
10/04/16 17:30-17:44	21	278	16	315	31	212	91	334	89	101	8	198	12	72	24	108	955
10/04/16 17:45-17:59	14	237	2	253	23	270	70	363	60	75	6	141	17	63	22	102	859
Total:	135	2,373	83	2,591	234	1,707	576	2,517	749	754	48	1,551	110	560	230	900	7,559
Approach %:	5%	91%	3%		9%	67%	22%		48%	48%	3%		12%	62%	25%		
Int. %:	1%	31%	1%	34%	3%	22%	7%	33%	9%	9%	0%	20%	1%	7%	3%	11%	

Attachment B
Cumulative Full Access Conditions

Eureka Road Medical Office Building
4: Eureka Rd & Rocky Ridge Dr

Cumulative Plus Project - Full Access

AM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	428	238	4	53	151	77	21	1443	90	141	1576	275
v/c Ratio	0.77	0.33	0.00	0.45	0.46	0.05	0.15	0.61	0.06	0.69	0.57	0.17
Control Delay	57.5	42.0	0.0	65.1	56.0	0.1	50.7	27.0	0.1	67.8	21.7	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.5	42.0	0.0	65.1	56.0	0.1	50.7	27.0	0.1	67.8	21.7	0.2
Queue Length 50th (ft)	165	85	0	40	59	0	16	297	0	107	233	0
Queue Length 95th (ft)	211	118	0	81	92	0	39	427	0	168	459	0
Internal Link Dist (ft)		808			235			295			308	
Turn Bay Length (ft)	225		225	185		185	220		220	230		
Base Capacity (vph)	1001	982	1583	236	412	1583	236	2369	1583	246	2786	1583
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.24	0.00	0.22	0.37	0.05	0.09	0.61	0.06	0.57	0.57	0.17
Intersection Summary												

Eureka Road Medical Office Building
4: Eureka Rd & Rocky Ridge Dr

Cumulative Plus Project - Full Access

AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	394	219	4	49	139	71	9	10	1328	83	130	1450
Future Volume (vph)	394	219	4	49	139	71	9	10	1328	83	130	1450
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.7	4.0	4.0	6.0	4.0		4.0	5.7	4.0	4.0	5.7
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00		1.00	0.91	1.00	1.00	0.91
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583		1770	5085	1583	1770	5085
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583		1770	5085	1583	1770	5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	428	238	4	53	151	77	10	11	1443	90	141	1576
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	428	238	4	53	151	77	0	21	1443	90	141	1576
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	Prot	NA	Free	Prot	NA
Protected Phases	5	2		1	6		3	3	8		7	4
Permitted Phases			Free			Free				Free		
Actuated Green, G (s)	19.5	24.6	120.0	7.1	11.9	120.0		6.4	55.1	120.0	13.8	62.5
Effective Green, g (s)	19.5	24.6	120.0	7.1	11.9	120.0		6.4	55.1	120.0	13.8	62.5
Actuated g/C Ratio	0.16	0.21	1.00	0.06	0.10	1.00		0.05	0.46	1.00	0.12	0.52
Clearance Time (s)	4.0	5.7		4.0	6.0			4.0	5.7		4.0	5.7
Vehicle Extension (s)	2.0	4.3		2.0	3.9			2.0	4.3		2.0	4.3
Lane Grp Cap (vph)	557	725	1583	104	350	1583		94	2334	1583	203	2648
v/s Ratio Prot	c0.12	0.07		0.03	c0.04			0.01	c0.28		c0.08	0.31
v/s Ratio Perm			0.00			0.05				0.06		
v/c Ratio	0.77	0.33	0.00	0.51	0.43	0.05		0.22	0.62	0.06	0.69	0.60
Uniform Delay, d1	48.1	40.7	0.0	54.8	50.9	0.0		54.4	24.5	0.0	51.1	20.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.7	0.4	0.0	1.4	1.1	0.1		0.4	1.2	0.1	8.0	1.0
Delay (s)	53.8	41.1	0.0	56.2	52.0	0.1		54.9	25.7	0.1	59.1	21.0
Level of Service	D	D	A	E	D	A		D	C	A	E	C
Approach Delay (s)		48.9			38.6				24.7			20.8
Approach LOS		D			D				C			C
Intersection Summary												
HCM 2000 Control Delay			27.4			HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio			0.64									
Actuated Cycle Length (s)			120.0			Sum of lost time (s)			19.7			
Intersection Capacity Utilization			64.4%			ICU Level of Service			C			
Analysis Period (min)			15									
c Critical Lane Group												



Movement	SBR
AAA Configurations	AAA
Traffic Volume (vph)	253
Future Volume (vph)	253
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	275
RTOR Reduction (vph)	0
Lane Group Flow (vph)	275
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	120.0
Effective Green, g (s)	120.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1583
v/s Ratio Prot	
v/s Ratio Perm	0.17
v/c Ratio	0.17
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.2
Delay (s)	0.2
Level of Service	A
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Eureka Road Medical Office Building
4: Eureka Rd & Rocky Ridge Dr

Cumulative Plus Project - Full Access

PM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	529	348	20	159	348	121	53	1700	14	134	1580	327
v/c Ratio	0.86	0.56	0.01	0.72	0.83	0.08	0.23	0.84	0.01	0.66	0.78	0.21
Control Delay	56.6	43.9	0.0	62.5	63.1	0.1	41.8	33.9	0.0	59.8	32.3	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.6	43.9	0.0	62.5	63.1	0.1	41.8	33.9	0.0	59.8	32.3	0.3
Queue Length 50th (ft)	176	113	0	104	122	0	32	376	0	87	360	0
Queue Length 95th (ft)	#252	165	0	169	#201	0	68	#505	0	146	425	0
Internal Link Dist (ft)		808			235			295			308	
Turn Bay Length (ft)	225		225	185		185	220		220	230		
Base Capacity (vph)	653	624	1583	269	419	1583	269	2033	1583	269	2034	1583
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.56	0.01	0.59	0.83	0.08	0.20	0.84	0.01	0.50	0.78	0.21

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Eureka Road Medical Office Building
4: Eureka Rd & Rocky Ridge Dr

Cumulative Plus Project - Full Access

PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	487	320	18	146	320	111	23	26	1564	13	123	1454
Future Volume (vph)	487	320	18	146	320	111	23	26	1564	13	123	1454
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.7	4.0	4.0	6.0	4.0		4.0	5.7	4.0	4.0	5.7
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00		1.00	0.91	1.00	1.00	0.91
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583		1770	5085	1583	1770	5085
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583		1770	5085	1583	1770	5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	529	348	20	159	348	121	25	28	1700	14	134	1580
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	529	348	20	159	348	121	0	53	1700	14	134	1580
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	Prot	NA	Free	Prot	NA
Protected Phases	5	2		1	6		3	3	8		7	4
Permitted Phases			Free			Free				Free		
Actuated Green, G (s)	18.8	18.5	105.0	13.1	12.5	105.0		12.8	42.0	105.0	12.0	41.2
Effective Green, g (s)	18.8	18.5	105.0	13.1	12.5	105.0		12.8	42.0	105.0	12.0	41.2
Actuated g/C Ratio	0.18	0.18	1.00	0.12	0.12	1.00		0.12	0.40	1.00	0.11	0.39
Clearance Time (s)	4.0	5.7		4.0	6.0			4.0	5.7		4.0	5.7
Vehicle Extension (s)	2.0	4.3		2.0	3.9			2.0	4.3		2.0	4.3
Lane Grp Cap (vph)	614	623	1583	220	421	1583		215	2034	1583	202	1995
v/s Ratio Prot	c0.15	0.10		0.09	c0.10			0.03	c0.33		0.08	c0.31
v/s Ratio Perm			0.01			0.08				0.01		
v/c Ratio	0.86	0.56	0.01	0.72	0.83	0.08		0.25	0.84	0.01	0.66	0.79
Uniform Delay, d1	41.8	39.5	0.0	44.2	45.2	0.0		41.7	28.4	0.0	44.6	28.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.5	1.5	0.0	9.5	13.0	0.1		0.2	4.3	0.0	6.2	3.3
Delay (s)	53.4	41.0	0.0	53.7	58.2	0.1		42.0	32.7	0.0	50.8	31.4
Level of Service	D	D	A	D	E	A		D	C	A	D	C
Approach Delay (s)		47.4			45.9				32.7			27.7
Approach LOS		D			D				C			C
Intersection Summary												
HCM 2000 Control Delay			34.8			HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio			0.85									
Actuated Cycle Length (s)			105.0			Sum of lost time (s)			19.7			
Intersection Capacity Utilization			76.2%			ICU Level of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												



Movement	SBR
AAA Configurations	AAA
Traffic Volume (vph)	301
Future Volume (vph)	301
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	327
RTOR Reduction (vph)	0
Lane Group Flow (vph)	327
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	105.0
Effective Green, g (s)	105.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1583
v/s Ratio Prot	
v/s Ratio Perm	0.21
v/c Ratio	0.21
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.3
Delay (s)	0.3
Level of Service	A
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Attachment C
Cumulative No Access Conditions

Eureka Road Medical Office Building
4: Eureka Rd & Rocky Ridge Dr

Cumulative Plus Project - Without Access

AM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	428	222	21	57	149	76	34	1445	93	61	1657	275
v/c Ratio	0.77	0.31	0.01	0.47	0.46	0.05	0.20	0.54	0.06	0.49	0.63	0.17
Control Delay	57.5	42.1	0.0	65.4	56.0	0.1	50.0	21.7	0.1	65.7	25.3	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.5	42.1	0.0	65.4	56.0	0.1	50.0	21.7	0.1	65.7	25.3	0.2
Queue Length 50th (ft)	165	79	0	43	58	0	24	270	0	46	376	0
Queue Length 95th (ft)	211	112	0	86	91	0	56	384	0	89	491	0
Internal Link Dist (ft)	808				235				295		308	
Turn Bay Length (ft)	225		225		185		185		220		220	
Base Capacity (vph)	1001	982	1583	236	412	1583	236	2673	1583	236	2620	1583
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.23	0.01	0.24	0.36	0.05	0.14	0.54	0.06	0.26	0.63	0.17
Intersection Summary												

Eureka Road Medical Office Building
4: Eureka Rd & Rocky Ridge Dr

Cumulative Plus Project - Without Access

AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	394	204	19	52	137	70	19	12	1329	86	56	1524
Future Volume (vph)	394	204	19	52	137	70	19	12	1329	86	56	1524
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.7	4.0	4.0	6.0	4.0		4.0	5.7	4.0	4.0	5.7
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00		1.00	0.91	1.00	1.00	0.91
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583		1770	5085	1583	1770	5085
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583		1770	5085	1583	1770	5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	428	222	21	57	149	76	21	13	1445	93	61	1657
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	428	222	21	57	149	76	0	34	1445	93	61	1657
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	Prot	NA	Free	Prot	NA
Protected Phases	5	2		1	6		3	3	8		7	4
Permitted Phases			Free			Free				Free		
Actuated Green, G (s)	19.5	24.2	120.0	7.3	11.7	120.0		9.6	61.5	120.0	7.6	59.5
Effective Green, g (s)	19.5	24.2	120.0	7.3	11.7	120.0		9.6	61.5	120.0	7.6	59.5
Actuated g/C Ratio	0.16	0.20	1.00	0.06	0.10	1.00		0.08	0.51	1.00	0.06	0.50
Clearance Time (s)	4.0	5.7		4.0	6.0			4.0	5.7		4.0	5.7
Vehicle Extension (s)	2.0	4.3		2.0	3.9			2.0	4.3		2.0	4.3
Lane Grp Cap (vph)	557	713	1583	107	345	1583		141	2606	1583	112	2521
v/s Ratio Prot	c0.12	0.06		0.03	c0.04			0.02	c0.28		0.03	c0.33
v/s Ratio Perm			0.01			0.05				0.06		
v/c Ratio	0.77	0.31	0.01	0.53	0.43	0.05		0.24	0.55	0.06	0.54	0.66
Uniform Delay, d1	48.1	40.8	0.0	54.7	51.0	0.0		51.8	19.9	0.0	54.5	22.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.7	0.4	0.0	2.5	1.2	0.1		0.3	0.9	0.1	2.9	1.4
Delay (s)	53.8	41.2	0.0	57.2	52.2	0.1		52.1	20.8	0.1	57.4	24.0
Level of Service	D	D	A	E	D	A		D	C	A	E	C
Approach Delay (s)		47.9			39.1				20.2			21.7
Approach LOS		D			D				C			C
Intersection Summary												
HCM 2000 Control Delay			26.2			HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio			0.65									
Actuated Cycle Length (s)			120.0			Sum of lost time (s)			19.7			
Intersection Capacity Utilization			64.2%			ICU Level of Service			C			
Analysis Period (min)			15									
c Critical Lane Group												



Movement	SBR
AAA Configurations	AAA
Traffic Volume (vph)	253
Future Volume (vph)	253
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	275
RTOR Reduction (vph)	0
Lane Group Flow (vph)	275
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	120.0
Effective Green, g (s)	120.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1583
v/s Ratio Prot	
v/s Ratio Perm	0.17
v/c Ratio	0.17
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.2
Delay (s)	0.2
Level of Service	A
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Eureka Road Medical Office Building
4: Eureka Rd & Rocky Ridge Dr

Cumulative Plus Project - Without Access

PM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	529	333	35	141	341	104	86	1716	40	109	1604	327
v/c Ratio	0.86	0.51	0.02	0.68	0.82	0.07	0.37	0.82	0.03	0.60	0.79	0.21
Control Delay	56.6	42.5	0.0	60.5	62.2	0.1	45.1	32.3	0.0	58.0	32.7	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.6	42.5	0.0	60.5	62.2	0.1	45.1	32.3	0.0	58.0	32.7	0.3
Queue Length 50th (ft)	176	106	0	92	120	0	52	372	0	71	367	0
Queue Length 95th (ft)	#252	158	0	152	#195	0	100	#505	0	123	434	0
Internal Link Dist (ft)		808			235			295			308	
Turn Bay Length (ft)	225		225	185		185	220		220	230		
Base Capacity (vph)	653	647	1583	269	417	1583	269	2096	1583	269	2037	1583
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.51	0.02	0.52	0.82	0.07	0.32	0.82	0.03	0.41	0.79	0.21

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Eureka Road Medical Office Building
4: Eureka Rd & Rocky Ridge Dr

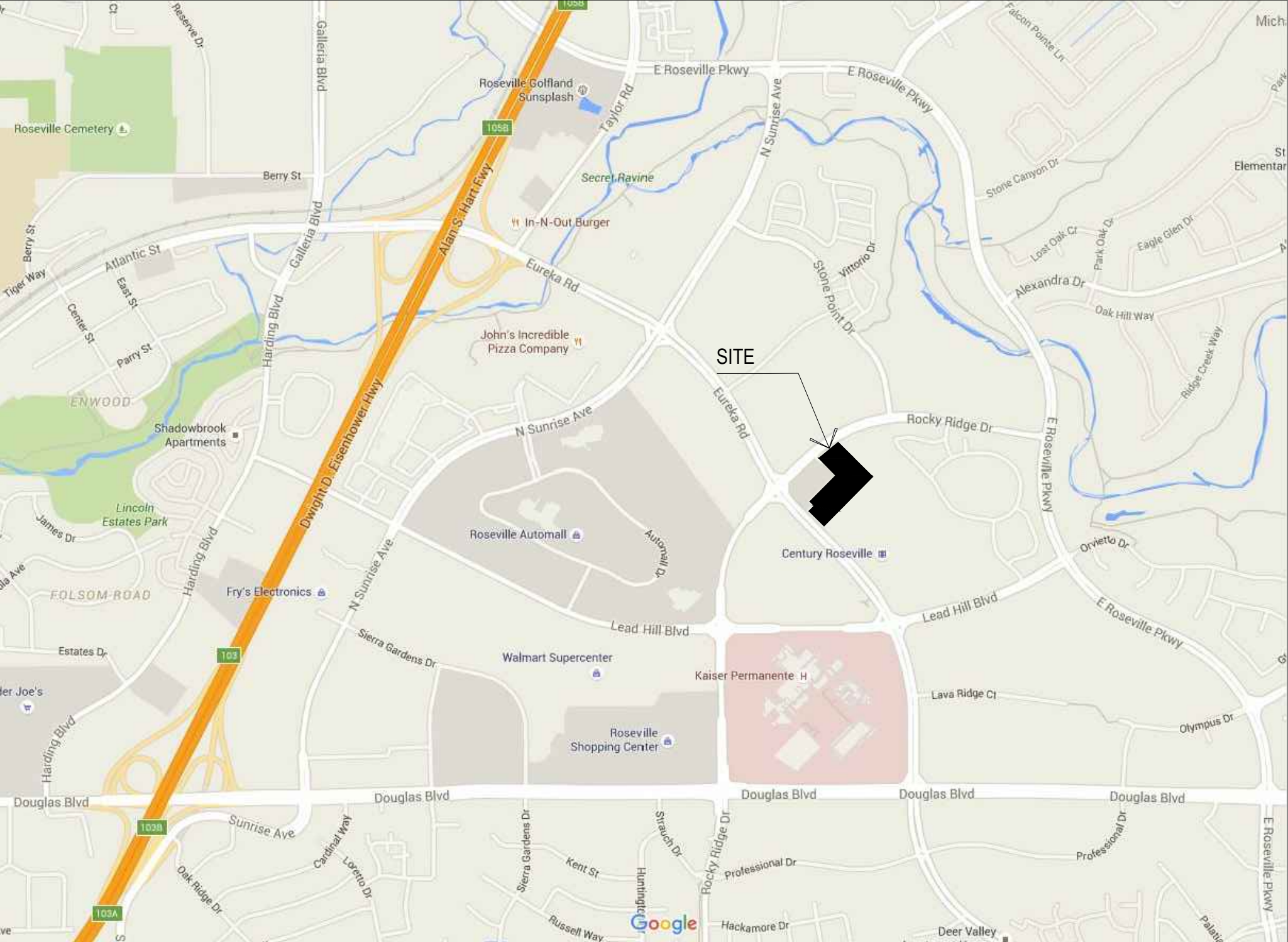
Cumulative Plus Project - Without Access

PM Peak

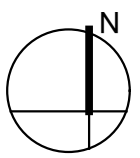
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations	 	 			 				  			  
Traffic Volume (vph)	487	306	32	130	314	96	47	32	1579	37	100	1476
Future Volume (vph)	487	306	32	130	314	96	47	32	1579	37	100	1476
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.7	4.0	4.0	6.0	4.0		4.0	5.7	4.0	4.0	5.7
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00		1.00	0.91	1.00	1.00	0.91
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583		1770	5085	1583	1770	5085
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583		1770	5085	1583	1770	5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	529	333	35	141	341	104	51	35	1716	40	109	1604
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	529	333	35	141	341	104	0	86	1716	40	109	1604
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	Prot	NA	Free	Prot	NA
Protected Phases	5	2		1	6		3	3	8		7	4
Permitted Phases			Free			Free				Free		
Actuated Green, G (s)	18.8	19.2	105.0	12.3	12.4	105.0		12.8	43.3	105.0	10.8	41.3
Effective Green, g (s)	18.8	19.2	105.0	12.3	12.4	105.0		12.8	43.3	105.0	10.8	41.3
Actuated g/C Ratio	0.18	0.18	1.00	0.12	0.12	1.00		0.12	0.41	1.00	0.10	0.39
Clearance Time (s)	4.0	5.7		4.0	6.0			4.0	5.7		4.0	5.7
Vehicle Extension (s)	2.0	4.3		2.0	3.9			2.0	4.3		2.0	4.3
Lane Grp Cap (vph)	614	647	1583	207	417	1583		215	2096	1583	182	2000
v/s Ratio Prot	c0.15	0.09		0.08	c0.10			0.05	c0.34		0.06	c0.32
v/s Ratio Perm			0.02			0.07				0.03		
v/c Ratio	0.86	0.51	0.02	0.68	0.82	0.07		0.40	0.82	0.03	0.60	0.80
Uniform Delay, d1	41.8	38.7	0.0	44.5	45.2	0.0		42.6	27.4	0.0	45.0	28.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.5	1.1	0.0	7.1	12.3	0.1		0.4	3.7	0.0	3.5	3.5
Delay (s)	53.4	39.8	0.0	51.6	57.5	0.1		43.0	31.1	0.0	48.5	31.7
Level of Service	D	D	A	D	E	A		D	C	A	D	C
Approach Delay (s)		46.2			45.9				31.0			27.6
Approach LOS		D			D				C			C
Intersection Summary												
HCM 2000 Control Delay			33.9			HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio			0.84									
Actuated Cycle Length (s)			105.0			Sum of lost time (s)			19.7			
Intersection Capacity Utilization			75.0%			ICU Level of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												

Movement	SBR
Left Configurations	7
Traffic Volume (vph)	301
Future Volume (vph)	301
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	327
RTOR Reduction (vph)	0
Lane Group Flow (vph)	327
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	105.0
Effective Green, g (s)	105.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1583
v/s Ratio Prot	
v/s Ratio Perm	0.21
v/c Ratio	0.21
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.3
Delay (s)	0.3
Level of Service	A
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Initial Study - Exhibit A



VICINITY MAP
NTS



PROJECT DATA

SITE DATA

SITE AREA: 5.7 ACRES
BLDG GROSS AREA: 75,000 SF

PARKING DATA

PROPOSED PARKING STALLS COUNT

ADA PARKING STALLS	7
ADA PARKING VAN STALLS	3
STANDARD PARKING STALLS	345
COMPACT PARKING STALLS	98 (22%)
TOTAL PARKING:	453 STALLS
	6 STALLS PER 1,000 SF

REQUIRED PARKING STALLS COUNT

1 STALL PER 150 SF	460 STALLS
--------------------	------------

BIKE PARKING

REQUIRED 5% OF TOTAL PARKING	23 SPACES
PROVIDED BIKE SPACES	24 SPACES



PARKING LOT LIGHT
GARDCO GULLWING LED ON 15' HIGH POLE



MEDICAL OFFICE BUILDING
EUREKA ROAD @ ROCKY RIDGE

ROSEVILLE, CA

SITE PLAN

DATE: 01.17.2017
PROJECT NO: 1111-0009
SCALE:
SHEET:

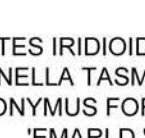


LPAS

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Initial Study - **Exhibit B**

PLANT SCHEDULE

TREES	BOTANICAL NAME / COMMON NAME	CONT	QTY	W/
	Acer rubrum 'Autumn Glory' / Autumn Glory Maple	24"box	6	M
	Arbutus unedo / Strawberry Tree	15 gal	31	L
	Cercis canadensis 'Forest Pansy' TM / Forest Pansy Redbud	15 gal	7	M
	Cercis canadensis 'Oklahoma' / Oklahoma Redbud	15 gal	43	M
	Pistacia chinensis 'Keith Davey' / Keith Davey Chinese Pistache	15 gal	12	L
	Prunus cerasifera 'Purple Pony' / Dwarf Flowering Plum	15 gal	46	M
	Zelkova serrata 'Green Vase' / Sawleaf Zelkova	15 gal	32	M

SHRUB LEGEND

BOTANICAL NAME	COMMON NAME	PLANT SIZE	SIZE (HxW)	WATER USE
DIETES IRIDIODES	FORTNIGHT LILY	5 GAL.	3'x3'	L
DIANELLA TASMANICA	FLAX LILY	1 GAL.	2' x 2'	M
EUONYMUS FORTUNEI	WINTERCREEPER	1 GAL.	2' x 3'	M
'EMARLD 'N GOLD'				
FESTUCA 'ELIJAH BLUE'	BLUE FESCUE	1 GAL.	1' x 1'	L
GAURA LINDHEIMERI	BUTTERFLY GAURA	1 GAL.	2' x 2'	M
JUNIPERUS 'SKY ROCKET'	SKYROCKET JUNIPER	5 GAL.	12' x 2'	L
LOMANDRA LONGIFOLIA	DWARF MAT RUSH	1 GAL.	2' x 2'	L
LOROPETALUM 'PURPLE PIXIE'	CHINESE FRINGE	5 GAL.	2' x 6'	M
NANDINA DOMESTICA	HEAVENLY BAMBOO	5 GAL.	2' x 2'	M
PHORMIUM HYB.	NEW ZEALAND FLAX	15 GAL.	3' x 3'	L
PITTOSPORUM 'CREAM DE MINT'	NCN	1 GAL.	2' x 3'	M
RHAPHIOLEPIS 'BALLERINA'	INDIAN HAWTHORNE	1 GAL.	2' x 4'	L

GROUND COVER LEGEND

BOTANICAL NAME	COMMON NAME	PLANT SIZE	SPACING	WATER USE
AGAPANTHUS 'STORM CLOUD'	LILY OF THE NILE	1 GAL.	@ 2' O.C.	M
ARCTOSTAPHYLOS D.	MANZANITA	1 GAL.	@ 4' O.C.	L
'EMERALD CARPET'				
BACCHARIS PILULARIS	DWARF COYOTE BUSH	1 GAL.	@ 4' O.C.	L
TWIN PEAKS II				
COTONEASTER 'LOWFAST'	COTONEASTER	1 GAL.	@ 6' O.C.	L
HEMEROCALLIS HYB.	DAYLILY	1 GAL.	@ 2' O.C.	M
GAZANIA	NCN	1 GAL.	@ 1' O.C.	L
JUNIPERUS HORIZONTALIS	JUNIPER	1 GAL.	@ 3' O.C.	L
MYOPORUM PARVIFOLIUM	NCN	1 GAL.	@ 4' O.C.	L
ROSA	CARPET ROSE	1 GAL.	@ 3' O.C.	L
ZAUSCHNERIA CALIFORNICA	CALIFORNIA FUCHSIA	1 GAL.	@ 3' O.C.	L

STORM WATER PLANTER

BOTANICAL NAME	COMMON NAME	PLANT SIZE	SPACING	WATER USE
NATIVE PRESERVATION BLEND		SOD		L

VINE LEGEND

BOTANICAL NAME	COMMON NAME	PLANT SIZE	SPACING	WATER USE
PARTHENOCISSUS TRICUSPIDATA	BOSTON IVY	5 GAL.	@ 4' O.C.	M

LANDSCAPE NOTES

- IRRIGATION SYSTEM TO BE WATER EFFICIENT AND PER CITY STANDARDS.
- SLOPE ALL PLANTING AREAS A MINIMUM OF 2% TO PROVIDE POSITIVE DRAINAGE.
- IMPORTED TOPSOIL SHALL BE TESTED BY AN APPROVED SOIL TESTING SERVICE, AND TOPSOIL SHALL BE AMENDED PER THE RECOMMENDATIONS CONTAINED IN THAT SOILS REPORT.
- TOP DRESS ALL SHRUB AND GROUND COVER AREAS, (NOT LAWN) WITH A 3" LAYER OF 2" SHREDDED FIR BARK MULCH. SUBMIT SAMPLE TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.
- TREE LOCATIONS MAY BE ADJUSTED IN THE FIELD BY THE LANDSCAPE ARCHITECT TO SUIT SITE REQUIREMENTS.
- SOIL CONDITIONS CAUSING THE RETENTION OF WATER IN PLANTING PITS FOR MORE THAN 2 HOURS SHALL BE CORRECTED PRIOR TO PLANTING TO PROVIDE POSITIVE DRAINAGE, AT NO ADDITIONAL COST TO THE OWNER.
- ALL PLANT MATERIALS SHALL COMPLY WITH SPECIFICATIONS OF ANSI Z60.1 "STANDARD FOR NURSERY STOCK".
- ALL TREES TO BE MINIMUM 15' FROM PARKING LOT AND STREET LIGHT.
- LANDSCAPE PLANS ARE CONSISTENT WITH STATE WATER EFFICIENT REQUIREMENTS (CALIFORNIA CODE OF REGULATIONS, TITLE 23, CH. 2.7, DIV. 2).



MEDICAL OFFICE BUILDING
EUREKA ROAD @ ROCKY RIDGE

ROSEVILLE, CA

COLOR LANDSCAPE
PLAN

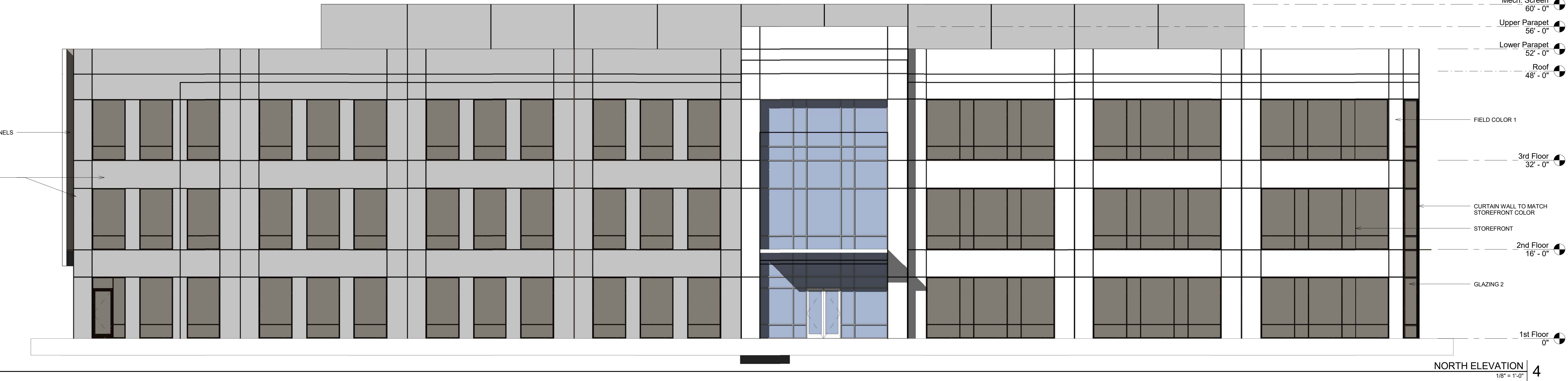
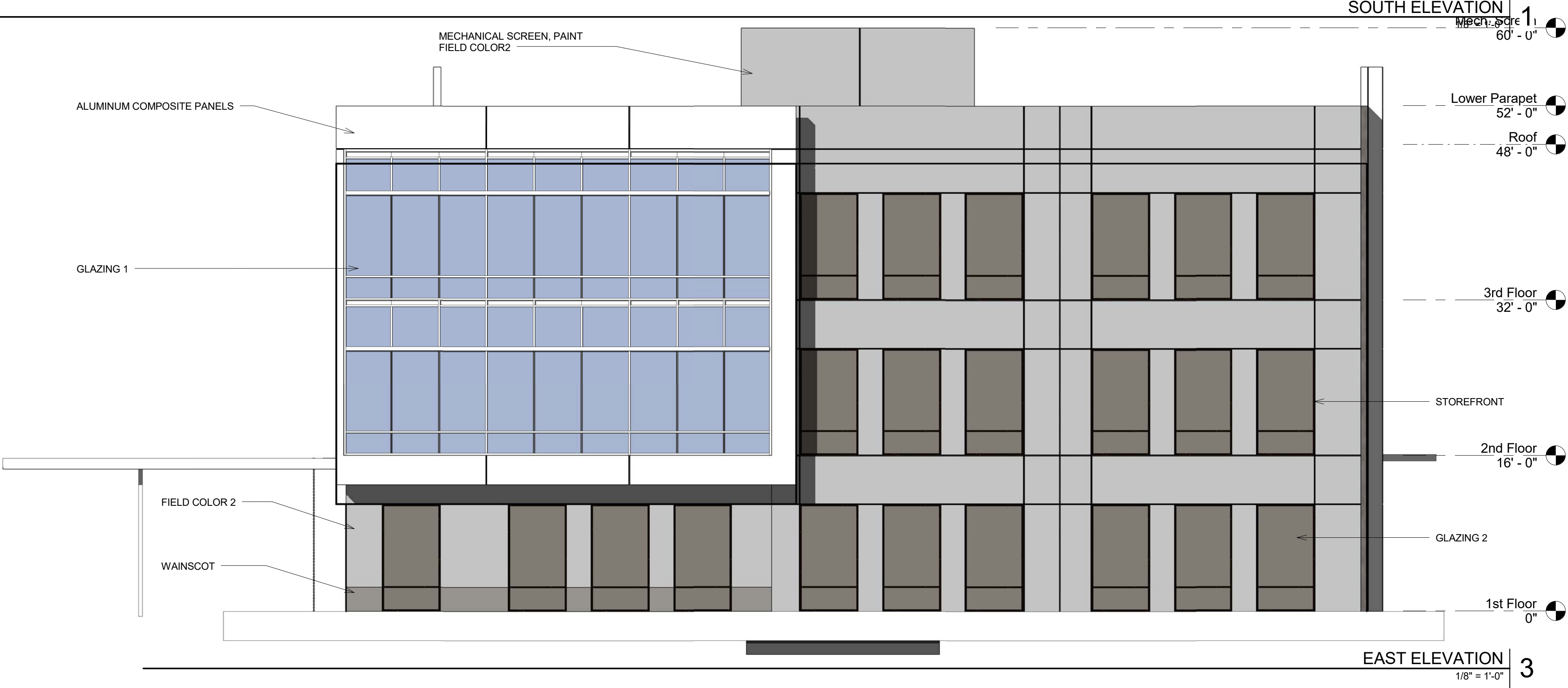
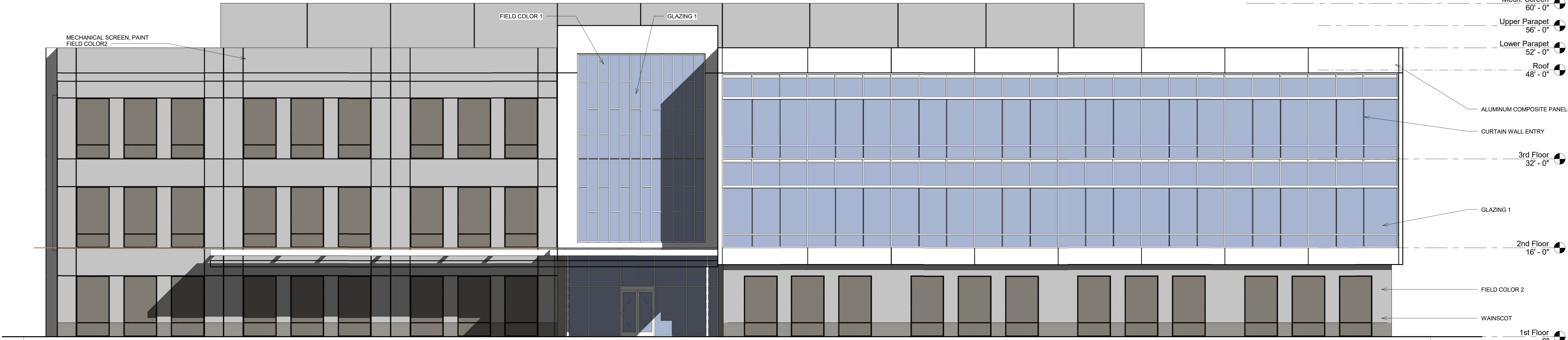
DATE: 09.16.2016
PROJECT NO: 1111-0009
SCALE:
SHEET:



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Initial Study
Exhibit C



Medical Office Building
EUREKA ROAD @ ROCKY RIDGE

Roseville, CA

BUILDING ELEVATIONS

DATE: 02/26/16
PROJECT NO: 1111-0009
SCALE:
SHEET: A3.01





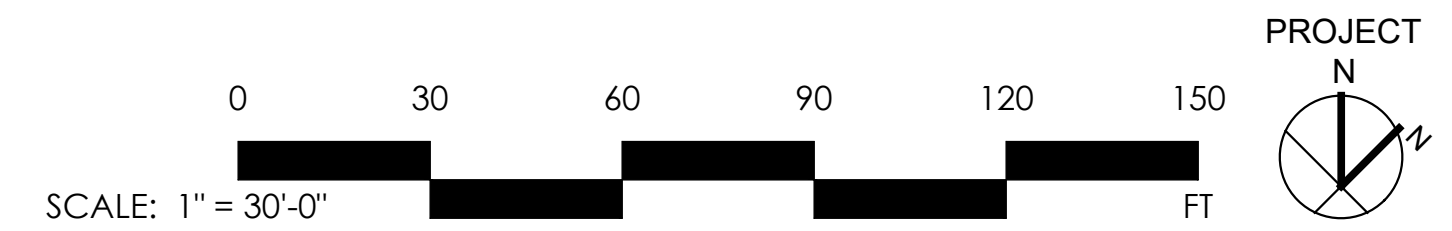
MEDICAL OFFICE BUILDING
EUREKA ROAD @ ROCKY RIDGE

ROSEVILLE, CA

BUILDING RENDERINGS

DATE: 09.16.2016
PROJECT NO: 1111-0009
SCALE:
SHEET:

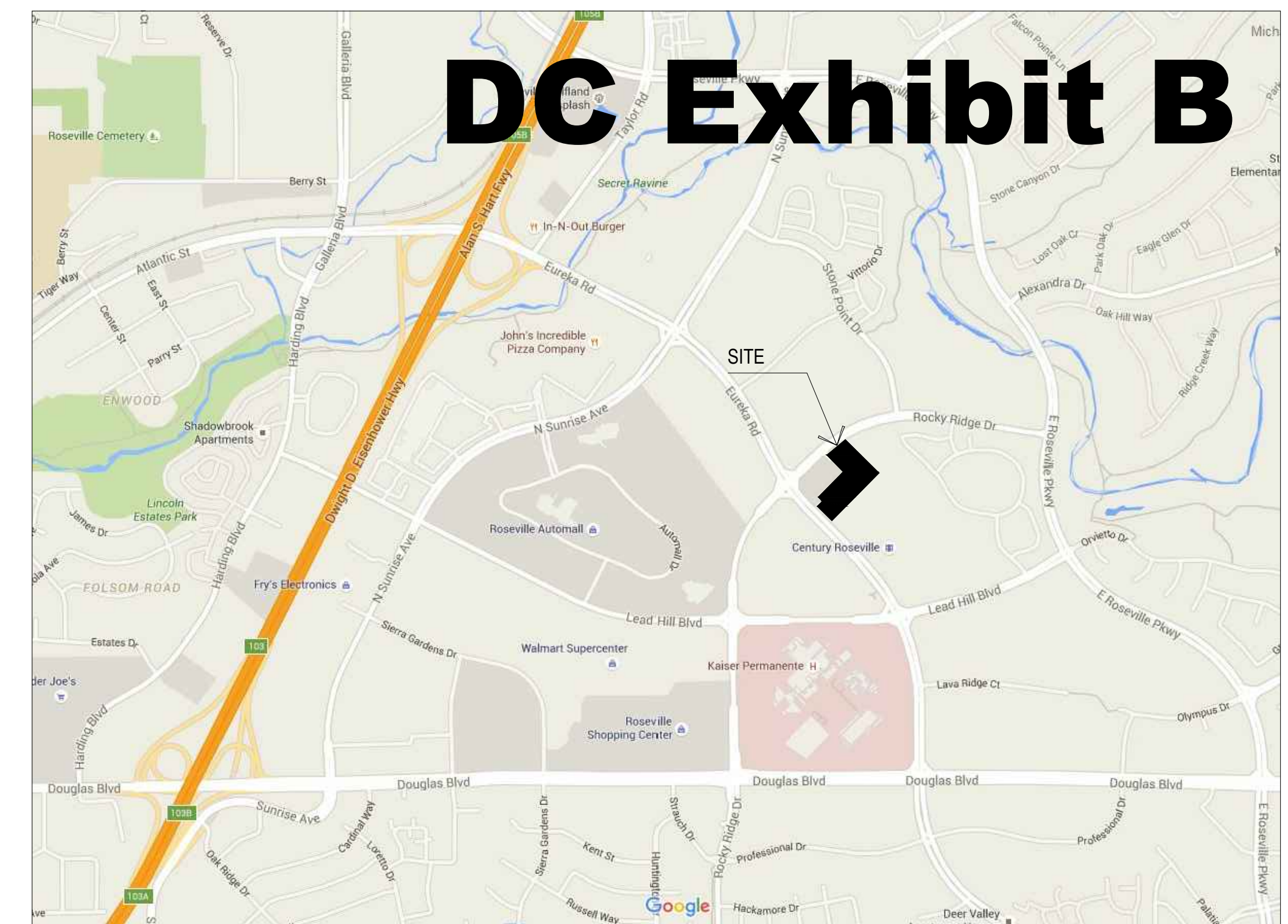




ROSEVILLE, CA

SITE PLAN

DATE: 03.27.2017
PROJECT NO: 1111-0009
SCALE:
SHEET:



VICINITY MAP

NTS

PROJECT DATA

SITE DATA

SITE AREA: 5.7 ACRES

BUILDING AREA: 77,106 GSF

PARKING DATA

PROPOSED PARKING STALLS COUNT

ADA PARKING STALLS	8
ADA PARKING VAN STALLS	2

STANDARD PARKING STALLS	348
COMPACT PARKING STALLS	94 (21%)

TOTAL PARKING: 452 STALLS (5.9 STALLS PER 1,000 SF)

CLEAN AIR/ VAN POOL/ EV
PARKING PROVIDED 36 (8% X 452 PARKING SPACES)

REQUIRED PARKING STALLS COUNT

1 STALL PER 150 SF 514 STALLS

BIKE PARKING

SHORT TERM (RACKS)	21	(5% X 402 GUEST PARKING SPACES)
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LONG TERM (LOCKERS)	3	(5% X 50 TENANT PARKING SPACES)
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TOTAL PROVIDED BIKE SPACES	24 SPACES
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PARKING LOT LIGHT
GARDCO GULLWING LED ON 15' HIGH POLE



LPAS

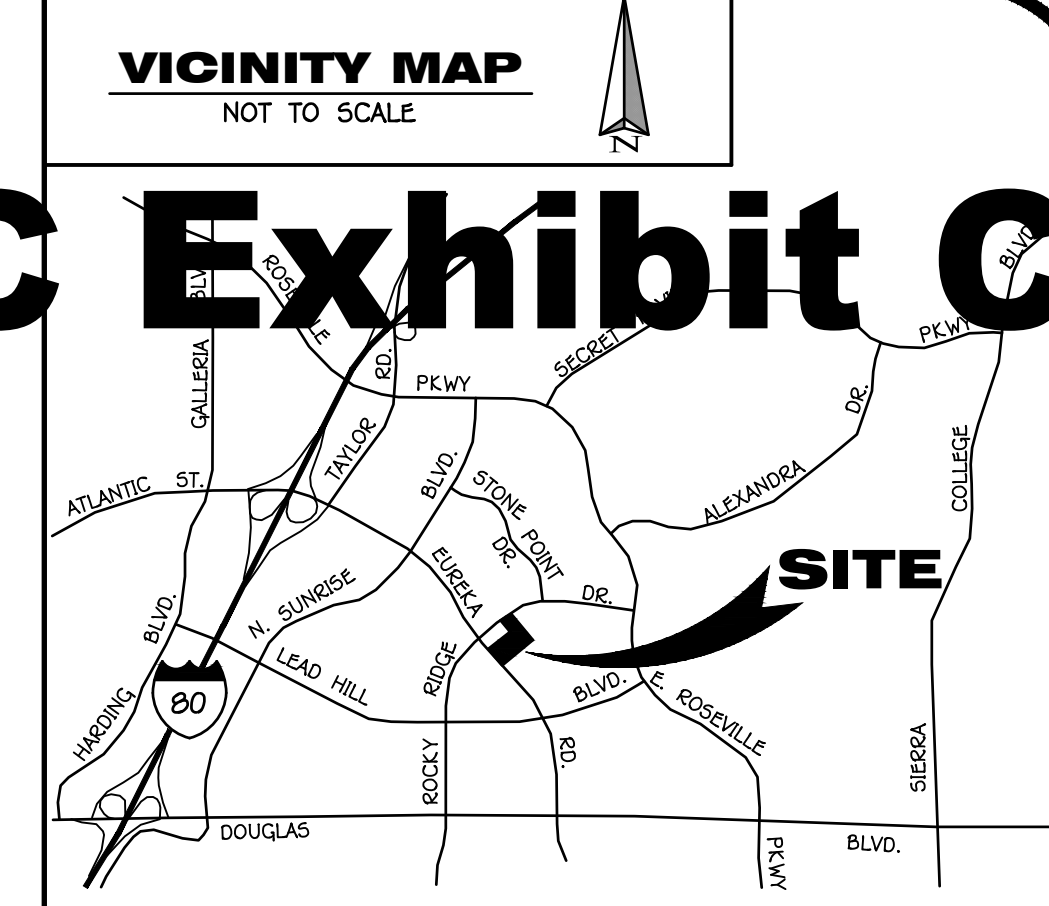
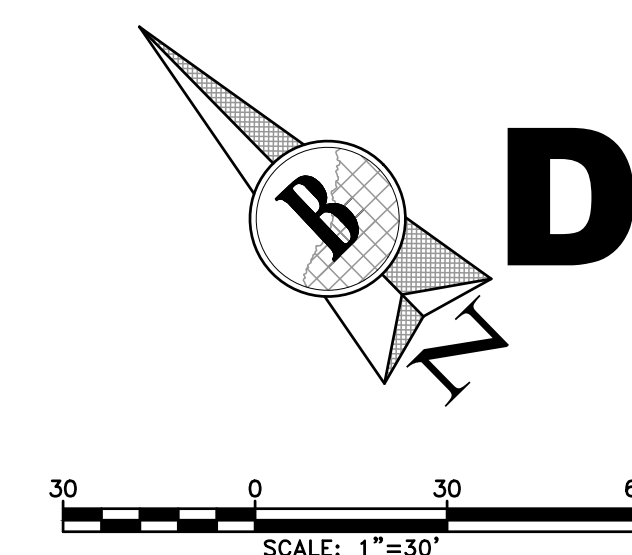
2484 Natomas Park Drive Suite 100 Sacramento CA 95833
916 443 0335 lpasdesign.com Architecture + Design

1. THIS PRELIMINARY GRADING PLAN IS SCHEMATIC ONLY, AND IS INTENDED TO DEPICT THE PROPOSED GENERAL DRAINAGE CONCEPTS AND THE MAGNITUDE OF CUTS AND FILLS. THE FINISHED DESIGN MAY INCORPORATE MINOR REVISIONS DUE TO FINAL DESIGN CONSIDERATIONS.
2. ALL GRADES SHOWN HEREON ARE FINISHED SURFACE GRADES.
3. A RECIPROCAL PARKING AND ACCESS AGREEMENT WILL BE PROVIDED BETWEEN THE PARCELS.
4. ALL IMPROVEMENTS ARE TO CONFORM TO THE CITY OF ROSEVILLE STANDARDS AND NO DEVIATIONS FROM THOSE STANDARDS ARE PROPOSED.
5. EXISTING UTILITIES TO BE REMOVED AS NECESSARY TO ACCOMMODATE LOCATIONS OF PROPOSED BUILDINGS.

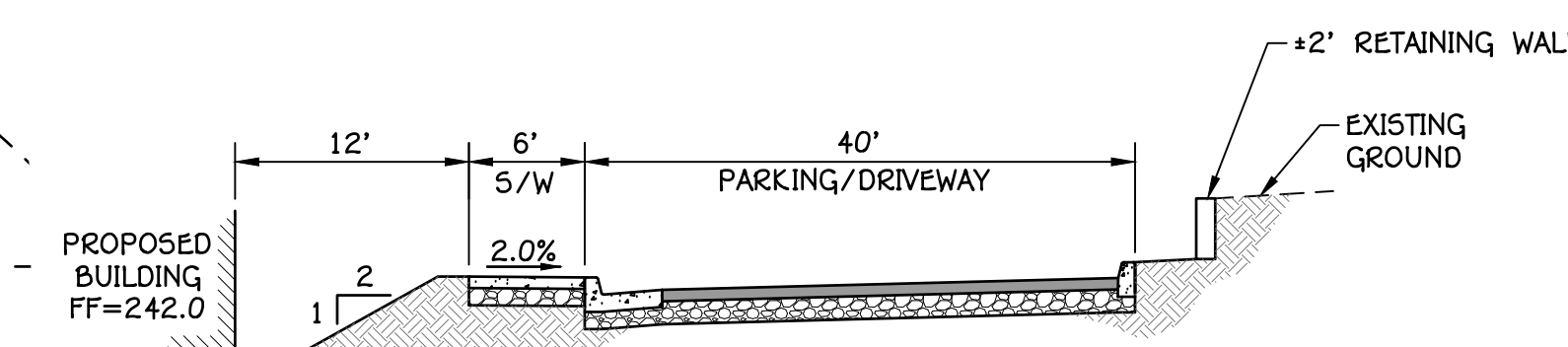
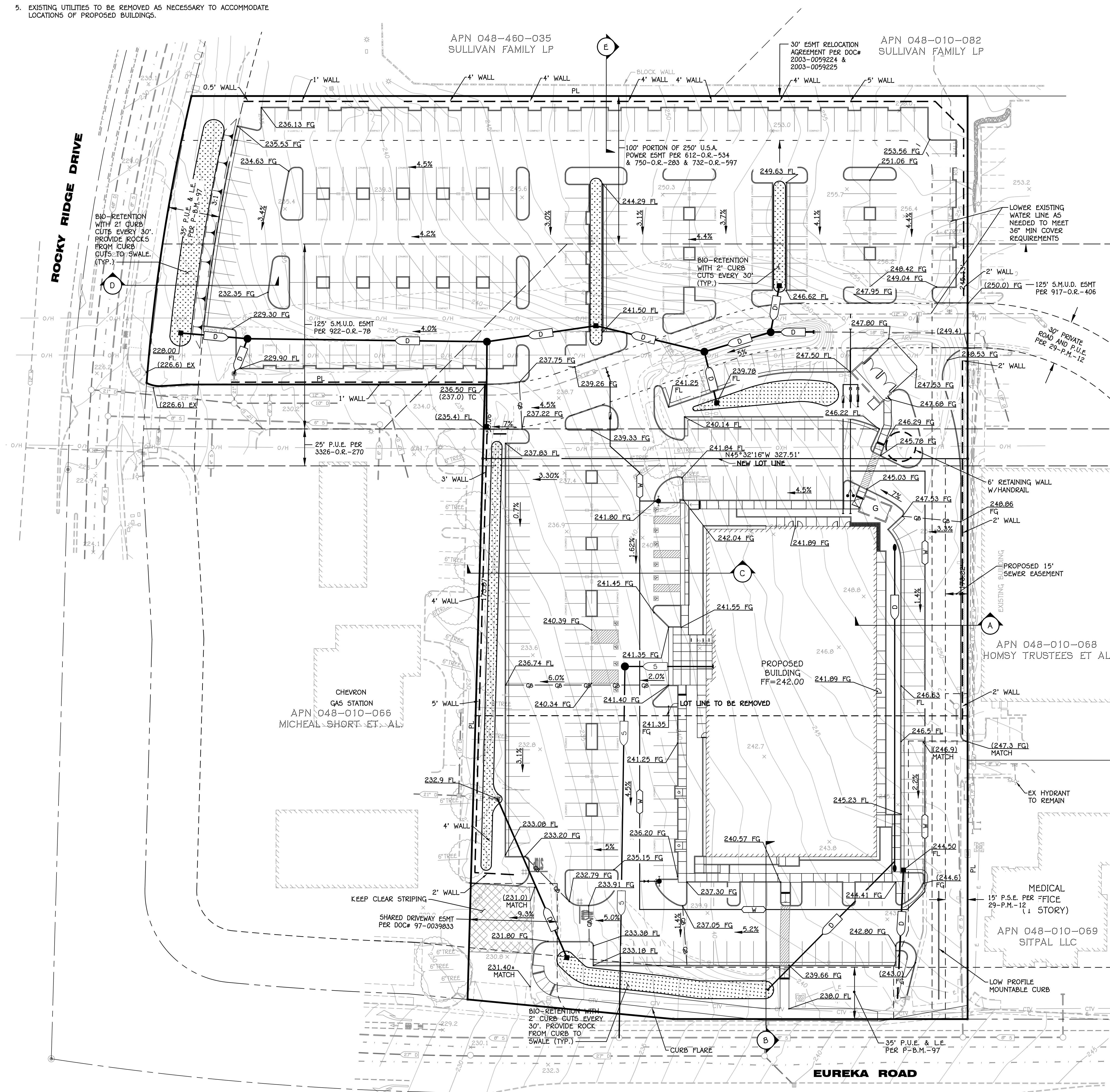
CITY OF ROSEVILLE

PAPPAS GATEWAY, LP

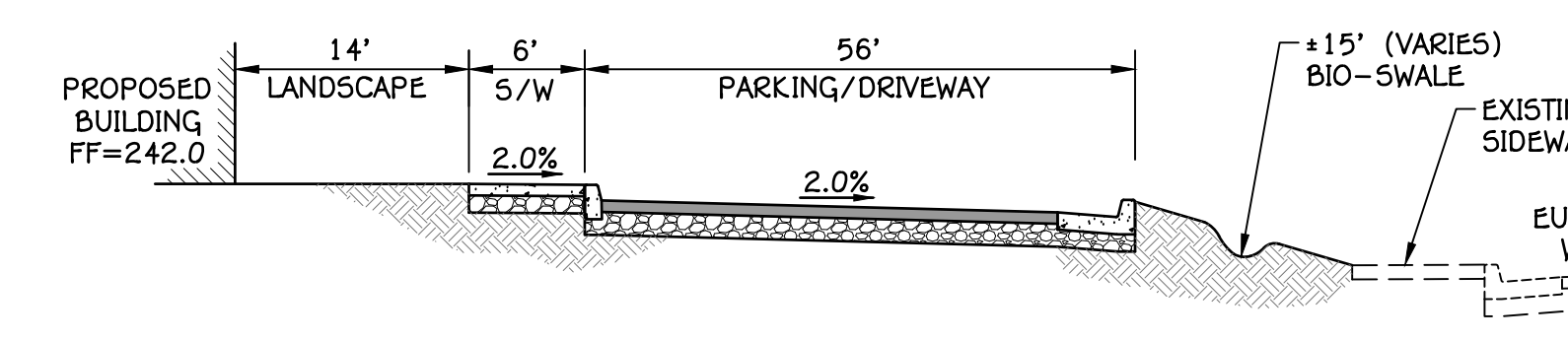
CALIFORNIA



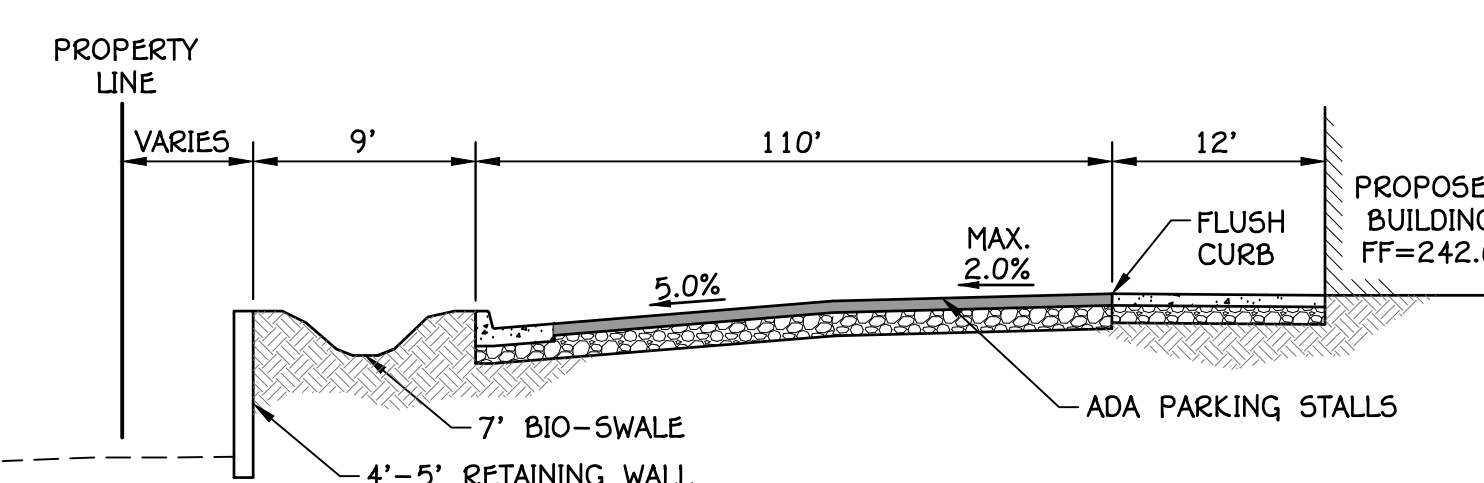
LEGEND	(P) PROPOSED	(E) EXISTING
STORM DRAIN		
SANITARY SEWER		
WATER MAIN		
FIRE SERVICE		
CENTERLINE		
RIGHT OF WAY LINE		
BOUNDARY LINE		
ELECTRICAL LINE		
GAS LINE		
TELEPHONE LINE		
JOINT TRENCH		
FENCE		
WOOD FENCE		
WROUGHT IRON FENCE		
WALL		
SIDEWALK WITH CURB AND GUTTER		
VARIABLE CURB FACE		
BARRICADE		
DRIVEWAY		
MANHOLE		
DRAIN INLET		
SEWER CLEANOUT		
WATER SERVICE		
METERED WATER SERVICE		
POST INDICATOR VALVE		
FIRE HYDRANT		
FIRE DEPT. CONNECTION		
BLOWOFF VALVE		
GATE VALVE		
BUTTERFLY VALVE		
REDUCED PRESSURE BACKFLOW PREVENTOR		
DOUBLE DETECTOR CHECK VALVE		
TYPE 'A' STREET LIGHT		
TYPE 'B' STREET LIGHT		
TRAFFIC LIGHT		
TRANSFORMER		
PULLBOX		
PEDESTAL & SERVICE CAN		
UTILITY SERVICE PEDESTAL		
UTILITY POLE		
GUY WIRE		
4 SIDED STREET SIGN		
SIGN		
RIDGE LINE		
DIRECTION OF FLOW		
FLOWLINE		
SWALE		
PAD ELEVATION		
ELEVATION		
2:1 SLOPE UNLESS NOTED OTHERWISE		
TREE TO BE REMOVED		
TREE TO REMAIN, CONSTRUCT TEMPORARY FENCE		



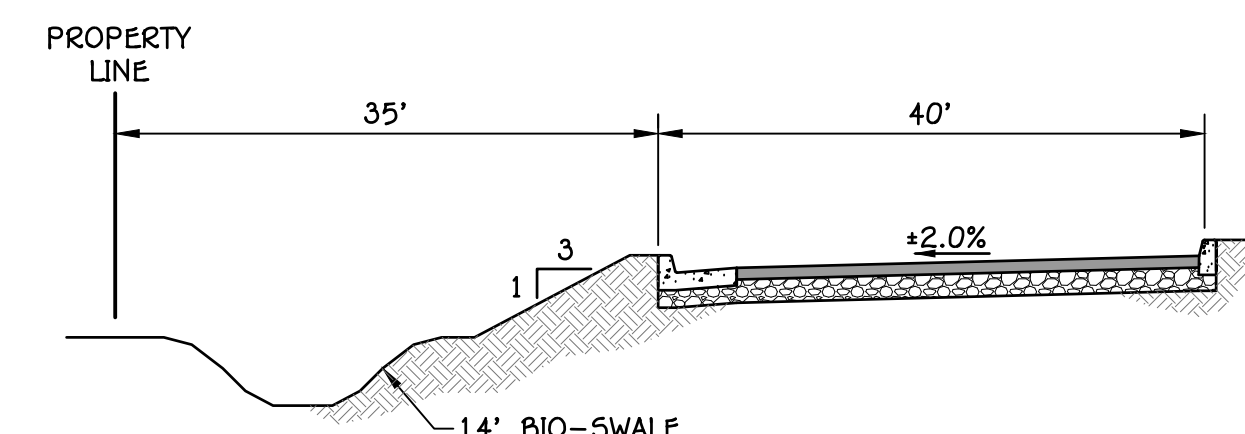
CROSS SECTION



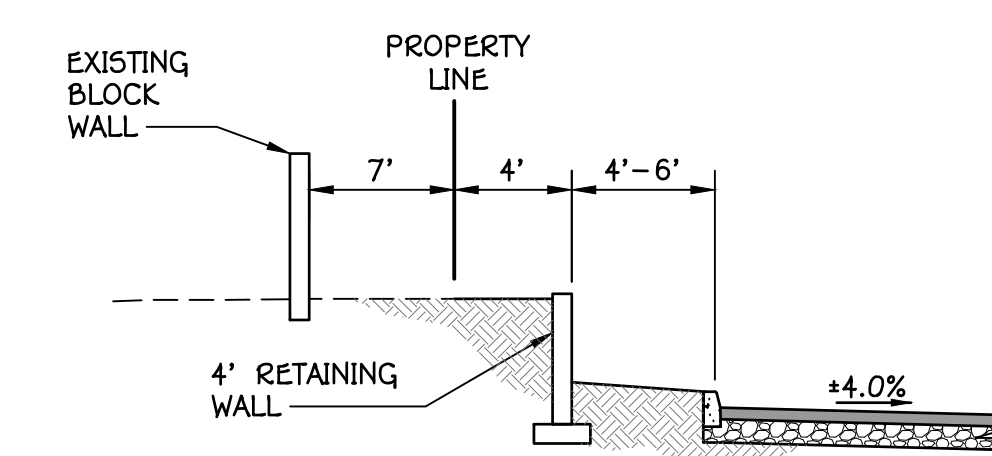
CROSS SECTION



CROSS SECTION

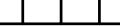


CROSS SECTION



CROSS SECTION

**PRELIMINARY GRADING AND UTILITY PLAN FOR:
1513 & 1521 EUREKA ROAD
PAPPAS GATEWAY, LP
JANUARY 16, 2017**



**BURRELL
CONSULTING
GROUP, INC.**

1001 Enterprise Way, Suite 100, Roseville, CA 95678 (916) 783-88

1001 Enterprise Way, Suite 100 Roseville, CA 95678 (916) 783-8898



PLANT SCHEDULE				
TREES	BOTANICAL NAME	CONT.	QTY	WATER USE
	Acer rubrum 'Autumn Glory' Autumn Glory Maple	24"box	6	M
	Arbutus unedo Strawberry Tree	15 gal	31	L
	Cercis canadensis 'Forest Pansy' TM Forest Pansy Redbud	15 gal	7	M
	Cercis canadensis 'Oklahoma' Oklahoma Redbud	15 gal	44	M
	Pistacia chinensis 'Keith Davey' Keith Davey Chinese Pistache	15 gal	12	L
	Prunus cerasifera 'Purple Pony' Dwarf Flowering Plum	15 gal	51	M
	Zelkova serrata 'Green Vase' Sawleaf Zelkova	15 gal	34	M

SHRUB LEGEND				
BOTANICAL NAME	COMMON NAME	PLANT SIZE	SIZE (HxW)	WATER USE
DIETES IRIDIODES	FORTNIGHT LILY	5 GAL.	3'x3'	L
DIANELLA TASMANICA	FLAX LILY	1 GAL.	2' x 2'	M
EUCONYMUS FORTUNEI	WINTERCREEPER	1 GAL.	2' x 3'	M
'EMERALD N' GOLD'				
FESTUCA 'ELIJAH BLUE'	BLUE FESCUE	1 GAL.	1' x 1'	L
GAURA LINDHEIMERI	BUTTERFLY GAURA	1 GAL.	2' x 2'	M
JUNIPERUS 'SKY ROCKET'	SKYROCKET JUNIPER	5 GAL.	12' x 2'	L
LOMANDRA LONGIFOLIA	DWARF MAT RUSH	1 GAL.	2' x 2'	L
LOROPETALUM 'PURPLE PIXIE'	CHINESE FRINGE	5 GAL.	2' x 6'	M
NANDINA DOMESTICA	HEAVENLY BAMBOO	5 GAL.	2' x 2'	M
PHORMIUM HYB	NEW ZEALAND FLAX	15 GAL.	3' x 3'	L
PITTOSPORUM 'CREAM DE MINT'	NCN	1 GAL.	2' x 3'	M
RHAPHIOLEPIS 'BALLERINA'	INDIAN HAWTHORNE	1 GAL.	2' x 4'	L

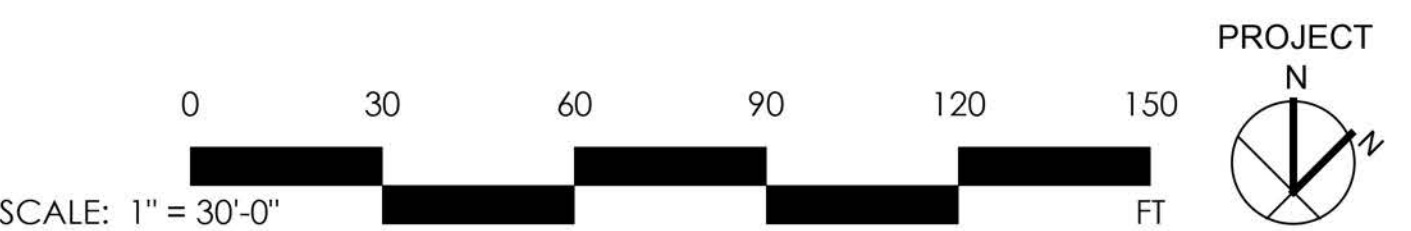
GROUND COVER LEGEND				
BOTANICAL NAME	COMMON NAME	PLANT SIZE	SPACING	WATER USE
AGAPANTHUS 'STORM CLOUD'	LILY OF THE NILE	1 GAL.	@ 2' O.C.	M
ARCTOSTAPHYLOS D.	MANZANITA	1 GAL.	@ 4' O.C.	L
'EMERALD CARPET'				
BACCHARIS PILULARIS	DWARF COYOTE BUSH	1 GAL.	@ 4' O.C.	L
'TWIN PEAKS II'				
COTONEASTER 'LOWFAST'	COTONEASTER	1 GAL.	@ 6' O.C.	L
HEMEROCALLIS HYB.	DAYLILY	1 GAL.	@ 2' O.C.	M
GAZANIA	NCN	1 GAL.	@ 1' O.C.	L
JUNIPERUS HORIZONTALIS	JUNIPER	1 GAL.	@ 3' O.C.	L
MYOPORUM PARVIFOLIUM	NCN	1 GAL.	@ 4' O.C.	L
ROSA	CARPET ROSE	1 GAL.	@ 3' O.C.	L
ZAUSCHNERIA CALIFORNICA	CALIFORNIA FUCHSIA	1 GAL.	@ 3' O.C.	L

STORM WATER PLANTER				
BOTANICAL NAME	COMMON NAME	PLANT SIZE	SPACING	WATER USE
NATIVE PRESERVATION BLEND		SOD		L

VINE LEGEND				
BOTANICAL NAME	COMMON NAME	PLANT SIZE	SPACING	WATER USE
PARTHENOCCISSUS TRICUSPIDATA	BOSTON IVY	5 GAL.	@ 4' O.C.	M

PARKING LOT SHADE TREE					
Quercus virginiana	35'	Full	4	962	3,848
Zelkova s. 'Green Vase'		Three-Qtrs	3	722	2,166
		Half	26	481	12,596
		Quarter	0	241	0
Total					18,520
Pistacia c. 'Keith Davey'	30'	Full	9	706	6,354
		Three-Qtrs	2	530	1,060
		Half	1	354	354
		Quarter	0	177	0
Total					7,768
Cercis c. 'Oklahoma'	15'	Full	43	353	15,179
Lagerstroemia x 'Tonto'		Three-Qtrs	6	265	1,590
Magnolia g. 'Little Gem'		Half	79	177	13,983
Prunus c. 'Purple Pony'		Quarter	0	89	0
Total					30,752
Total Tree Shaded Area Provided					57,040
Percent of Parking Shaded					35.6%
Total Parking Area					160,026

- LANDSCAPE NOTES
- IRRIGATION SYSTEM TO BE WATER EFFICIENT AND PER CITY STANDARDS.
 - SLOPE ALL PLANTING AREAS A MINIMUM OF 2% TO PROVIDE POSITIVE DRAINAGE.
 - IMPORTED TOPSOIL SHALL BE TESTED BY AN APPROVED SOIL TESTING SERVICE, AND TOPSOIL SHALL BE AMENDED PER THE RECOMMENDATIONS CONTAINED IN THAT SOILS REPORT.
 - TOP DRESS ALL SHRUB AND GROUND COVER AREAS, (NOT LAWN) WITH A 3" LAYER OF 2" SHREDDED FIR BARK MULCH. SUBMIT SAMPLE TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.
 - TREE LOCATIONS MAY BE ADJUSTED IN THE FIELD BY THE LANDSCAPE ARCHITECT TO SUIT SITE REQUIREMENTS.
 - SOIL CONDITIONS CAUSING THE RETENTION OF WATER IN PLANTING PITS FOR MORE THAN 2 HOURS SHALL BE CORRECTED PRIOR TO PLANTING TO PROVIDE POSITIVE DRAINAGE, AT NO ADDITIONAL COST TO THE OWNER.
 - ALL PLANT MATERIALS SHALL COMPLY WITH SPECIFICATIONS OF ANSI Z60.1 "STANDARD FOR NURSERY STOCK".
 - ALL TREES TO BE MINIMUM 15' FROM PARKING LOT AND STREET LIGHT.
 - LANDSCAPE PLANS ARE CONSISTENT WITH STATE WATER EFFICIENT REQUIREMENTS (CALIFORNIA CODE OF REGULATIONS, TITLE 23, CH. 2.7, DIV. 2).



MEDICAL OFFICE BUILDING
EUREKA ROAD @ ROCKY RIDGE

ROSEVILLE, CA

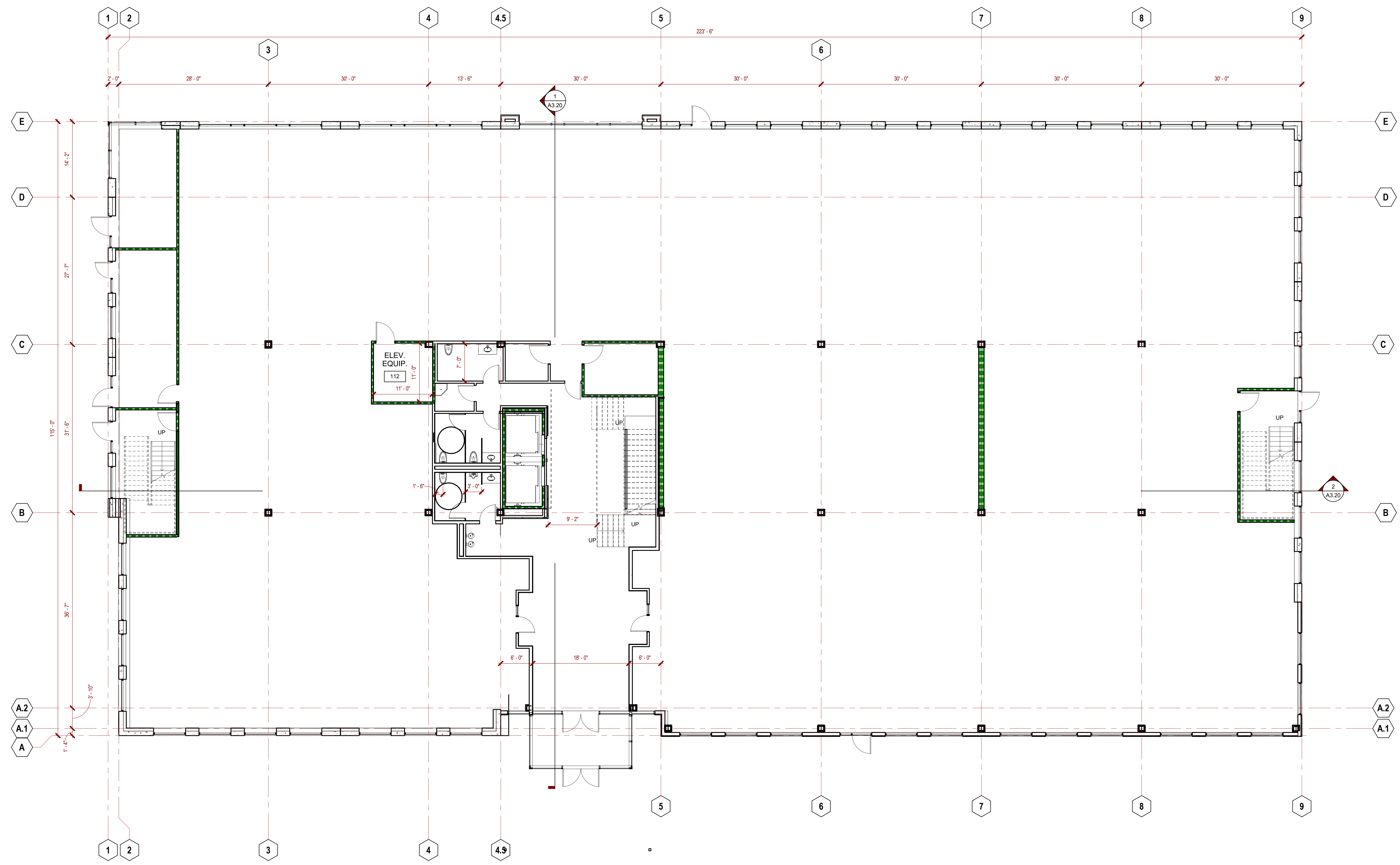
LANDSCAPE PLAN

DATE: 03.27.2017
PROJECT NO: 1111-0009
SCALE:
SHEET:



LPAS

2484 Natomas Park Drive Suite 100 Sacramento CA 95833
916.443.0335 lpasdesign.com Architecture + Design



First Floor Gross Square Footage = 25,720 s.f.
Total Building Gross Square Footage = 77,106 s.f.

SCALE: 1/8" = 1'-0"

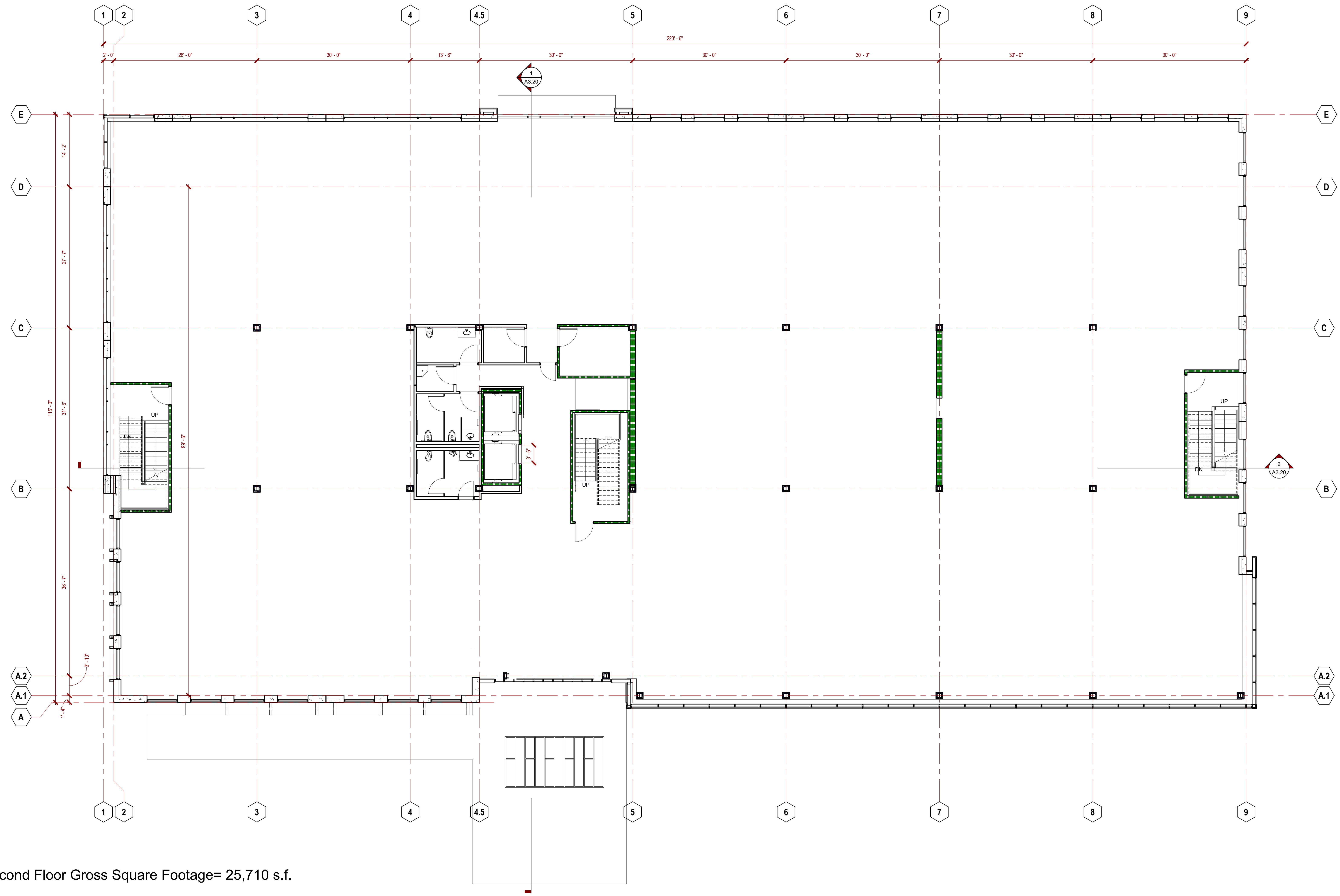
Medical Office Building
EUREKA ROAD @ ROCKY RIDGE

Roseville, CA

FIRST FLOOR PLAN

DATE: 3-27-2017
PROJECT NO: 1111-0009
SCALE: 1/8" = 1'-0"
SHEET: A2.01





Second Floor Gross Square Footage= 25,710 s.f.

0
FT
SCALE: 1/8" = 1'-0"

Medical Office Building

EUREKA ROAD @ ROCKY RIDGE

Roseville, CA

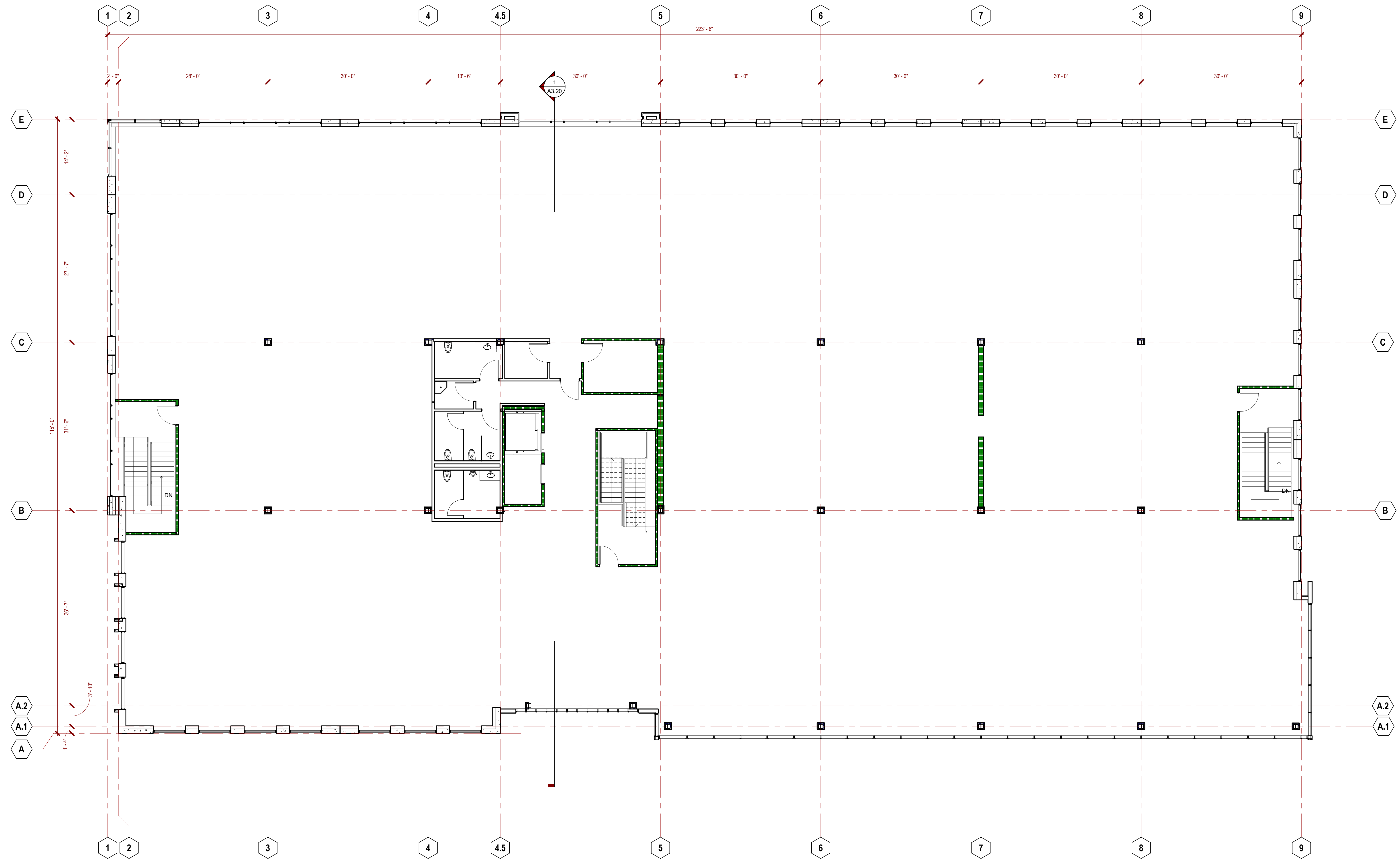
SECOND FLOOR PLAN

DATE: 03/27/17
PROJECT NO: 1111-0009
SCALE: 1/8" = 1'-0"
SHEET: A2.02



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916 443 0335 lpasdesign.com Architecture + Design



3rd Floor Gross Square Footage = 25,676 s.f.

0
FT
SCALE: 1/8" = 1'-0"

Medical Office Building
EUREKA ROAD @ ROCKY RIDGE

Roseville, CA

THIRD FLOOR PLAN

DATE: 03/27/17
PROJECT NO: 1111-0009
SCALE: 1/8" = 1'-0"
SHEET: A2.03



LPAS

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916 443 0335 lpasdesign.com Architecture + Design

Roseville, CA

ROOF PLAN

DATE: 03/27/17
PROJECT NO: 1111-0009
SCALE: 1/8" = 1'-0"
SHEET: A2.14





Medical Office Building

EUREKA ROAD @ ROCKY RIDGE

Roseville, CA

NO. ISSUE

DATE



ARCHITECT'S STAMP

APPROVAL

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CONSULTANT

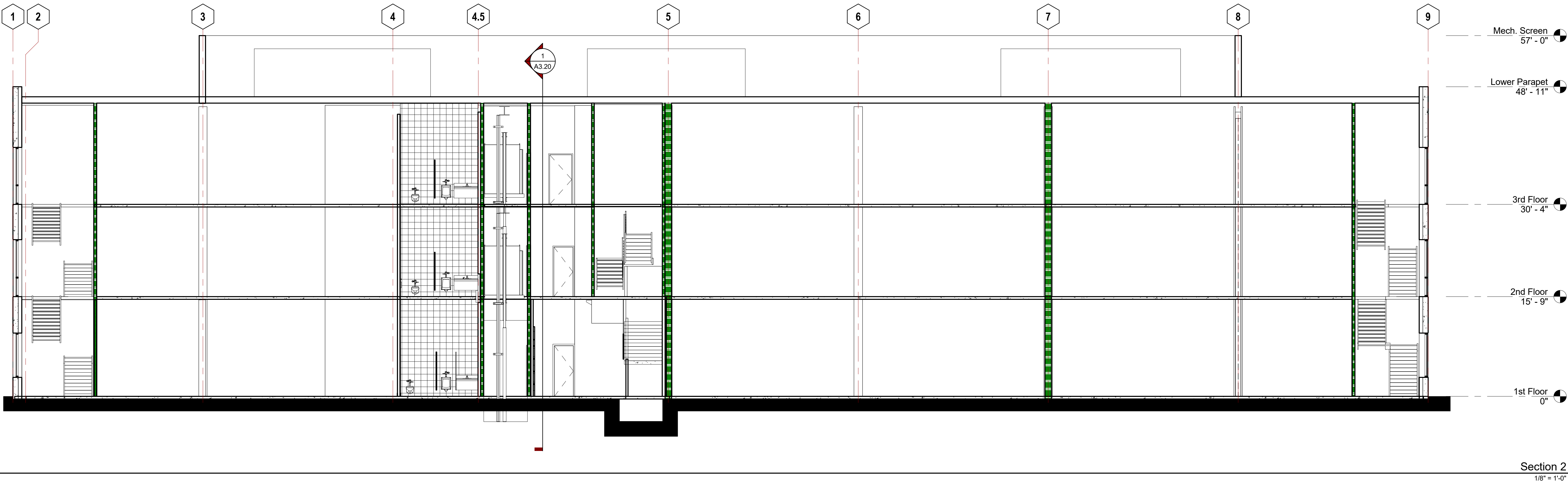
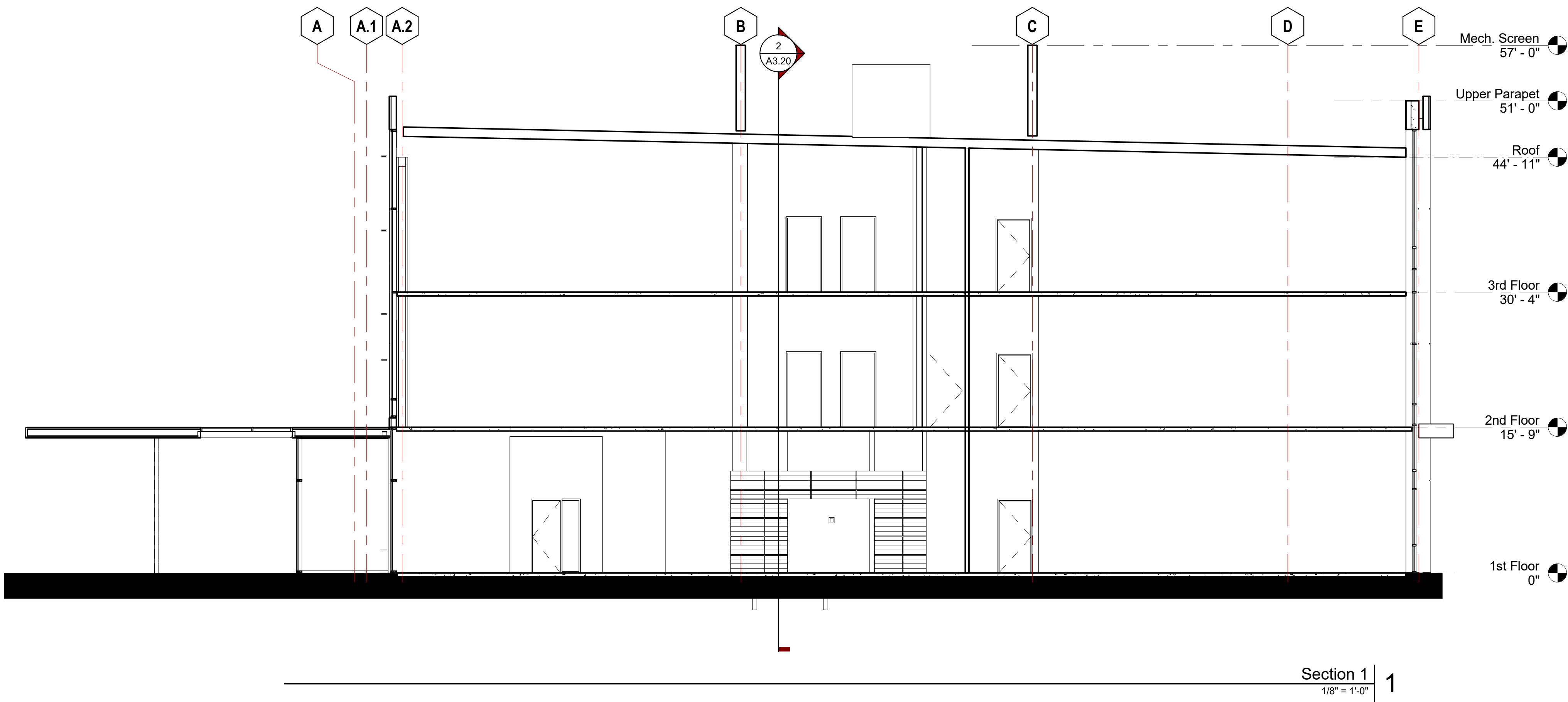
BUILDING SECTIONS

PROJECT NO: 1111-0009

DATE: 05.09.2016

SHEET NO:

A3.20



555 University Ave #200

Sacramento, Ca. 95825

Phone: (916) 447-7100

Fax: (916) 447-7112

March 28, 2017

City of Roseville Planning Division
Attn: Greg Bitter
311 Vernon Street
Roseville, CA 95678

RE: 1513 Eureka Road– NERSP PCL 8 Eureka Gateway MOB– PL16-0169

Dear Mr. Bitter:

We have prepared this letter to provide additional information regarding the parking for our proposed medical office/surgery center buildings at 1513 Eureka Road. The Medical Office Building (MOB) parking standard per the Zoning code is one space per 150 square feet. With our site plan we are providing 1 space per 170 square feet.

We have previously provided data outlining industry accepted practices for parking medical buildings, including standards from both Kaiser and Sutter planning designs which showed that our planned parking spaces are more than sufficient. We also compared Roseville's standard to other surrounding jurisdictions, which in general require less spaces. Since that time we have compiled additional research regarding medical office parking, local approvals, demographics, and adjacent properties, which we would like to share with you in support of our request.

Fehr and Peers Transportation Consultants have performed multiple parking studies in the City of Roseville related to MOB's. One of the most recent was completed in November 2013, for the additional Medical Office Building in the Sutter Roseville Medical Center (SRMC). This study concluded that the MOB required a peak-hour demand of 3.23 parking spaces per 1,000 s.f.¹. This finding agreed with previous F&P studies, including a 2008 study for a 27,000 s.f. MOB on North Sunrise Blvd which required 3.29/1,000 s.f.. Our project has provided 452 parking spaces for 77,106 square feet, which translates to a 5.9stalls/1000sf ratio.

There are many highly local variables which influence parking and can reduce demand, such as density, demographics, availability of public transit, and the potential for biking and walking². Our project is designed to be pedestrian and bike-friendly campus. Too much parking in such an environment can create unwanted "dead zones in the middle of what ought to be a bustling commercial district or neighborhood",² and "detract from a 'community feel' and pedestrian environment"³. Planning Staff has been tremendously helpful in guiding us through (and ensuring that we meet) the City's circulation and pedestrian requirements.

We will be working with the Alternative Transportation Division of the City of Roseville to produce a Transportation Systems Management Plan for our project. "This integrated and cooperative approach will promote alternative transportation options to reduce traffic congestion..." (TSMP handbook). In advance of this plan we have already designated areas on

our site plan for short- and long-term bicycle parking facilities, as well as Clean Air vehicle parking spaces on our site plan. There is an existing bus stop pad on Rocky Ridge Drive, just a few dozen feet from our parcel. City Staff has confirmed that this pad, although not currently operating as a Bus Stop, is "in the system" and can be activated when demand requires. Also, the City of Roseville has a "Dial-A-Ride" program in place which facilitates and encourages shared rides. Covered seating areas will be provided at the main entrance for Dial-a-Ride passenger pick up. There are also programs like "Health Express" by the Seniors First organization, which shuttles seniors to medical appointments.

Demographics are another variable which can reduce parking demand. It is well known that the American population is aging, thanks to the "Baby Boomer Generation". In California, the population of seniors aged 65 or older is expected to increase by 76-100%⁴ by 2030, and those older adults will make up 20% of the U.S. population⁹. This increase can affect every facet of transportation systems, including parking demand. Because of a variety of factors, including income restraints, many seniors choose alternative transit to remain mobile. In fact, research shows that more than 20% of seniors age 65 and older do not drive at all⁵. This information is especially relevant in a medical setting- physician office visits and services have been increasingly saturated by those over 65 years old (from 12% in 1998 to 27% in 2008, and expected to increase)⁶. This data shows that parking demand by MOB clients may not be as high as previously predicted.

Encouraging the use of alternative transit options is a major tool in solving parking problems. Both the United States Environmental Protection Agency² and the Metropolitan Transportation Commission⁷ believe that Parking Reductions are an acceptable and effective method of encouraging alternate transportation. Roseville has previously approved a parking reduction request on several nearby projects. The office & retail project at 1440 Rocky Ridge Drive included a parking study which stated that their parking lot "will meet the greatest parking demand"⁸ of their buildings. The Planning Commission Staff Report for that project further noted that "a parking reduction will encourage carpooling"⁸. This statement is supported by multiple sources, including the group Transit for Livable Communities, which found that "...abundant parking *discourages* transit use, carpooling, and other alternatives to driving"³.

Finally we wanted to share some data from the Institute of Transportation Engineers. Their studies indicate that the average peak period parking demand for a Medical Office use is 3.2 vehicles per 1,000 square feet. For Surgery Center use, the demand is 5.67 spaces per operating room¹⁰. Approximately 1/3 of the building is planned as an out-patient Surgery Center, with 4-6 Operating Rooms. The parking requirement for this space is much less than traditional medical office. As you know, Zoning Code section 19.26.030 (b) allows the Planning Manager to determine parking requirements where the use is not listed (as is the case for an outpatient surgery center).

We strongly believe that other local projects, and industry accepted parking analysis, show that the 5.9/1000s.f. parking ratio provided for our project is more than adequate for medical office uses, and will meet the full demands of our tenants and their visitors without impact to neighboring projects.

In closing, we ask that you consider all of the above information and stay consistent with other project approvals by endorsing our parking reduction request for 1513 Eureka Road.

Sincerely,

Pappas Gateway LP

A handwritten signature in blue ink, appearing to read "John Pappas", with a long horizontal flourish extending to the right.

John Pappas
(916) 447-7100

- ¹ Fehr & Peers, 2013. "Updated Parking Evaluation for Proposed Medical Office Building on Sutter Roseville Medical Center".
- ² U.S. Environmental Protection Agency, 2006. "Parking Spaces/ Community Places: Finding the balance through Smart Growth Solutions".
- ³ Transit for Livable Communities, 2003. "The Myth of Free Parking".
- ⁴ Transportation for America, 2011. "Aging in Place: Stuck without Options".
- ⁵ U.S. Administration on Aging, 2010. "A Profile of Older Americans: 2010".
- ⁶ U.S. Department of Health and Human Services, 2010. "Population Aging and the Use of Office-based Physician Services".
- ⁷ Metropolitan Transportation Commission, June 2007. "Reforming Parking Policies to Support Smart Growth".
- ⁸ City of Roseville, May 27, 2004. Major Project Permit MPP 03-06 & PM 03-09 Staff Report.
- ⁹ National Center for Chronic Disease Prevention and Health Promotion, 2013. "The State of Aging and Health in America 2013".
- ¹⁰ Institute of Transportation Engineers, 2010. "Parking Generation, 4th Edition".