CITY OF ROSEVILLE CALIFORNIA

AGENDA

January 20, 2022

DESIGN COMMITTEE MEETING
4:30 P.M.
Civic Center Meeting Rooms 1 & 2
311 Vernon Street
Roseville, California
www.roseville.ca.us

THE CITY OF ROSEVILLE WELCOMES YOUR PARTICIPATION

If an agenda item is open to public comment, such public comment shall be addressed to the chair of the meeting.

Public Comment - Speakers have three minutes under Public Comment to speak on issues that are not listed on the agenda and are within the City's jurisdiction. The Brown Act does not permit any action or discussion on items not listed on the agenda.

Consent Calendar - If applicable, the Consent Calendar consists of routine items that may be approved by one motion. Any person can remove an item from the Consent Calendar to be discussed separately.

Agenda Items - Speakers have five minutes to address items that are listed on the agenda.

Americans with Disabilities Act - Notify the City Clerk or Secretary at least 72 hours in advance if special assistance is required to participate in a meeting including the need of auxiliary aids or services.

Audio/Visual Presentations - If making a presentation regarding an agenda item, audio/visual materials must be submitted to the City Clerk or Secretary at least 72 hours in advance.

Roseville City Clerk 311 Vernon Street, Roseville, CA 916-774-5200 TDD 916-774-5220

1. CALL TO ORDER

2. ROLL CALL (SILENT)

3. CONSENT CALENDAR

3.1. Minutes of December 16, 2021

4. REQUESTS/PRESENTATIONS

4.1. SVSP PCL KT-42 – Circle K, 5900 Baseline Rd, File # PL21-0233

REQUEST

The applicant requests approval of a Design Review Permit to allow the development of a 5,200 square foot convenience store with associated fuel canopy and car wash on a portion of Sierra Vista Specific Plan (SVSP) Parcel KT-42, a 8.47-acre site. The request also includes a Tentative Parcel Map to create a 2.0 acre parcel for the project, leaving the remaining portion of Parcel KT-42 for future development.

Applicant: Justin Pierce, Land Development Consultants, LLC
Owner: KV Sierra Vista LLC

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

A. Adopt the Circle K Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program;
B. Adopt the four (4) findings of fact and approve the Design Review Permit subject to eighty (80) conditions of approval; and,
C. Adopt the three (3) findings of fact and approve the Tentative Parcel Map subject to thirty-seven (37) conditions of approval.

4.2. NIPA PCL 50 - Warehouse, 751 Roseville Pw, File # PL21-0210 (Continued from the 12/16/21 Design Committee Meeting)

REQUEST
The applicant requests approval of a Design Review Permit to allow the construction of a 206,795-square-foot warehouse building and associated site improvements on an approximately 14.05-acre parcel in the North Industrial Plan area.

Applicant: Jeff Thompson, Morton & Pitalo
Owner: Michelle Azevedo, Ridge Capital Inc.

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

A. Consider the Addendum to the NIPA PCL 50 – Foothills Corporate Center Grading Plan Mitigated Negative Declaration; and,
B. Adopt the four (4) findings of fact and approve the Design Review Permit subject to seventy (70) conditions of approval.

5. COMMITTEE MEMBER / STAFF REPORT

6. PUBLIC COMMENTS

7. ADJOURNMENT

DESIGN COMMITTEE COMMUNICATION

Title:	Minutes of December 16, 2021
Contact:	Lupe Nelson, lnelson@roseville.ca.us, (916) 774-5281

Meeting Date: 1/20/2022
Item #: 3.1.

ATTACHMENTS:

Description

Minutes of December 16, 2021

DRAFT MINUTES
December 16, 2021

DESIGN COMMITTEE MEETING
4:30 P.M.
Civic Center Meeting Rooms 1 & 2
311 Vernon Street
Roseville, California
www.roseville.ca.us

1. CALL TO ORDER

Chair Prior called the meeting to order at 4:30 p.m.

2. ROLL CALL (SILENT)

Present: Clark, Poulsen, Prior
Absent: None

3. CONSENT CALENDAR

3.1. Minutes of September 19, 2019

Motion by Committee Member Poulsen, seconded by Committee Member Clark, to approve the minutes of September 19, 2019.

The Motion Passed unanimously with a voice vote.

4. REQUESTS/PRESENTATIONS

4.1. WRSP PCL F-21 – Fiddyment Apartments, 2151 Blue Oaks Bl, File # PL21-0087

REQUEST

The applicant requests approval of a Design Review Permit to allow the development of a 342-unit, three-story apartment complex with 659 parking spaces, clubhouse, pool, and associated site amenities. The request also includes a Tree Permit to allow the removal of one native oak tree, and encroachment into the driplines of three (3) oak trees that will be retained on site.

Associate Planner, Shelby Maples, presented the staff report.

Chair Prior invited questions from the Committee members.

Committee Discussion:

- Discussion of tree #1571
  - A Committee Member asked what the condition of the tree was after the recent storm. Applicant responded that while there had been an update to the arborist report in November 2021, no additional assessment had been done after the storms.
  - A Committee Member asked if the tree is a hazard or damaged will it be replaced in kind? Staff responded that the City works with the developer and the project arborist when a preserved tree becomes hazardous and needs to be removed.
- Committee members liked that the landscaping exhibit showed that many Valley Oaks are planned to be planted within the project.

Chair Prior opened the Public Hearing and invited comments from the representative for the project and/or audience.

Applicant representative, Chris Kelley, LPAS Architecture + Design, stated he had received a copy of the staff report and was in agreement with staff's recommendations. He responded to Committee members' questions.

Committee Discussion with Applicant:

- A Committee Member asked if the development will be phased. Applicant responded that the 342 units will be staggered into five (5) stages with 50-80 units per stage with 2 months per phase.
- A Committee Member asked with the current materials shortage how will substitutions of proposed materials be addressed. Applicant responded that they will work with staff to find an acceptable material match.
- A Committee Member liked the proposed fiber cement siding to be used throughout the project.
- A Committee Member liked the clean design of the project.
- A Committee Member liked how the trees are incorporated into the design.
- A Committee Member requested that the applicant try to preserve tree #1571.

Chair Prior opened the public comment period. Hearing none, Chair Prior closed the public comment period and Public Hearing.

Motion by Committee member Poulsen, seconded by Committee member Clark, to:

A. Adopt the four (4) findings of fact and approve the Design Review Permit subject to eighty-five (85) conditions of approval; and,
B. Adopt the two (2) findings of fact and approve the Tree Permit subject to twenty (20) conditions of approval.

The Motion Passed unanimously with a voice vote.

4.2. NIPA PCL 50 - Warehouse, 751 Roseville Pw, File #PL21-0210

REQUEST

The applicant requests approval of a Design Review Permit to allow the construction of a 206,795-square-foot warehouse building and associated site improvements on an approximately 14.05-acre parcel in the North Industrial Plan area.

Staff and applicant requested that this item be continued to the January 20, 2022 Design Committee Meeting.

5. BOARD MEMBER / COMMISSIONER / STAFF REPORT

Staff Report

- There will be a January 20, 2022 Design Committee Meeting.
- Welcome to Committee Member Clark.

Committee Member Report

- None

6. PUBLIC COMMENTS

Chair Prior opened the public comment period. Hearing none, Chair Prior closed the public comment period.

7. ADJOURNMENT

Motion by Committee Member Clark, seconded by Committee Member Poulsen, to adjourn the meeting. The Motion Passed unanimously at 4:49 p.m. with a voice vote.

DESIGN COMMITTEE COMMUNICATION

Title:	SVSP PCL KT-42 – Circle K, 5900 Baseline Rd, File # PL21-0233
Contact:	Escarlet Mar, emar@roseville.ca.us, (916) 774-5247

Meeting Date: 1/20/2022
Item #: 4.1.

ATTACHMENTS:

Description

Staff Report

Exhibit A Initial StudyMitigated Negative Declaration & Mitigation Monitoring and Report

Exhibit B Tentative Parcel Map

Exhibit C Site Plan

Exhibit D Floor Plan

Exhibit E Roof Plan and Section

Exhibit F Elevations

Exhibit G Preliminary Grading Plan

Exhibit H Preliminary Utility Plan

Exhibit I Post-Construction Storm Water Quality Plan

Exhibit J Landscape Plan

CITY OF ROSEVILLE CALIFORNIA

Planning Division Staff Report
Design Committee Meeting January 20, 2022

Prepared by: Escarlet Mar, Associate Planner

ITEM 4.1: Design Review Permit and Tentative Parcel Map – 5900 Baseline Road – SVSP PCL KT-42 – Circle K– PL21-0233

REQUEST

The applicant requests approval of a Design Review Permit to allow the development of a 5,200 square foot convenience store with associated fuel canopy and car wash on a portion of Sierra Vista Specific Plan (SVSP) Parcel KT-42, a 8.47-acre site. The request also includes a Tentative Parcel Map to create a 2.0 acre parcel for the project, leaving the remaining portion of Parcel KT-42 for future development.

Applicant – Justin Pierce, Land Development Consultants, LLC
Owner – KV Sierra Vista LLC

SUMMARY RECOMMENDATION

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

A. Adopt the Circle K Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program; and
B. Adopt the four (4) findings of fact and approve the Design Review Permit subject to eighty (80) conditions of approval; and
C. Adopt the three (3) findings of fact and approve the Tentative Parcel Map subject to thirty-seven (37) 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

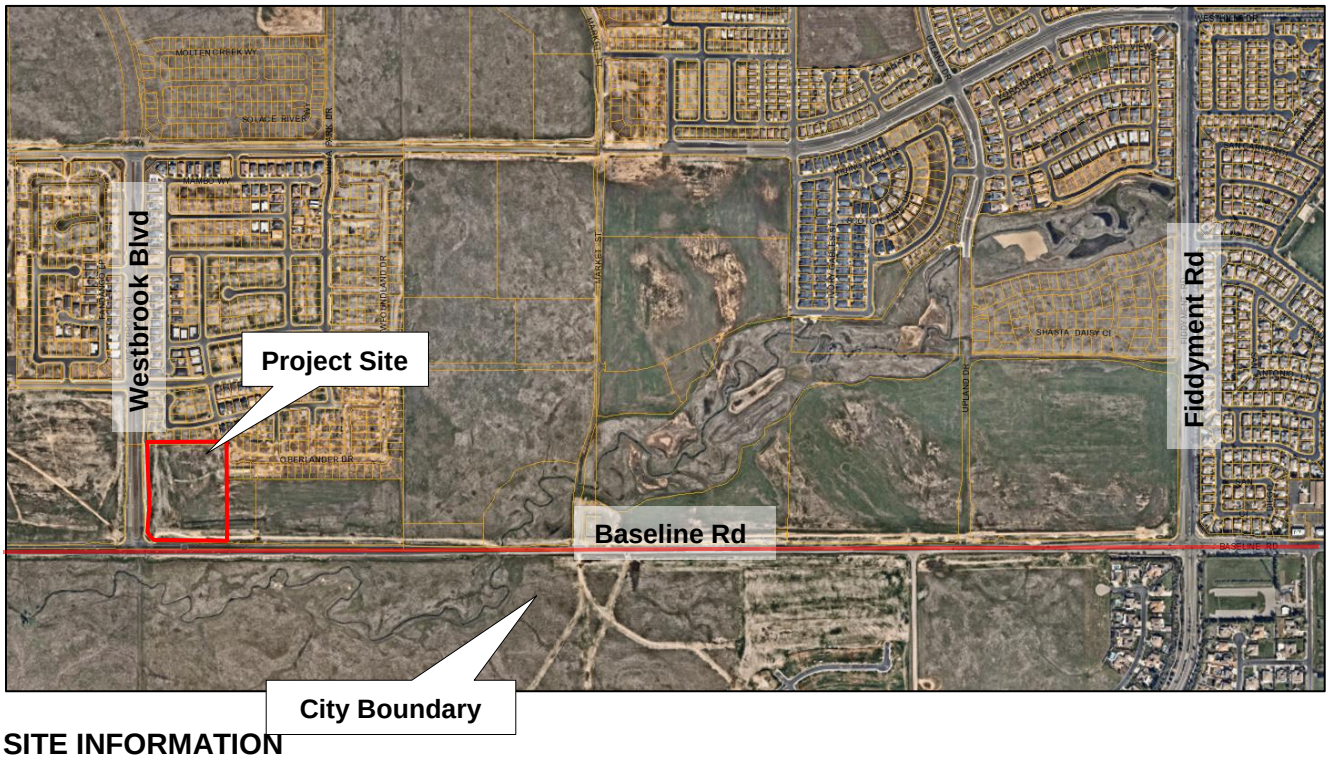
SVSP Parcel KT-42 is located in the Sierra Vista Specific Plan (SVSP) area, at the northeast corner of the intersection of Baseline Road and Westbrook Boulevard (see Figure 1). The SVSP establishes a comprehensive land use and regulatory framework to guide development of an approximately 2,075-acre Plan Area located to the west of Fiddyment Road and north of Baseline Road, along the western edge of the City. The SVSP and an Environmental Impact Report (EIR) and Mitigation Monitoring and Reporting Program was approved in May 2010. Subsequently, in June 2012 the SVSP was amended to entitle land uses on the Westbrook property.

The project site has a General Plan land use designation of Community Commercial (CC) and a zoning land use designation of General Commercial (GC). Parcel KT-42 is adjacent to vacant parcels to the east and west. The parcel to the east of the Project site is slated for commercial development (e.g. storage facility). To the north, a residential community is under construction and to the south is land within unincorporated Placer County.

The proposed project is a request for a Design Review Permit to construct a 5,200 square foot convenience store, a 1,450 square foot car wash facility, and a fuel canopy with 6 pumps. The project site would accommodate a total of 27 surface parking stalls with landscape throughout the site, specifically along Westbrook Boulevard and Baseline Road. The Project also includes a Tentative Parcel

Map to create a 2.0 acre parcel for the Project, which leaves the remaining surrounding parcel for future development.

Figure 1 – Project Location



SITE INFORMATION

Location: 5900 Baseline Road, APN 499-010-081-000

Total Size: 8.47 acres

Topography and Setting: The project is located on a vacant property on the north side of Baseline Road within a developing portion of the City of Roseville. Topography of the site is relatively flat, however, there are some areas of the site where a stockpile of dirt is evident. The site has been heavily disturbed from previous grading and site preparation for adjacent development. Currently, there are no trees or other biological resources present on the site. The current land use and zoning of the site allow for commercial and business professional uses. The site is surrounded by vacant land to the east, south, and west. The parcel to the east of the project site is slated for commercial development (e.g. storage facility). To the north, a residential community is under construction. Public improvements (i.e. sidewalks, streetlights, curb, and gutter) are present along Westbrook Boulevard. Fully operating traffic signals are installed at the intersection of Baseline Road and Westbrook Boulevard.

EVALUATION – DESIGN REVIEW PERMIT

The DRP evaluation of the project is based on the applicable development standards within the City's Zoning Ordinance, the SVSP, and the design standards of the Community Design Guidelines (CDG). Section 19.78.60(B) of the City of Roseville Zoning Ordinance requires that four findings be made to approve or conditionally approve a DRP. The four findings are listed below in ***italicized, bold*** text and are followed by an evaluation of the DRP in relation to each finding.

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

The Project site has been previously disturbed as a result of site preparation activities for adjacent development. Consequently, the site shows no evidence of trees or other biological resources present on the site. To allow for the construction of the convenience store, gas pumps, and the car wash, the project site would be graded to allow beneficial use of the site for development. The preliminary grading plans have been reviewed and evaluated by the Development Services Department, and the conditions of approval are recommended to ensure compliance with the City of Roseville Improvement Standards.

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; irrigation; and lighting which results in 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.

The City's CDG provide guidelines that include recommendations for site planning, circulation, architecture, and other aspects of site development. The following discussions provide an evaluation with respect to the applicable design guidelines in the CDG.

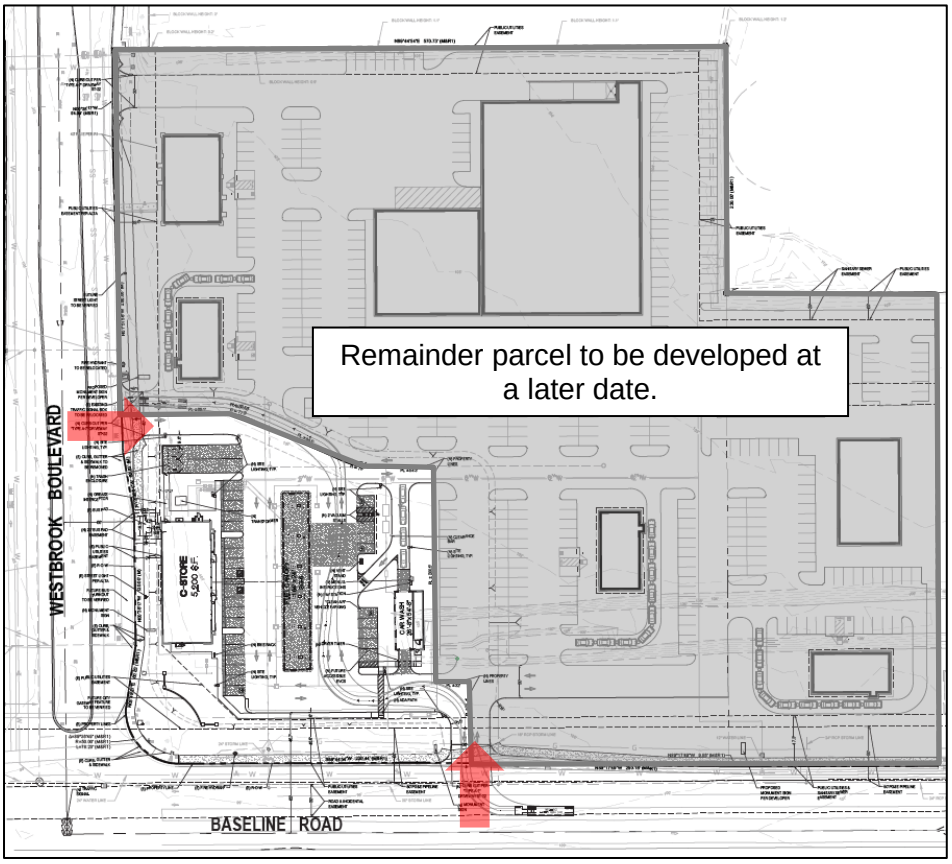
Site Planning & Building Siting: The Project is located along two (2) major arterial streets that provide linkage between sections of the City and the regional circulation system. Both Baseline Road and Westbrook Boulevard are anticipated to carry relatively high traffic volumes and provide a connection between the County of Placer and the City. As a result, the project is strategically positioned in an area of the City that would be highly visible by both automotive users entering and exiting the city of Roseville through Baseline and pedestrians from the nearby residential subdivisions. The CDG puts an importance on site planning and building siting, where it encourages projects on prominent corner lots to be treated as community gateways and be of the highest design quality. In addition, those buildings on signature corners should be located at the back of the landscape corridor to provide massing and visual interest to from the intersection. Gas station canopies, fast-food restaurants with drive-thrus, and other services should be located away from these prominent corners. The convenience store is proposed to be located closest to Westbrook Boulevard and setback approximately 110-feet from Baseline Road. Conversely, the fuel pumps and car wash are both located at a minimum approximately 140-feet from Westbrook Boulevard and approximately 85-feet from Baseline Road. The large setback provides enough buffer between the buildings and the street, making it ideal for street frontage enhancements. The location of the buildings provides for a large landscape buffer along Baseline Road and Westbrook Boulevard and it achieves the goal of siting the buildings at the back of the landscape corridor (Figure 2).

Figure 2 – Project Site Plan

Vehicle Access & Circulation: The project site includes two (2) entries onto the site, one along Baseline Road and the other along Westbrook Boulevard. To provide access to both the Project site and the future development on Parcel KT-42, the driveways are located approximately at the center of Parcel KT-42 (Figure 3). The proposed driveways connect to the internal roadway system and surface parking areas. The driveway on Baseline Road will be restricted to right turn ingress and egress only, a temporarily "pork chop" will be required to prohibit left turns in or out.

The site design of the remainder of Parcel KT-42 is preliminary, but to ensure the future development provides access to all parcels Planning and Engineering staff reviewed driveway locations and access and a condition of approval has been placed on the Project that would require a reciprocal access agreement to be submitted to the City Attorney for review and approval. The driveway access and internal circulation have been reviewed by the City Staff and were found to be consistent with both emergency circulation requirements and refuse service standards.

Figure 3 – Overall Site Plan



The project also includes pedestrian connectivity throughout the site and to Baseline Road and Westbrook Boulevard. Pathways internal to the Project connect the convenience store and the carwash facility. The existing and future sidewalk along Baseline Road would connect pedestrians using these facilities to the convenience store main entrance. An existing bus pad is shown on the site plan along Westbrook Boulevard. Upon future development of the remaining parcel and an extension of the axillary lane along Westbrook Boulevard, the existing bus pad would be removed and a new bus pad and easement would be required. Per the conditions of approval, the developer of the remaining parcel would be responsible for the installation of the bus shelter and related improvements.

Parking: Surface parking throughout the project site is proposed to accommodate patrons of the business, a total of 27 standard off-street parking stalls are proposed. Pursuant to the City's Off-Street Parking and Loading requirement, automatic car wash service requires 1 space per drying and vacuum areas and 100 linear feet in front of the car wash for staking, plus 1 space per 300 square feet of gasoline sales with commercial sales. The project exceeds the minimum off-street parking requirement for the site. In addition, the applicant provided five (5) spaces for clean air vehicles. These parking stalls are included in the total parking count. The proposed number of parking spaces is consistent with the Zoning Ordinance requirement.

Landscaping and Lighting: The CDG recommends using landscaping throughout the site, placing trees to provide shading for sidewalks and public spaces, using native or drought-tolerant plants where possible, and providing a minimum of 50-percent shading (based on 15-year maturity) over the parking spaces. The proposed landscape plan is included as Exhibit J. The SVSP identifies a 50-foot landscape corridor all along Baseline Road and Westbrook Boulevard. The SVSP recognizes that there are properties along arterial and collector streets that must accommodate turn pockets, acceleration/deceleration lanes/tapers, and bus turn outs, and as a result, reductions to the landscape

corridor are permitted. The intent of this SVSP requirement is that a certain level of landscaping at major roadway intersections is maintained to ensure a high-quality streetscape, while also maintaining an efficient automobile travel lane. This has resulted in projects like this one to include the auxiliary lane as part of the landscape corridor. The project proposes a public utility easement (P.U.E.) of approximately 40-feet all along Baseline Road, and along Westbrook Boulevard there is an existing 24-foot P.U.E. The project includes landscape all along the perimeter of the site and throughout the project site. Along Baseline Road and within the 40-foot-wide P.U.E., there exists a Pacific Gas & Electric (PG&E) pipeline that would preclude the applicant from planting any vegetation at least 10-feet from the edge of the pipeline. As a result of PG&E's recommendation during the review period, the architect designed the landscape along Baseline Road in such a way that only plants, groundcover, grasses, flowers, and low-growing plants that grow unsupported to a maximum of 4-feet in height at maturity would grow near the gas pipeline. Outside of PG&E's pipeline area, the landscape architect included California Sycamore, Red Oak, and Interior Live Oak trees to provide shade and visual interest to the site. Internal to the project site, large trees are included within the landscaping areas to provide shade on sidewalks and pathways. Selected species include Keith Davey Chinese Pistache and Eastern Redbud Multi-trunk, as well as other shrubs. The proposed landscaping plans show 51-percent parking lot shade coverage, exceeding the minimum requirement.

The project includes lighting standards for the parking areas, and the conditions of approval ensure that a minimum of one (1) foot-candle of lighting in the parking areas and 0.5 foot-candles of lighting in the pedestrian walkways are provided. Light standards will be shielded to ensure there is no off-site glare.

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 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.

Development Standards: The City of Roseville Zoning Ordinance development standards for General Commercial (GC) zones establish a maximum building height of up to 50 feet. The project includes two (2) single-story commercial buildings and a single gas station canopy, with the convenience store being the tallest building with an overall height of approximately 23-feet tall. Further, as proposed the project complies with the SVSP roadway system and landscape requirements. As discussed in the Landscaping and Lighting section above, the project meets the goal of the SVSP roadway system and landscape requirements by keeping and maintaining a high-quality streetscape. The project also complies with the goals of the CDG. Whereas buildings on signature corners should be located at the back of the landscape corridor to provide massing and visual interest to frame the intersection. The convenience store is setback approximately 110-feet from the south property line, while the fueling canopy is setback approximately 85-feet from the south property line. Yet all buildings provide a large setback as recommended in the CDG.

Building Design: The proposed buildings are designed to have a modern look and feel, with a mix of neutral main building colors. A deep red color is used as an accent to help define the Circle K brand. The proposed convenience store, fuel canopy, and car wash all include the same architectural elements that define the commercial property as one unit. To achieve a cohesive architectural design, the applicant proposes the use of one consistent color palette (e.g. a brown and tan color and red color band) and building material (e.g. stacked stone wainscoting) on all three (3) structures. Due to the location of the convenience store, an emphasis was given to the building elevations. The convenience store incorporates several design elements that assist with the articulation of the building's façade. For example, on the front elevation of the building there are varying depths of façade elements, the rooflines are flat and vary in height, metal lattices are proposed on the west elevation, and spandrel glass windows are incorporated where permissible to break up the blank wall areas. Conversely, the car wash building also includes stacked stone at the base of the building, large window frames, and an accent band on the top of the building.

Figure 4 – Convenience Store Building Elevations

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.

All project refuse containers will be screened within a masonry enclosure. The enclosure will surround the three non-accessible sides of the trash container, and will be surrounded by landscaping. All other service equipment will be screened from public view, consistent with the conditions of approval.

Development within the vicinity of the project site is underway. The project is located at the corner of Westbrook Boulevard and Baseline Road, approximately 300-feet from the closest residential property (Figure 5). As part of the residential improvements, a masonry wall along the residential properties was constructed. The existing masonry wall and the location of the convenience and car wash will provide a large setback between the residence and the commercial user. The large setback and masonry wall will reduce the sound levels generated from the car wash facility to levels which are consistent with the City's Noise Ordinance.

EVALUATION – TENTATIVE PARCEL MAP

Pursuant to the Subdivision Ordinance Section 18.06.180, three (3) findings must be made in order to approve a tentative map. As stated in the Background section of this report, the applicant request a

Tentative Parcel Map to create a 2.0 acre parcel for the Project and leave the remaining surrounding parcel for future development. The required findings to approve a Tentative Parcel Map are in ***italicized, bold*** text and are followed by an evaluation.

1. ***The size, design, character, grading, location, orientation and configuration of lots, roads and all improvements for the tentative subdivision map are consistent with the density, uses, circulation and open space systems, applicable policies and standards of the general plan or any applicable specific plan for the area, whichever is more restrictive, and the design standards of the Subdivision Ordinance.***

Parcel size, design, configuration, location, orientation, and character: The proposed subdivision would result in the creation of two (2) parcels, Parcel A (2.01 acres) and Parcel B (6.57 acers). The Map Act and Subdivision Ordinance do not contain any maximum or minimum lot sizes. The project site as discussed in the Design Review Permit section of the staff report, the lots are adequately designed to allow for the proposed development on the parcel. The location and configuration of the driveways to the site would allow for emergency vehicles, as well as City maintenance vehicles to safely enter and maneuver through the project site.

Grading and Drainage: The site has been heavily disturbed from previous grading and site preparation for adjacent development. Pad grading would be necessary to construct the proposed buildings at the southwest corner of the project site. Only Parcel A is proposed for grading at this time, Parcel B would be graded at a later date via separate entitlements. Grading and drainage required for development of the project has been reviewed with the Design Review Permit and has been determined to comply with City standards as shown in the preliminary grading plans, and as conditioned.

Access & Circulation: The project site has approximately 300 lineal feet of frontage on Baseline Road and 275 lineal feet of frontage on Westbrook Boulevard. Access to the project site would be provided by two driveways, one off of Baseline Road and the second off of Westbrook Road (Figure 3). As part of this phase of the development, access to the Project site has been designed to meet City Improvement Standards. Upon development of the remainder parcel (i.e. Parcel B), the developer of Parcel B would be required to submit a reciprocal access agreement to the City Attorney for review and approval. The reciprocal access agreement would allow for shared parking and emergency circulation. Access and circulation is consistent with the City's Subdivision Ordinance and the City's Improvement Standards.

2. ***The subdivision will result in lots which can be used or built upon. The subdivision will not create lots which are impractical for improvement or use due to the steepness of terrain or location of watercourses in the area; the size or shape of the lots or inadequate building area; inadequate frontage or access; or, some other physical condition of the area.***

The proposed parcels are of sufficient size and shape to accommodate the proposed development and are consistent with the applicable zoning and design requirements, as discussed in the Design Review Permit evaluation section of the staff report. There are no watercourse or other natural features on the site that would impede development.

3. ***The design and density of the subdivision will not violate the existing requirements prescribed by the Regional Water Quality Control Board for the discharge of waste into the sewage system, pursuant to Division 7 of the Water Code.***

Anticipated water quality impacts and discharge of waste are not affected by the proposed Tentative Parcel Map. The design of the sewer lines in the project area and treatment capacity at the City's Pleasant Grove Wastewater Treatment Plant have adequate conveyance and capacity to accommodate development on the proposed parcels created by the Tentative Parcel Map.

PUBLIC OUTREACH

Notice of the application was distributed to the Roseville Coalition of Neighborhood Associations. Additionally, 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. A public notice of the Design Committee hearing was published on January 7, 2022, and was distributed to all property owners within 300 feet of the project site. To date, no comments have been received.

CONCLUSION

As demonstrated by the analyses in the foregoing sections, the proposed project is consistent with the objectives and intent of the General Plan, SVSP, Zoning Ordinance, and CDG. The required findings can be made for the requested entitlements, and staff requests that the Design Committee take the actions listed in the Recommendation section of this report.

ENVIRONMENTAL DETERMINATION

The City of Roseville, acting as Lead Agency, prepared an Initial Study/Mitigated Negative Declaration (IS/MND) to evaluate the environmental effects of the project. Staff recommends the Design Review Committee consider and adopt the proposed Mitigated Negative Declaration and associated Mitigation Monitoring Program (Exhibit A). The public review period for the proposed Mitigated Negative Declaration began on December 20, 2021 and ended on January 10, 2022. The IS/MND was made available for public review online at: https://www.roseville.ca.us/cms/One.aspx?portalId=7964922&pageId=8774505. To date, no comments have been received.

RECOMMENDATION

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

A. Adopt the Circle K Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program.

B. Adopt the findings of fact as stated in the staff report and approve the **DESIGN REVIEW PERMIT – 5900 Baseline Road – SVSP PCL KT-42 – CIRCLE K –PL21-0233** subject to eighty (80) conditions of approval.

C. Adopt the findings of fact as stated in the staff report and approve the **TENTATIVE PARCEL MAP – 5900 Baseline Road – SVSP PCL KT-42 – CIRCLE K –PL21-0233** subject to thirty-seven (37) conditions of approval.

CONDITIONS OF APPROVAL FOR DESIGN REVIEW PERMIT FILE #PL21-0233

1. This Design Review Permit approval shall be effectuated within a period of two (2) years from **January 20, 2022** and if not effectuated shall expire on **January 20, 2024**. Prior to said expiration date, the applicant may apply for an extension of time, provided this approval does not extend the expiration beyond **January 20, 2025**. (Planning)

2. The project is approved as shown in Exhibits A - J and as conditioned or modified below. (Planning)

3. The project shall comply with all required environmental mitigation identified in the Sierra Vista Specific Plan Environmental Impact Report, and shall include all applicable mitigation measures as notes on the grading plans. (All Departments)

4. The project and business shall be addressed as 5990 Baseline Road. (Business Services)

5. 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 (2) months after the end of warranty or the Notice of Termination date for the SWPPP, whichever occurs later. (Engineering, Environmental Utilities, Electric, Finance)

6. 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)

7. 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 have been submitted for review and are approved with grading and/or encroachment permits issued by the Department of Development Services – Engineering Division. (Engineering)

8. 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. The Developer shall submit civil drawings to the Department of Development Services – Engineering Division for review and approval. (Engineering)

PRIOR TO ISSUANCE OF BUILDING PERMITS:

9. Parking lot design shall conform to the City's design standards, including the following minimum standards for parking stalls:

    a) All parking stalls shall be double-striped. Parking stalls adjacent to sidewalks, landscaped areas or light fixtures, and all Accessible stalls shall abut a 6-inch raised curb. Parking stalls in front of the convenience store shall abut a 6-inch raised curb. (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 11 of the CBC.

        iii) Accessible parking and exterior route of travel shall comply with CBC, Sections 11B-206 and 11B-208. (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 Division 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, Engineering)

    b) The tree plantings in the parking lot shall be designed to provide a minimum of 50% shade coverage after 15 years. (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 Sierra Vista Specific Plan and the City of Roseville Water Efficient Landscape Ordinance. (Planning, Environmental Utilities)

    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)

    f) Slopes within landscape planters shall be no more than 3:1. A two-foot flat bench located at back-of-walk shall be included in the landscape area to slow or allow absorption of nuisance run-off from the planters. (Parks, Recreation, and Libraries)

    g) All landscaping shall conform to the standards of crime prevention through environmental design with the intent to create natural surveillance, controlling access, and territorial reinforcement to property boundaries. (Police)

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. A separate Architectural 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)

15. For Multiple Building Complexes: As part of the required Architectural 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). This is specific to the area developed for Circle K. (Building)

16. 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)

17. For restaurants, other food services, or commercial swimming pools: The developer shall obtain all required approvals and permits from the Placer County Health Department. (Building)

18. For restaurants, other food services, or commercial swimming pools: The developer shall obtain all required approvals and permits from the Placer County Health Department and the City of Roseville Industrial Waste Division. (Building, Environmental Utilities)

19. 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)

20. 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 Development Services - Engineering prior to approval of any plans. (Engineering)

21. 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)

22. 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."* (Engineering)

23. When Parcel B develops, the developer shall install a new standard bus shelter pad along northbound Westbrook Boulevard north of Baseline Road, 100 feet beyond the northern curb return of the driveway on Parcel A, and the developer shall install a continuous auxiliary lane up to the new bus pad and taper back to existing improvements (60' taper) prior to northern driveway located on Parcel B. (Engineering)

24. When Parcel B develops, the landowner shall dedicate a separate easement to the City of Roseville for the relocated bus stop and bus shelter pad described above. The easement documents shall be drafted for approval and acceptance by the City of Roseville, and recorded at the County Recorder's office. (Alternative Transportation, Engineering).

25. Developer shall be responsible for the installation of a bus shelter and related improvements conforming to the city's current standards on the shelter pad along northbound Westbrook Boulevard, north of Baseline Road. Upon installation and final inspection by the City of Roseville, the bus shelter and related improvements shall become the property of the City of Roseville. The Developer shall enter into a construction fee agreement with the City and pay a construction cost of $10,000 per shelter for future construction of the Bus Shelter located along northbound Westbrook Boulevard, north of Baseline Road. If the shelter is installed prior to the development of Parcel B, the developer shall be required to relocate the bus shelter to the new shelter pad location as identified above. (Shelter #324) (Engineering, Alternative Transportation)

26. The applicant shall complete the frontage improvements along Baseline Road to the eastern property line of Parcel B. Provide a 300 foot taper beginning at station 932+38.09 (angle point) 65' LT (top

back of curb) to 60' LT (top back of curb). Once taper is complete maintain the 60' width to the Parcel B boundary. These improvements will include pavement widening, curb & gutter, 8' wide sidewalk and a driveway. The driveway shall be 36-foot wide A-7 driveway. Site access shall be limited to right turn ingress/egress only. In order to restrict left turn ingress/egress movements a raised median "porkchop" to direct vehicles to a right turn movements only shall be designed to the satisfaction of the City Engineer and constructed within the driveway. (Engineering)

27. Bike parking and clean air vehicle spaces shall be provided per the California Green Building Standards. Bike rack/locker design and location shall be approved by Alternative Transportation. (Alternative Transportation, Building).

28. 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)

29. Prior to the approval of the Improvement Plans, the project proponent shall provide proof of preparation and submittal of a Storm Water Pollution Prevention Plan (SWPPP) to the Regional Water Quality Control Board (RWQCB). Proof shall be in the form of the Waste Discharge Identification Number (WDID#), provided to the applicant from RWQCB, placed on the coversheet of the improvement plans. Upon approval of the improvement plans, a copy of the SWPPP shall be required onsite and available for viewing by City inspection staff upon request. (Engineering)

30. The developer shall be responsible for any necessary relocation of signal interconnect cables that may require re-location as a result of the construction of turn lanes and/or driveways. (Engineering)

31. To ensure that the design for any necessary widening, construction, or modifications of Public Streets does not conflict with existing dry utilities generally located behind the curb and gutter, and prior to the submittal of design drawings for those frontage improvements, the project proponent shall have the existing dry utilities pot holed for verification of location and depth. (Engineering)

32. Sight distances for all driveways shall be clearly shown on the improvement plans to verify that minimum standards are achieved. It will be the responsibility of the project proponent to provide appropriate landscaping and improvement plans, and to relocate and/or modify existing facilities as needed to meet these design objectives. (Engineering)

33. 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)

34. 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)

35. 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. (Engineering)

36. 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)

37. The applicant shall pay all applicable water and sewer fees. (Environmental Utilities)

38. 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 feet 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 feet below finished grade, unless authorized in these conditions of approval.

    c) All sewer manholes shall have all-weather, 10-ton vehicle access unless otherwise authorized by these conditions of approval. (Environmental Utilities)

39. Recycled water infrastructure shall be designed pursuant to the adopted City of Roseville Improvement Standards and the City of Roseville Construction Standards. The applicant shall pay all applicable recycled water fees. Easements shall be provided as necessary for recycled water infrastructure. (Environmental Utilities)

40. The proposed car wash shall recycle a minimum of 75% of its water use. The applicant shall provide the manufacturer's specifications with improvement plan submittal which demonstrates compliance with City requirements. (Environmental Utilities)

41. If this project develops prior to the self-storage to the East, this project will be required to install the sewer and looped water main with this project. (Environmental Utilities)

42. 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)

43. The refuse, recycled, and organics enclosures as depicted in Exhibit C shall match the location and size of the enclosures as depicted in the Improvement Plans. (Refuse, Planning, Engineering)

44. 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)

45. 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)

46. 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)

47. 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)

48. 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

49. 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)

50. 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)

51. 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:

52. 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)

53. The following easements shall be provided by separate instrument and shown on the site plan, unless otherwise provided for in these conditions:

    a) Water and sewer easements.

    b) Additional internal easements will be required to cover primary electrical facilities to the project when the final electrical design is completed. (Electric)

    c) A 20-foot x 24 foot bus shelter easement for Shelter #324 (Alternative Transportation)

54. 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)

55. 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)

56. All improvements being constructed in accordance with the approved grading and improvement plans shall be accepted as complete by the City. (Engineering)

57. 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)

58. All water backflow devices shall be tested and approved by the Environmental Utilities Department. (Environmental Utilities)

59. **Restaurants or other Food Service Establishment (FSE).** The applicant shall design for installation and/or install an exterior grease interceptor if the proposed business could potentially discharge substances containing fats, oils and grease (FOG) into the sewer system. The grease interceptor shall be adequate to separate and remove FOG contained in the wastewater from FSE's prior to discharge to the public sewer. (Environmental Utilities)

60. In the event an exterior grease interceptor cannot be installed due to space limitation, the developer shall install a grease trap, per City Standards, that will mechanically separate the FOG contained in the wastewater from the FSE prior to discharge to the public sewer. (Environmental Utilities)

61. Pursuant to the Municipal Code, the applicant shall apply for and obtain a FOG waste discharge permit (FOG WDP) from the Environmental Utilities Industrial Waste Division prior to occupancy or prior to discharging waste to the public sewer. The applicant shall submit information required by the Environmental Utilities Department for evaluation, including but not limited to: site plans, floor plans, mechanical and plumbing plans, and details to show all sewers, FOG control device, grease interceptor or other pretreatment equipment and appurtenances by size, location and elevation. Additional information related to the applicant's business operations and potential discharge may be requested to properly evaluate the FOG WDP application. (Environmental Utilities)

62. All Electric Department facilities, including streetlights where applicable, shall be designed and built to the "City of Roseville Specifications for Commercial Construction." (Electric)

63. 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)

64. Any relocation, rearrangement, or change of existing electric facilities due to this development shall be at the developer's expense. (Electric)

65. 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)

66. 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)

67. One ¾-inch conduit with a 2-pair phone line shall be installed from the building's telephone service panel to the meter section of the customer's electrical switchgear or panel. (Electric)

68. It is the responsibility of the developer to ensure that all existing electric facilities remain free and clear of any obstruction during construction and when the project is complete. (Electric)

69. The developer will be responsible for extending backbone infrastructure along the north side of Baseline Road. This will include installation of street lights, conduits, conductors, pad vaults and transformers. (Electric)

OTHER CONDITIONS OF APPROVAL:

70. 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)

71. 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)

72. 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)

73. 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)

74. 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)

75. 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 of not and if site remediation is required. (Fire)

76. All commercial air conditioning units 5 tons or less (<65,000 btu/ h) shall meet the current Consortium for Energy Efficiency ("CEE") Tier I specifications. The SEER/EER ratings will be specified on building plans and Title 24 compliance certificates at the time building permits are requested. The SEER and EER ratings will be verified with appropriate documentation. These requirements shall be utilized in the overall energy compliance calculations required for issuance of any building permit for any commercial building in the Plan Area. Any variances, with the exception of Tier 2 compliance, must be approved by the Electric Department's Retail Energy Services Department. (Electric)

77. 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 that all construction equipment shall be fitted with factory installed muffling devices and be maintained in good working order. (Building)

78. 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 Division Field Inspector at the time of or prior to the foundation inspection. (Building)

79. Prior to Certificate of Occupancy, the applicant may apply for a Temporary Certificate of Occupancy (TCO) of the building. If a TCO 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 Certificate of Occupancy. (Building)

80. 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 Division and shall include 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) An estimated time frame for each phase and a specific date for the first phase. (Planning, Building)

CONDITIONS OF APPROVAL FOR TENTATIVE PARCEL MAP FILE #PL21-0233

PRIOR TO ISSUANCE OF A GRADING PERMIT AND/OR IMPROVEMENT PLANS

1. The project shall comply with all required environmental mitigation identified in the Sierra Vista Specific Plan Environmental Impact Report, and shall include all applicable mitigation measures as notes on the plans. (Planning)

2. The grading and improvement plans shall be designed in accordance with the City's Improvement Standards and Construction Standards and shall reflect the following:

    a) Street improvements including, but not limited to, curb, gutter, sidewalk, pavement, drainage systems, traffic striping, signing, medians and markings, etc. along all existing and proposed City streets, as required by Engineering.

    b) Grading shall comply with the City grading ordinance. There shall be no cut and/or fill slopes steeper than a 4:1 ratio. Erosion control devices (sediment traps, ditches, straw bales, etc.) shall be shown on the grading plans and all erosion control shall be installed prior to the onset of wet weather. Erosion control is installed to minimize silt discharge from the project site; it is the applicant's responsibility to ensure that necessary measures are taken to minimize silt discharge from the site. Modification of the erosion control plan may be warranted during wet weather conditions.

    c) A rough grading permit may be approved by the Engineering Department prior to approval of the improvement plans.

    d) Access to the floodplain shall be provided as required by Engineering and the Streets Department.

    e) Standard accessible ramps shall be installed at all curb returns per City Standards. (Engineering)

2. The applicant shall coordinate with the Planning Division on the design of the proposed Gateway sign during Improvement Plan review. The Gateway sign shall be reviewed and approved by the Planning Division. (Planning)

3. The applicant shall apply for and obtain an encroachment permit from the Engineering Department prior to any work conducted within the City right-of-way and/or City easements. (Engineering)

4. All drainage facilities shall conform to natural drainage sheds. (Engineering)

5. The following note shall be added to the Grading and/or Improvement Plans:

To minimize dust/grading impacts during construction the applicant shall:

    a) Spray water on all exposed earth surfaces during clearing, grading, earth moving and other site preparation activities throughout the day.

    b) Use tarpaulins or other affective covers on all stockpiled earth material and on all haul trucks.

    c) Sweep the adjacent streets frontages at least once a day or as needed to remove silt and other dirt which is evident from construction activities.

    d) Ensure that construction vehicles are cleaned prior to leaving the construction site to prevent dust and dirt from being tracked off site.

e) *The City shall have the authority to stop all grading operations if, in the opinion of city staff, inadequate dust control measures are being practiced or excessive wind conditions contribute to fugitive dust emissions. (Engineering)*

6. Prior to the approval of Improvement Plans, the applicant shall submit to the Development services - Engineering Division a paper copy and an electronic copy of the final set of Improvement Plans per the Division's "Digital Submission of Utility Composites" standards. Additionally, the applicant shall submit approved/proposed street names for the approved subdivision map. The approved street names shall be included on the final set of Improvement Plans. (Engineering)

7. Fire hydrants shall be located as required by the Fire Department. The maximum distance between fire hydrants shall not exceed 1,000 feet on center. (Fire)

8. Minimum fire flow is 1,500 gallons per minute with 20 pounds per square inch residual pressure. A change in any of the conditions may increase the required fire flow. (Fire)

9. Testing of all fire systems shall be performed prior to the sales office being opened for business. (Fire)

10. Framing construction cannot commerce until access roads and public fire hydrants are approved by the Fire Department. (Fire)

11. If this project will be phased, the fire department requirements for access and circulation throughout shall be reviewed and approved by the Fire Department. Access roads shall comply with the California Fire Code and the City of Roseville's Amendments. (Fire)

12. 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)

13. The design for electrical service for this project will begin when the Electric Department has received a full set of improvement plans for the project. (Electric)

14. All landscaping in areas containing electrical service equipment shall conform to the "Electric Department Landscape Design Requirements" as outlined in Section 10.00 of the Electric Department's "Specifications for Commercial Construction." (Electric)

15. 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

16. It is the developer's responsibility to notify PG&E of any work required on PG&E facilities. (PG&E)

17. The following easements shall be provided and shown on the Final /Parcel Map or by separate instrument, unless otherwise provided for in these conditions:
    a) Water, sewer easements

18. All existing easements shall be maintained, unless otherwise provided for in these conditions. (Environmental Utilities, Electric, Engineering)

19. 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)

20. A declaration of Conditions, Covenants and Restrictions (CC&Rs), in a form approved by the City Attorney, shall be recorded on the entire property concurrently with the Final/Parcel Map. The CC&Rs shall include the following item(s):

    a) A clause stating that the property owners within this subdivision shall agree to participate in a Transportation Systems Management (TSM) Plan and shall agree to enter into a Transportation Management Agreement with the City of Roseville.

    b) A clause prohibiting the amendment, revision or deletion of any sections in the CC&Rs required by these conditions of approval without the prior written consent of the City Attorney.

    c) A clause excluding any property owned by the City from the terms of the CC&Rs. (Attorney)

21. The City shall not approve the Final Map for recordation until the improvement plans are approved, and the improvements are constructed and accepted as complete. In this case, the subdivider shall enter into a one-year maintenance agreement concurrent with the recordation of the Final Map. (Engineering)

22. In the event that the Final (Parcel) Map will record prior to the completion of on-site construction, all utility and access easements shall be placed on the face of the Map to the satisfaction of the City Engineer. If all on-site improvements are complete prior to the recordation of the map, then a separate agreement allowing all parcels/lots the rights of reciprocal access, rights to construct, and parking shall be submitted to the City as a part of final/parcel map submittal. Said agreement shall be in a form acceptable to the City Attorney and referenced on the face of the recorded map. (Engineering)

23. The Final/Parcel Map shall include an irrevocable offer to dedicate public rights-of-way and public and/or private easements as required by the City. (Engineering)

24. The Final/Parcel Map shall be submitted per "The Digital Submittal of Cadastral Surveys." A plot or print of the submittal shall accompany the electronic copy. The complete submittal shall occur after the Engineering Department approval but prior to City Council approval of the Final/Parcel Map. (Engineering)

25. The cost of any facilities, which are identified in the Capital Improvement Program and are beyond those needed for this project, may be reimbursed to the developer. In accordance with §66485 and §66486 of the Subdivision Map Act, for any improvements constructed by the subdivider which contain supplemental size, capacity, number, or length for the benefit of property not within the subdivision and which are to be dedicated to the public, the subdivider shall be entitled to reimbursement for that portion of the cost of the improvements which is in excess of the construction required for the subdivision. (Engineering)

26. When Parcel B develops, the developer shall install a new standard bus shelter pad along northbound Westbrook Boulevard north of Baseline Road, 100 feet beyond the northern curb return of the driveway

on Parcel A, and the developer shall install a continuous auxiliary lane up to the new bus pad and taper back to existing improvements (60' taper) prior to northern driveway located on Parcel B. (Engineering)

27. The Final/Parcel Map shall indicate that when Parcel B develops, the landowner shall dedicate a separate easement to the City of Roseville for the relocated bus stop and bus shelter pad described above. The easement documents shall be drafted for approval and acceptance by the City of Roseville, and recorded at the County Recorder's office. (Alternative Transportation, Engineering).

28. Electric construction costs incurred by the City of Roseville Electric Department for this project shall be paid for by the developer per the applicable policy. (Electric)

29. Additional internal easements will be required to cover primary electrical facilities to the project when the final electrical design is completed. (Electric)

30. All Electric Department facilities, including streetlights where applicable, shall be designed and built to the "City of Roseville Specifications for Commercial Construction." (Electric)

31. 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)

32. The applicant shall pay all applicable water and sewer fees. (Environmental Utilities)

OTHER CONDITIONS OF APPROVAL

33. Any relocation, rearrangement, or change to existing electric facilities due to this development shall be at the developer's expense. (Electric)

34. It is the responsibility of the developer to ensure all existing electric facilities remain free and clear of any obstructions during construction and when the project is complete. (Electric)

35. Existing public facilities damaged during the course of construction shall be repaired by the applicant, at the applicant's expense, to the satisfaction of the City. (Engineering)

36. The project is subject to the noise standards established in the City's Noise Ordinance. In accordance with the City's Noise Ordinance, provided all construction equipment is fitted with factory installed muffling devices and is maintained in good working order, project construction noise 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. (Engineering)

37. If site survey or earthmoving work results in the discovery of hazardous materials in containers or what appears to be hazardous wastes released into the ground, the contractor shall 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. Non-emergency releases or notifications about the presence of containers found shall be reported to the Fire Department. (Fire)

Exhibits

A. Initial Study/Mitigated Negative Declaration & Mitigation Monitoring and Reporting Program
B. Tentative Parcel Map
C. Site Plan
D. Floor Plan
E. Roof Plan and Section
F. Elevations
G. Preliminary Grading Plan
H. Preliminary Utility Plan
I. Post-Construction Storm Water Quality Plan
J. Landscape Plan

Note to Applicant and/or Developer: Please contact the Planning Division staff at (916) 774-5276 prior to the Design Committee meeting if you have any questions on any of the recommended conditions for your project. If you challenge the decision of the Design Committee 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.

NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

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

Project Title/File#: SVSP PCL KT-42 – Circle K, File # PL21-0233

Project Address: 5900 Baseline Rd.
Project Applicant: Justin Pierce, Land Development Consultants, LLC

Project Planner: Escarlet Mar, Associate Planner

Project Description: The applicant requests approval of a Design Review Permit to allow the development of a 5,200 square feet convenience store with associated fuel canopy and car wash. The request also includes a Parcel Map to create a 2.0 acre parcel for the project and leave the remaining parcel for future development. The project site consists of two standalone commercial buildings and a fueling canopy with ample surface parking throughout the site. The convenience store is proposed along the western property line setback approximately 24-feet from the property line. The fueling station canopy is proposed to be located at the center of the property with the pumps running east to west. As part of the project lighting and landscaping will also be installed.

Document Review and Availability: The public review and comment period begins on **December 20, 2021** and ends on **January 10, 2022**. The Mitigated Negative Declaration may be reviewed online at:

https://www.roseville.ca.us/government/departments/development_services/planning/environmental_documents_public_notices

You can also find the webpage via the City of Roseville Planning Division website, www.roseville.ca.us/planning, and use the page subheadings to navigate to Environmental Documents & Public Notices> Private Development Projects (Circle K).

Written comments on the adequacy of the Mitigated Negative Declaration may be submitted to Escarlet Mar, Associate Planner at emar@roseville.ca.us or in person at 311 Vernon Street, Roseville, CA 95678 (Monday—Friday, 8 a.m. to 4 p.m.), and must be received no later than 5:00 pm on January 10, 2022.

This project will be scheduled for a public hearing before the City's Design Committee. At this hearing, the Design Committee will consider the Mitigated Negative Declaration and associated project entitlements. The tentative hearing date is January 20, 2022. Separate notices will be published when the hearing is scheduled.

Mike Isom, Development Services Director

Dated: December 17, 2021 Publish: December 20, 2021

CITY OF ROSEVILLE CALIFORNIA

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

MITIGATED NEGATIVE DECLARATION

Project Title/File Number:	SVSP PCL KT-42 – Circle K; File # PL21-0233
Project Location:	5900 Baseline Road, Roseville, Placer County; 499-010-081-000
Project Applicant:	Justin Pierce, Land Development Consultants, LLC; (602) 525-4823; 3281 E Guasti Road, #700, Ontario, CA 91761
Property Owner:	KV Sierra Vista LLC; 7801 Folsom Boulevard, Sacramento, CA 95826
Lead Agency Contact Person:	Escarlet Mar, Associate Planner - City of Roseville; (916) 774-5247
Date:	December 20, 2021

Project Description:

The applicant requests approval of a Design Review Permit to allow the development of a 5,200 square feet convenience store with associated fuel canopy and car wash. The request also includes a Parcel Map to create a 2.0 acre parcel for the project and leave the remaining parcel for future development.

DECLARATION

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

A. The project will not have the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare or threatened species, reduce the number or restrict the range of rare or endangered plants or animals or eliminate important examples of the major periods of California history or prehistory.

B. The project will not have the potential to achieve short-term, to the disadvantage of long-term, environmental goals.

C. The project will not have impacts, which are individually limited, but cumulatively considerable.

D. The project will not have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly.

E. No substantial evidence exists that the project may have a significant effect on the environment.

F. The project incorporates all applicable mitigation measures identified in the attached initial study.

G. This Mitigated Negative Declaration reflects the independent judgment of the lead agency.

CITY OF ROSEVILLE CALIFORNIA

DEVELOPMENT SERVICES DEPARTMENT–PLANNING DIVISION

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

INITIAL STUDY & ENVIRONMENTAL CHECKLIST

Project Title/File Number:	SVSP PCL KT-42 – Circle K/ File # PL-21-0233
Project Location:	5900 Baseline Road; APN 499-010-081-000
Project Description:	The applicant requests approval of a Design Review Permit to develop a portion of the project site with a 5,200 square foot convenience store, a 1,458 square foot car wash building, a fuel canopy (with 6 pumps), and associated site improvements including parking, lighting, and landscaping. A Tentative Parcel Map is proposed to create a 2.1 acre parcel for the project and a second parcel for future development.
Project Applicant:	Justin Pierce, Land Development Consultants, LLC
Property Owner:	KV Sierra Vista LLC
Lead Agency Contact:	Escarlet Mar, Associate Planner

This initial study has been prepared to identify and assess the anticipated environmental impacts of the above described project application. The document relies on previously prepared environmental documents for the Sierra Vista Specific Plan and site-specific studies prepared to address in detail the effects or impacts associated with the project (see Attachments). 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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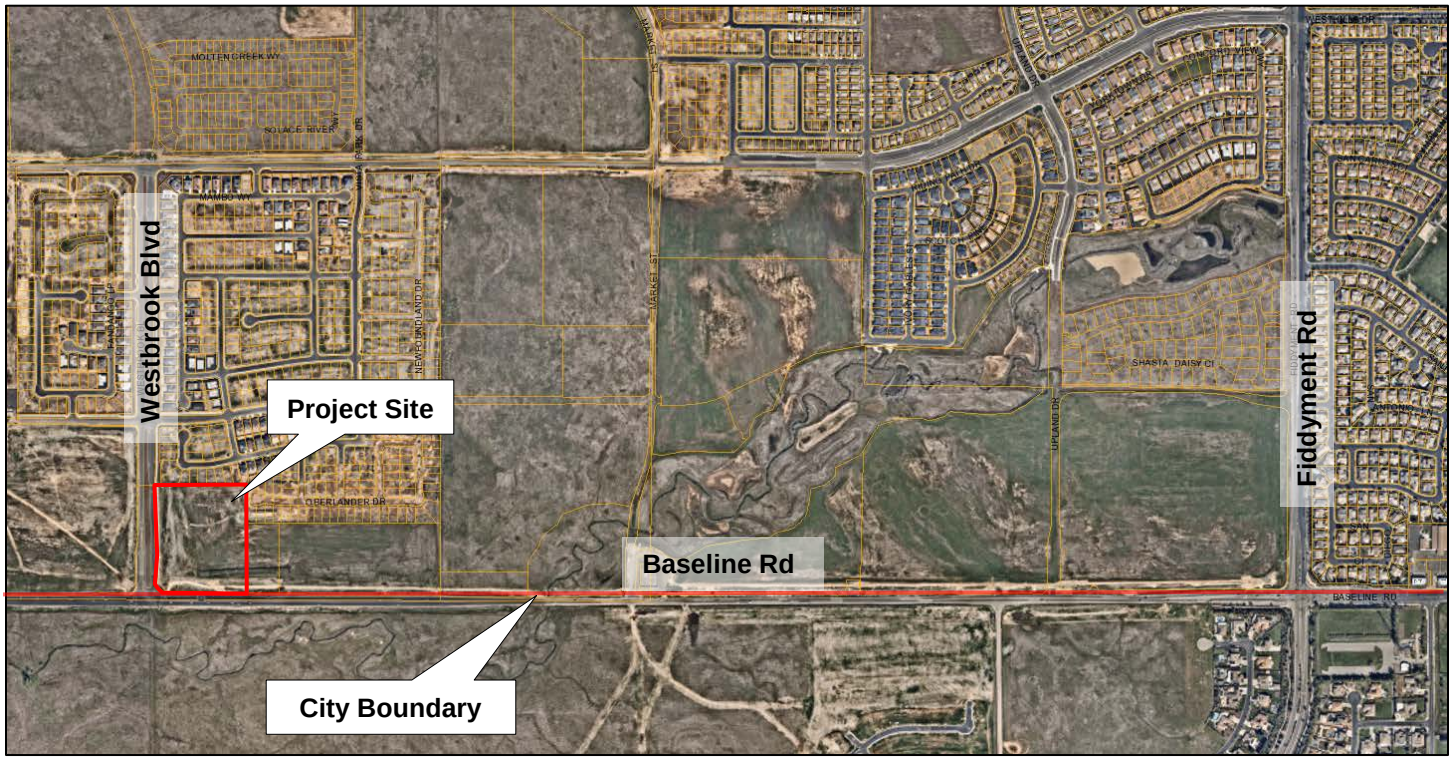
PROJECT DESCRIPTION

Project Location

The project site is located at the northeast corner of Baseline Road and Westbrook Boulevard approximately one mile west of the intersection of Fiddyment Road and Baseline Road and within the Sierra Vista Specific Plan (SVSP) area (Figure 1).

Figure 1: Project Location



Background

An Environmental Impact Report (EIR) was certified (SCH #2008032115) and a Mitigation Monitoring and Reporting Program was adopted for the SVSP project (File 2007PL-044) on May 5, 2010. The SVSP plan area includes 2,064 acres located west of Fiddyment Road and north of Baseline Road. The SVSP sets the framework for development of the plan area with a mix of residential, commercial, parks, and open space land uses.

Location	Zoning	General Plan Land Use	Actual Use of Property
Site	General Commercial (GC)	Community Commercial (CC)	Vacant
North	Small Lot Residential/Development Standards (RS/DS)	Low Density Residential (LDR)	Single-Family Dwelling Units
South	SPL-PVSP	Placer Vineyards Specific Plan	Vacant / Dry Farm land
East	CC/Special Area (SA)	CC	Vacant
West	Westbrook Boulevard; across the street GC	Westbrook Boulevard; across the street CC	City Street/ Vacant

Environmental Setting

The project is located on a vacant property on the north side of Baseline Road within a developing portion of the City of Roseville. Topography of the site is relatively flat, however, there are some areas of the site where tall mountains of soil are evident. The site has been heavily disturbed from previous grading and site preparation for adjacent development. Currently, there are no trees or other biological resources present on the site. The current land use and zoning of the site allow for commercial and business professional uses. The site is surrounded by a vacant parcel to the east, south, and west. The parcel to the east of the project site is slated for commercial development (e.g. storage facility). To the north, a residential community is under construction. Public improvements (i.e. sidewalks, streetlights, curb, and gutter) are present along Westbrook Boulevard. Fully operating traffic signals are installed at the intersection of Baseline Road and Westbrook Boulevard.

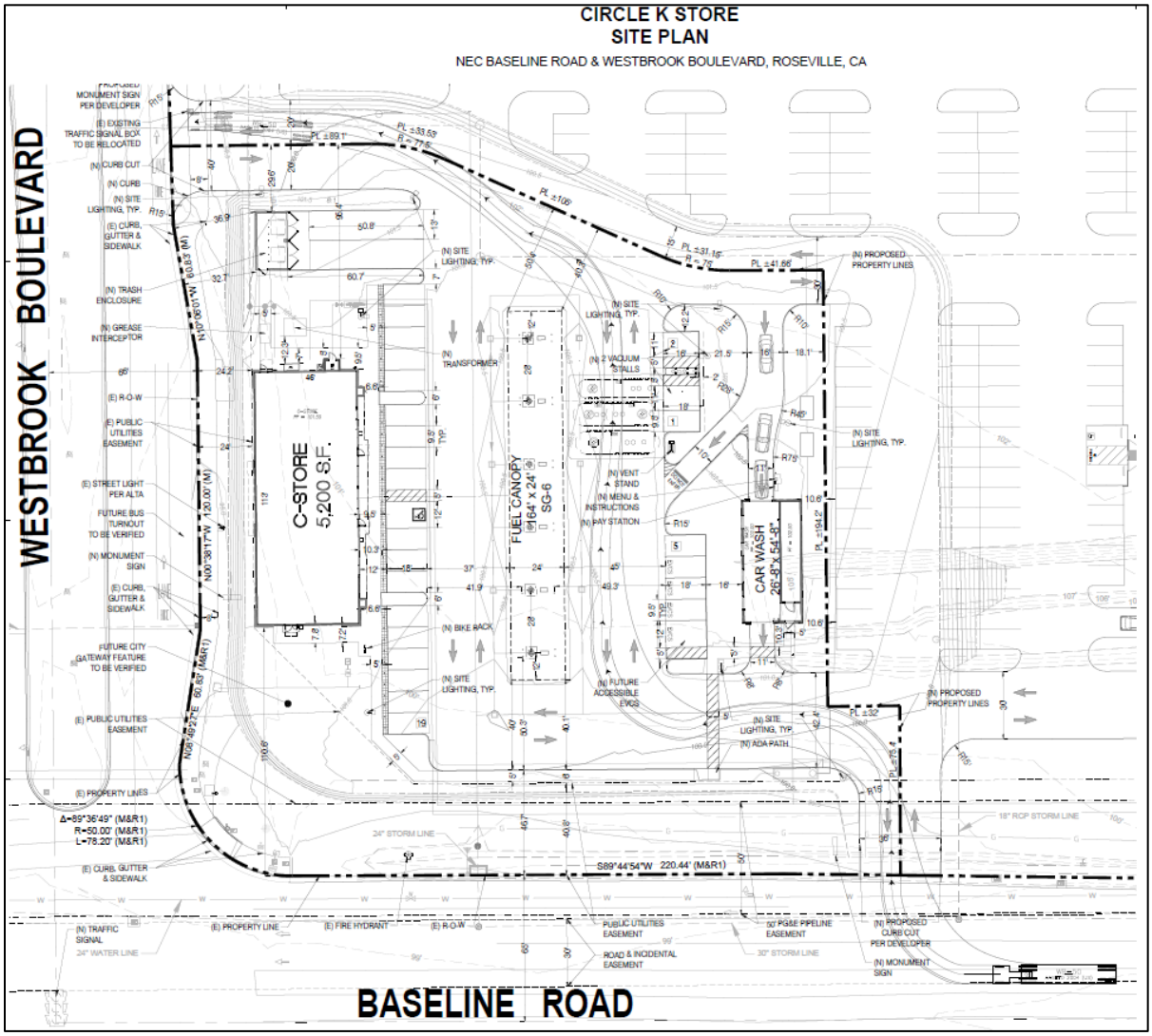
Proposed Project

The project includes a Design Review Permit and a Tentative Parcel Map for an approximately 5,200 square foot convenience store, a 1,450 square foot car wash facility, and a fuel canopy with 6 pumps (Figure 2). A Tentative Parcel Map is also proposed to create a 2.0 acre parcel for the project and a second parcel for future development.

The project site consists of two standalone commercial buildings and a fueling canopy with ample surface parking throughout the site. The convenience store is proposed along the western property line setback approximately 24-feet from the property line. The fueling station canopy is proposed to be located at the center of the property with the pumps running east to west. As part of the part of the project lighting and landscaping will also be installed.

The location of the fueling canopy was strategically designed to allow safe site circulation for vehicle fueling. The car wash building is proposed along the eastern side of the proposed property. Vehicles would enter the car wash building on the north side, and exit the south side of the building. In the event that a vehicle using the car wash decides to exit the queue line, an exit route is provided before the car wash entrance. For this purpose, a drive aisle is proposed before the car wash entrance. Surface parking throughout the project site is proposed to accommodate patrons of the business, a total of 28 standard off-street parking stalls are proposed. Lastly, the project site is located at one of several major arterial streets along Baseline Road. The site fronts Westbrook Blvd. a major north/south linkage between Sierra Vista Specific Plan and West Roseville Specific Plan. Both Westbrook Blvd. and Baseline Rd. arterial streets were designed in the SVSP as having a 50’ landscape corridor, with the flexibility to reduce the width dependent on existing and proposed street features (i.e. auxiliary lanes, bus pull-outs, etc.). The project proposes a 40-foot landscape corridor along Baseline Road and a 24-foot landscape corridor and a future bus turnout along Westbrook Boulevard.

Figure 2: Project Site Plan



CITY OF ROSEVILLE MITIGATION ORDINANCES, GUIDELINES, AND STANDARDS

For projects that are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified, CEQA Guidelines section 15183(f) allows a lead agency to rely on previously adopted development policies or standards as mitigation for the environmental effects, when the standards have been adopted by the City, with findings based on substantial evidence, that the policies or standards will substantially mitigate environmental effects, unless substantial new information shows otherwise (CEQA Guidelines §15183(f)). The City of Roseville adopted CEQA Implementing Procedures (Implementing Procedures) which are consistent with this CEQA Guidelines section. The current version of the Implementing Procedures were adopted in April 2008 (Resolution 08-172), along with Findings of Fact, and were updated in January 2021 (Resolution 21-018). The below regulations and ordinances were found to provide uniform mitigating policies and standards, and are applicable to development projects. The City's Mitigating Policies and Standards are referenced, where applicable, in the Initial Study Checklist.

- Noise Regulation (RMC Ch.9.24)
- Flood Damage Prevention Ordinance (RMC Ch.9.80)

- Traffic Mitigation Fee (RMC Ch.4.44)
- Drainage Fees (Dry Creek [RMC Ch.4.49] and Pleasant Grove Creek [RMC Ch.4.48])
- City of Roseville Improvement Standards (Resolution 02-37 and as further amended)
- City of Roseville Design and Construction Standards (Resolution 01-208 and as further amended)
- Tree Preservation Ordinance (RMC Ch.19.66)
- Internal Guidance for Management of Tribal Cultural Resources and Consultation (Tribal Consultation Policy) (Resolution 20-294)
- Subdivision Ordinance (RMC Title 18)
- Community Design Guidelines
- Specific Plan Design Guidelines:
    - Development Guidelines Del Webb Specific Plan
    - Landscape Design Guidelines for North Central Roseville Specific Plan
    - North Roseville Specific Plan and Design Guidelines
    - Northeast Roseville Specific Plan (Olympus Pointe) Signage Guidelines
    - North Roseville Area Design Guidelines
    - Northeast Roseville Specific Plan Landscape Design Guidelines
    - Southeast Roseville Specific Plan Landscape Design Guidelines
    - Stoneridge Specific Plan and Design Guidelines
    - Highland Reserve North Specific Plan and Design Guidelines
    - West Roseville Specific Plan and Design Guidelines
    - Sierra Vista Specific Plan and Design Guidelines
    - Creekview Specific Plan and Design Guidelines
    - Amoruso Ranch Specific Plan and Design Guidelines
- City of Roseville 2035 General Plan

OTHER ENVIRONMENTAL DOCUMENTS RELIED UPON

- 2035 General Plan Update Final Environmental Impact Report, certified August 5, 2020
- Sierra Vista Specific Plan Final Environmental Impact Report, certified May 5, 2010

Pursuant to CEQA Guidelines Section 15183, any project which is consistent with the development densities established by zoning, a Community Plan, or a General Plan for which an EIR was certified shall not require additional environmental review, except as may be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. The 2035 General Plan Update EIR (General Plan EIR) updated all Citywide analyses, including for vehicle miles traveled, greenhouse gas emissions, water supply, water treatment, wastewater treatment, and waste disposal. The proposed project is consistent with the adopted land use designations examined within the environmental documents listed above, and thus this Initial Study focuses on effects particular to the specific project site, impacts which were not analyzed within the EIR, and impacts which may require revisiting due to substantial new information. When applicable, the topical sections within the Initial Study summarize the findings within the environmental documents listed above. The analysis, supporting technical materials, and findings of the environmental document are incorporated by reference, and are available for review at the Civic Center, 311 Vernon Street, Roseville, CA.

EXPLANATION OF INITIAL STUDY CHECKLIST

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

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

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

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

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

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

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

INITIAL STUDY CHECKLIST

I. Aesthetics

The project site is located on the southeast corner of the City limits. Public views of the site are from Baseline Road and Westbrook Boulevard, both designated arterial roadways. The site is undeveloped and contains no native oak trees and some native grass land. The site appears to have been previously disturbed. The project

site surrounded by Baseline Road and Westbrook Boulevard to the south and west respectively, a self-storage facility to the east, and a single-family subdivision to the north approximately 300 feet from the project site.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) In non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?			X	

Thresholds of Significance and Regulatory Setting:

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

Discussion of Checklist Answers:

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

c) The project site is in an urban setting, and as a result lacks any prominent or high-quality natural features which could be negatively impacted by development. The City of Roseville has adopted Community Design Guidelines (CDG) for the purpose of creating building and community designs which are a visual asset to the community. The CDG includes guidelines for building design, site design and landscape design, which will result in a project that enhances the existing urban visual environment. Accordingly, the aesthetic impacts of the project are less than significant.

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

II. Agricultural & Forestry Resources

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

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
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, is not within or adjacent to land within a Williamson Act Contract, and is not considered forest land. Given the foregoing, the proposed project will have no impact on agricultural resources.

III. Air Quality

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

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Result in a cumulatively considerable net increase of any criteria for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

Thresholds of Significance and Regulatory Setting:

In responding to checklist items a–c, project-related air emissions would have a significant effect if they would result in concentrations that either violate an ambient air quality standard or contribute to an existing air quality violation. To assist in making this determination, the PCAPCD adopted thresholds of significance, which were developed by considering both the health-based ambient air quality standards and the attainment strategies outlined in the State Implementation Plan. The PCAPCD-recommended significance threshold for reactive organic gases (ROG) and nitrogen oxides (NO_x) is 82 pounds daily during construction and 55 pounds daily during operation, and for particulate matter (PM) is 82 pounds per day during both construction and operation. For all other constituents, significance is determined based on the concentration-based limits in the Federal and State Ambient Air Quality Standards. Toxic Air Contaminants (TAC) are also of public health concern, but no thresholds or standards are provided because they are considered to have no safe level of exposure. Analysis of TAC is based on the *Air Quality and Land Use Handbook – A Community Health Perspective (*April 2005, California Air Resources Board), which lists TAC sources and recommended buffer distances from sensitive uses. For checklist item c, the PCAPCD's *CEQA Air Quality Handbook* (*Handbook*) recommends that the same thresholds used for the project analysis be used for the cumulative impact analysis.

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

Discussion of Checklist Answers:

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

analyzed because the SVAB is in attainment for this constituent, and it requires high localized concentrations (called carbon monoxide "hot spots") before the ambient air quality standard would be exceeded. "Hot spots" are typically associated with heavy traffic congestion occurring at high-volume roadway intersections. The General Plan EIR analysis of Citywide traffic indicated that more than 70% of signalized intersections would operate at level of service C or better—that is, they will not experience heavy traffic congestion. It further indicated that analyses of existing CO concentrations at the most congested intersections in Roseville show that CO levels are well below federal and state ambient air quality standards. The discussions below focus on emissions of ROG**,** NO_x, or PM**.** A project-level analysis has been prepared to determine whether the project will, on a singular level, exceed the established thresholds.

The Sierra Vista Specific Plan EIR did not analyze the air quality impacts of the specific use of a proposed gas station on the project site, but the air permitting process required for the proposed gas station will ensure the project results in no significant air quality impacts. State law gives local air pollution control districts "the primary responsibility for control of air pollution from all sources, other than emissions from motor vehicles." (Health & Safety Code, § 40000.) Pursuant to this authority, the Place County Air Pollution Control District (PCAPCD) requires that gas stations obtain a permit known as an "Authority to Construct" prior to building the facility and another annual permit known as a "Permit to Operate" before dispensing gasoline. The PCAPCD's Rules and Regulations require denial of these permits if the proposed gas station's air emissions would violate federal, state, or local air quality standards. (PCAPCD, Rules and Regulations, Rule 501, § 303, and Rule 502, § 408.) In addition to controlling the emission of various "criteria pollutants," it should be noted that the PCAPCD's permits will address any potential emission of Toxic Air Contaminants (TACs) from the gas station, including benzene. The PCAPCD will review the proposed "annual throughput" for the gas station and will place any necessary restrictions on the operation to ensure that that the facility's emissions of TACs do not exceed the APCD's established "health risk" threshold of 10 in 1 million. (PCAPCD Advisory Notice for Gasoline Dispensing Facilities) Notably, this "10 in 1 million" threshold is identical to the PCAPCD's CEQA threshold of significance for TACs. Accordingly, it can be said with certainty that a gas station which must obtain an Authority to Construct and Permit to Operate from APCD will not result in any significant TAC emission impacts.

In conjunction with PCAPCD's air permitting process, staff requested the applicant complete a Health Risk Assessment (HRA) for the project that demonstrates the project would not result in exposure of sensitive receptors to unacceptable TAC levels. Trinity Consultants determined that the maximum cancer residential risk associated with the project would be 0.39 cancers/million, well below the PCAPCD's significance threshold of 10 cancers/million. Trinity Consultants determined that the maximum non-cancer risks at nearby homes would be a hazard index (HI) of 0.002 for maximum chronic non-cancer risk and an HI of 0.02 for maximum acute non-cancer risk, both numbers well below the PCAPCD's significance threshold of 1.0 HI for both chronic and acute non-cancer health risks. A copy of that health risk assessment is included in Attachment 2 of this document. (Trinity Consultants, December, 2021.)

As outlined in the Sierra Vista Specific Plan Mitigation Monitoring Program, the proposed project would not exceed the applicable thresholds of significance for air pollutant emissions during construction or operation. As such, the project would not conflict with or obstruct implementation of the *Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (which is the SIP) or contribute substantially to the PCAPCD's nonattainment status for ozone. In addition, because the proposed project would not produce substantial emissions of criteria air pollutants, CO, or TACs, adjacent residents would not be exposed to significant levels of pollutant concentrations during construction or operation. Therefore, implementation of the proposed project would result in less than significant impacts, and consistent with the analysis methodology outlined in the Significance Thresholds and Regulatory Setting section, cumulative impacts are less than significant.

e) Diesel fumes from construction equipment and delivery trucks are often found to be objectionable; however, construction is temporary and diesel emissions are minimal and regulated. Typical urban projects such as residences and retail businesses generally do not result in substantial objectionable odors when operated in

compliance with City Ordinances (e.g. proper trash disposal and storage). The Project is a typical urban development that lacks any characteristics that would cause the generation of substantial unpleasant odors. Thus, construction and operation of the proposed project would not result in the creation of objectionable odors affecting a substantial number of people. A review of the project surroundings indicates that there are no substantial odor-generating uses near the project site; the project location meets the recommended screening distances from odor-generators provided by the PCAPCD. Impacts related to odors are less than significant.

IV. Biological Resources

The project site is currently undeveloped and consists of annual grasses and dirt. The site has no natural features present onsite, it should be noted the site was previously graded. The project site is devoid of trees, vernal pools, and other water features.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			X	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?			X	
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

Thresholds of Significance and Regulatory Setting:

There is no ironclad definition of significance as it relates to biological resources. Thus, the significance of impacts to biological resources is defined by the use of expert judgment supported by facts, and relies on the policies, codes, and regulations adopted by the City and by regulatory agencies which relate to biological resources (as cited and described in the Discussion of Checklist Answers section). Thresholds for assessing the significance of environmental impacts are based on the CEQA Guidelines checklist items a–f, above. Consistent with CEQA Guidelines Section 15065, a project may have a significant effect on the environment if:

> The project has the potential to substantially degrade the quality of the environment*;* substantially reduce the habitat of a fish or wildlife species*;* cause a fish or wildlife population to drop below self-sustaining levels*;* threaten to eliminate a plant or animal community; [or] substantially reduce the number or restrict the range of an endangered, rare or threatened species . . .

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

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

Checklist item b addresses all "sensitive natural communities" and riparian (creekside) habitat that may be affected by local, state, or federal regulations/policies while checklist item c focuses specifically on one type of such a community: protected wetlands. Focusing first on wetlands, the 1987 Army Corps Wetlands Delineation Manual is used to determine whether an area meets the technical criteria for a wetland. A delineation verification by the Army Corps verifies the size and condition of the wetlands and other waters in question, and determines

the extent of government jurisdiction as it relates to Section 404 of the Federal Clean Water Act and Section 401 of the State Clean Water Act.

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

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

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

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

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

Discussion of Checklist Answers:

a&b) A Biological Resource Assessment was prepared as part of the SVSP. The assessment included list of species with the potential to occur within the SVSP plan area based on the species known to occur within the Pleasant Grove and Roseville 7.5 minute U.S. Geological Survey quadrangles. A review of this list determined that the project site contains potential habitat for nesting burrowing owls. Pursuant to the SVSP Mitigation Measure 4.8-3, preconstruction surveys for active burrows will be required prior to grading plan approval. As this is a requirement of the Specific Plan EIR, no mitigation is required. This measure will ensure that no nesting burrowing owls are impacted during grading and ground disturbing activities. Impacts are less than significant.

c) As discussed in the Environmental Setting, the project site is located in an urbanized area. The site is adjacent to paved roadways and is adjacent to single-family residential homes which are under construction. The property does not contain sensitive natural communities which are protected by federal, state or local policies, nor does it contain any wetlands; thus, the project will have no impact with regard to this criterion.

d) The City includes an interconnected network of open space corridors and preserves located throughout the City, to ensure that the movement of wildlife is not substantially impeded as the City develops. The development of the project site will not negatively impact these existing and planned open space corridors, nor

is the project site located in an area that has been designated by the City, United States Fish and Wildlife, or California Department of Fish and Wildlife as vital or important for the movement of wildlife or the use of native wildlife nursery sites.

e) As discussed, the site has been previously disturbed. Therefore, there are no protected trees or unprotected trees on the subject property; thus the project will have no impact with regard to this criterion.

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

V. Cultural Resources

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

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of an historic resource pursuant to in Section 15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?			X	
c) Disturb any human remains, including those interred outside of dedicated cemeteries?			X	

Thresholds of Significance and Regulatory Setting:

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

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

Discussion of Checklist Answers:

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

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

VI. Energy

Would the project:

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

Thresholds of Significance and Regulatory Setting:

Established in 2002, California's Renewable Portfolio Standard (RPS) currently requires that 33 percent of electricity retail sales by served by renewable energy resources by 2020, and 50 percent by 2030. The City published a Renewables Portfolio Standard Procurement Plan in June 2018, and continues to comply with the RPS reporting and requirements and standards. There are no numeric significance thresholds to define "wasteful, inefficient, or unnecessary" energy consumption, and therefore significance is based on CEQA

Guidelines checklist items a and b, above, and by the use of expert judgment supported by facts, relying on the policies, codes, and regulations adopted by the City and by regulatory agencies which relate to energy. The analysis considers compliance with regulations and standards, project design as it relates to energy use (including transportation energy), whether the project will result in a substantial unplanned demand on the City's energy resources, and whether the project will impede the ability of the City to meet the RPS standards.

Discussion of Checklist Answers:

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

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

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

The project is consistent with the existing land use designation of Community Commercial, and has therefore been assumed for development with commercial uses in citywide environmental analyses, such as in the Sierra Vista Specific Plan. The Environmental Impact Report (EIR) for the Sierra Vista Specific Plan included an assessment of energy impacts for the entire plan area. The analysis included consideration of transportation energy, and evaluated walkability, alternative transportation modes, and the degree to which the mix and location of uses would reduce vehicle miles traveled in the plan area. The EIR also included a citywide assessment of energy demand based on the existing and proposed land uses within the City and Specific Plan. Impacts related to energy consumption were found to be less than significant. The project is consistent with the existing land use designation, and therefore is consistent with the current citywide assessment of energy demand, and will not result in substantial unplanned, inefficient, wasteful, or unnecessary consumption of energy; impacts are less than significant.

VII. Geology and Soils

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

Would the project:

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

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	
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?			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–f listed above. Regulations applicable to this topic include the Alquist-Priolo Act, which addresses earthquake safety in building permits, and the Seismic Hazards Mapping Act, which requires the state to gather and publish data on the location and risk of seismic faults. The Archaeological, Historic, and Cultural Resources section of the City of Roseville General Plan also directs the proper evaluation of and, when feasible, protection of significant archeological resources, which for this evaluation will include paleontological resources (Policies 1 and 2). Section 50987.5 of the California Public Code Section is only applicable to public land; this section prohibits the excavation, removal, destruction, or defacement/injury to any vertebrate paleontological site, including fossilized footprints or other paleontological feature.

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

Discussion of Checklist Answers:

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

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

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

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

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

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

c, d) A review of the Natural Resources Conservation Service Soil Survey for Placer County, accessed via the Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/), indicates that the soils on the site are Fiddyment loam with 1 to 8 percent slope and Fiddyment-Kaseberg loams with 2 to 9 percent slope, which are not listed as geologically unstable or sensitive.

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

VIII. Greenhouse Gases

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

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	

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

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Thresholds of Significance and Regulatory Setting:

In Assembly Bill 32 (the California Global Warming Solutions Act), signed by Governor Schwarzenegger of California in September 2006, the legislature found that climate change resulting from global warming was a threat to California, and directed that "the State Air Resources Board design emissions reduction measures to meet the statewide emissions limits for greenhouse gases . . .". The target established in AB 32 was to reduce emissions to 1990 levels by the year 2020. CARB subsequently prepared the *Climate Change Scoping Plan* (Scoping Plan) for California, which was approved in 2008. The Scoping Plan provides the outline for actions to reduce California's GHG emissions, and has been updated twice.

The current 2017 Scoping Plan updated the target year from 2020 to 2030, based on the targets established in Senate Bill 32 (SB 32). SB 32 was signed by the Governor on September 8, 2016, to establish a reduction target of 40 percent below 1990 levels by 2030. Critically, the 2017 Scoping Plan also sets the path toward compliance with the 2050 target embodied within Executive Order S-3-05 as well. According to the 2017 Scoping Plan the statewide 2030 target is 260 million metric tons. The Scoping Plan recommends an efficiency target approach for local governments for 2030 and 2050 target years.

The Placer County Air Pollution Control District (PCAPCD) recommends that thresholds of significance for GHG be related to statewide reduction goals and has adopted thresholds of significance which take into account the 2030 reduction target. The thresholds include a de minimis and a bright-line maximum threshold, as well as residential and non-residential efficiency thresholds. However, the City developed its own thresholds as part of the 2035 General Plan Update project approved in July 2020. The justification for the City's thresholds is contained within the General Plan EIR. The thresholds were developed based on statewide emissions data adjusted for relevant local conditions and land uses. The significance thresholds are shown in Table 1 below.

Table 1: GHG Significance Thresholds

	2020	2030	2035	2050
Per Capita Emissions Efficiency Targets (MT CO_2e/capita/yr)	**7.21**	**4.00**	**3.22**	**1.19**
Per Service Population Emissions Efficiency Targets (MT CO_2e/SP/yr)	**5.07**	**2.79**	**2.25**	**0.83**
Projects which use these thresholds for environmental analysis should include a brief justification of the type of efficiency target and the target year selected. Per capita is most applicable to projects which only include residential uses, or in cases where reliable data to generate a service population estimate is unavailable. Projects should generally use the 2035 target year. Note that future projects consistent with the General Plan will not require further analysis, per the tiering provisions of CEQA.				
Note: MMT CO_2e = million metric tons of carbon dioxide equivalent; Service Population (SP) = population + employment				

Discussion of Checklist Answers:

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

The project would not be anticipated to increase VMT, since it is providing services in closer proximity to both developed and under construction residential areas in the City. The project site is located in an urbanized area of the City that is currently under construction, various single-family residential subdivisions are underway and anticipated to go on-line within the next couple of years. Therefore, the project would not increase the VMT in the area, since it would provide a service to those residential areas.

The focus of this analysis is on the emissions which would result from the operation of the proposed buildings. CalEEMod Version 2020.4.0 was used to calculate the operational emissions of the project (see Attachment 1), which includes energy run to the convenience store and car wash, area emissions such as landscape equipment to maintain the site, and water and wastewater energy demands. According to the CalEEMod results, the project would result in annual operational emissions of 425.0158 MT CO_2e, which is below the de minimis threshold of 1,100 MT CO_2e. Therefore, the proposed project would not result in significant operational emissions of GHG.

Construction-related GHG emissions occur at one point in time and are therefore not typically expected to significantly contribute to climate change. Climate change is a cumulative effect that occurs over time, as emissions increase on a year-to-year basis due to increases in developed area and other factors; construction emissions are a one-time emission source, which end once the project is built. The CalEEMod results indicate the project would result in annual construction emissions of 242.9015 CO_2e in the most active construction year, which is below the de minimis threshold of 1,100 MT CO_2e/yr. Thus, 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.

The Placer County Air Pollution Control District (PCAPCD) screening threshold for GHG indicates that projects resulting in less than 1,100 CO_2e/yr will result in less than significant impacts. The proposed project will result in GHG emissions which are below thresholds established by the PCAPCD. Thus, project-generated GHG emissions would not conflict with, and are consistent with, the State goals listed in AB32 and policies and regulation adopted by the California Air Resources Board pursuant to AB32. This impact is considered less than significant.

IX. Hazards and Hazardous Materials

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

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment though reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
g) Expose people or structures either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?				X

Thresholds of Significance and Regulatory Setting:

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

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

The project is not within an airport land use plan or within two miles of a public or private use airport. Therefore, no further discussion is provided for item e.

Discussion of Checklist Answers:

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

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

d) The project is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5[3]; therefore, no impact will occur.

e) This project is located within an area currently receiving City emergency services and development of the site has been anticipated and incorporated into emergency response plans. As such, the project will cause a less than significant impact to the City's Emergency Response or Management Plans. Furthermore, the project will be required to comply with all local, State and federal requirements for the handling of hazardous materials, which will ensure less-than-significant impacts. These will require the following programs:

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

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

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

X. Hydrology and Water Quality

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

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	

[3] 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
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on or off-site;			X	
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;				X
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater systems or provide substantial additional sources of polluted runoff; or			X	
iv) impede or redirect flood flows?				X
d) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	
e) In flood hazard, tsunami, or seiches zones, risk release of pollutants due to project innundation?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to hydrology and water quality is based directly on the CEQA Guidelines checklist items a–e listed above. For checklist item a, c (i), d, and e, the Findings of the Implementing Procedures indicate that compliance with the City of Roseville Design/Construction Standards (Resolution 07-107), Urban Stormwater Quality Management and Discharge Control Ordinance (RMC Ch. 14.20), and Stormwater Quality Design Manual (Resolution 16-152) will prevent significant impacts related to water quality or erosion. The standards require preparation of an erosion and sediment control plan for construction activities and includes designs to control pollutants within post-construction urban water runoff. Likewise, it is indicated that the Drainage Fees for the Dry Creek and Pleasant Grove Watersheds (RMC Ch.4.48) and City of Roseville

Design/Construction Standards (Resolution 07-107) will prevent significant impacts related to checklist items c (ii) and c (iii). The ordinance and standards require the collection of drainage fees to fund improvements that mitigate potential flooding impacts, and require the design of a water drainage system that will adequately convey anticipated stormwater flows without increasing the rate or amount of surface runoff. These same ordinances and standards prevent impacts related to groundwater (items a and d), because developers are required to treat and detain all stormwater onsite using stormwater swales and other methods which slow flows and preserve infiltration. Finally, it is indicated that compliance with the Flood Damage Prevention Ordinance (RMC Ch. 9.80) will prevent significant impacts related to items c (iv) and e. The Ordinance includes standard requirements for all new construction, including regulation of development with the potential to impede or redirect flood flows, and prohibits development within flood hazard areas. Impacts from tsunamis and seiches were screened out of the analysis (item e) because the project is not located near a water body or other feature that would pose a risk of such an event.

Discussion of Checklist Answers:

a,c (i),d, e) The project will involve the disturbance of on-site soils and the construction of impervious surfaces, such as asphalt paving and buildings. Disturbing the soil can allow sediment to be mobilized by rain or wind, and cause displacement into waterways. To address this and other issues, the developer is required to receive approval of a grading permit and/or improvement plants prior to the start of construction. The permit or plans are required to incorporate mitigation measures for dust and erosion control. In addition, the City has a National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit issued by the Central Valley Regional Water Quality Control Board which requires the City to reduce pollutants in stormwater to the maximum extent practicable. The City does this, in part, by means of the City's 2016 Design/Construction Standards, which require preparation and implementation of a Stormwater Pollution Prevention Plan. All permanent stormwater quality control measures must be designed to comply with the City's Manual for Stormwater Quality Control Standards for New Development, the City's 2016 Design/Construction Standards, Urban Stormwater Quality Management and Discharge Control Ordinance, and Stormwater Quality Design Manual. For these reasons, impacts related to water quality are less than significant.

b, d) The project does not involve the installation of groundwater wells. The City maintains wells to supplement surface water supplies during multiple dry years, but the effect of groundwater extraction on the aquifer was addressed in the City's Urban Water Master Plan and evaluated in the General Plan EIR. The proposed project is consistent with the General Plan land use designation, and is thus consistent with the citywide evaluation of water supply. Project impacts related to groundwater extraction are less than significant. Furthermore, all permanent stormwater quality control measures must be designed to comply with the Stormwater Quality Design Manual, which requires the use of bioswales and other onsite detention and infiltration methods. These standards ensure that stormwater will continue to infiltrate into the groundwater aquifer.

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

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

XI. Land Use and Planning

The project site has a General Plan land use designation of Community Commercial (CC) and a zoning designation of General Commercial (GC). Surrounding properties have commercial and residential land use and zoning designations, as described in the Background section of this Initial Study.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation of an agency adopted for the purpose of avoiding or mitigating an environmental effect?				X

Thresholds of Significance and Regulatory Setting:

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

Discussion of Checklist Answers:

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

b) The proposed development is consistent with the Sierra Vista Specific Plan and does not conflict with policies or regulations adopted for the purpose of avoiding or mitigating an environmental impact. Impacts are less than significant.

XII. Mineral Resources

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

Would the project:

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

Thresholds of Significance and Regulatory Setting:

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

Discussion of Checklist Answers:

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

XIII. Noise

The project consists of a convenience store, a car wash building, and a fuel canopy. Potential sources of noise at the project site would include patrons talking while entering and exiting the convenience store or users of the car wash facility. By nature a car wash facility would produce noise levels that are unavoidable, a car wash facility noise levels are generated from the vacuum dryers, air dryers, and blowers typically placed near the exit of the car wash. The project site was design in order to respect the single-family residential approximately 300-feet away, as proposed Circle K would be constructed closest to the street intersection of Westbrook Boulevard and Baseline Road. By designing the project site at the corner, there is approximately 300-feet between the car wash building and the closest residence. The applicant has noted that a future tenant/s would design the remaining parcel at a later date. Consequently, leaving the project closest to the intersection. Further, the project site is adjacent to two (2) roadways identified as transportation noise sources in the City's General Plan Noise Element. According to the General Plan, the project site is within the 60 dB L_{dn} noise contour for future roadways (City of Roseville 2015, Figure IX-2).

Would the project result in:

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

Thresholds of Significance and Regulatory Setting:

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

Discussion of Checklist Answers:

a) The City's Noise Ordinance includes sound limits for sensitive receptors. Section 9.24.100 states that noise measured at the property line of a sensitive receptor shall not exceed the ambient sound level by 3 dBA, or exceed the sound level standard in Table 1 (Figure 3), whichever is greater.

Currently, the project site is a single parcel approximately 8.58 acres in size. In conjunction with the Design Review Permit for the Circle K project, the applicant is requesting a Tentative Subdivision Map to allow for the creation of two (2) parcels. Parcel 1 would be approximately 6.57-acres and Parcel 2 (Circle K) would be

approximately 2.01-acres in size. The subdivision of the single parcel into two (2) parcels would result in a buffer between the residence and the Circle K site. Albeit, a significant buffer between the residence and the project site would be present, the proposed project is designed with the air blowers facing Baseline Road.

The convenience store and car wash facility hours of operation are proposed to be 24 hours per day, 365 days per year. The hours of operation and the noise levels generated by the project would be less than significant to the surrounding land uses, as the project site would not be adjacent to sensitive land uses (i.e. residential). Further, as part of the improvements for the subdivision to the north of the project site, a soundwall was installed along the residential property line. The soundwall would provide an additional sound barrier between the residence and the future commercial development.

Figure 3: Noise Ordinance Table 1

Table 1
SOUND LEVEL STANDARDS
(for non-transportation or fixed sound sources)

Sound Level Descriptor	Daytime (7:00 a.m. to 10:00 p.m.)	Nighttime (10:00 p.m. to 7:00 a.m.)
Hourly L_{eq}, dB	50	45
Maximum level, dB	70	65

A. Each of the sound level standards specified in Table 1 shall be reduced by five dB for simple tone noises, consisting of speech and music. However, in no case shall the sound level standard be lower than the ambient sound level plus three dB.

B. If the intruding sound source is continuous and cannot reasonably be discontinued or stopped for a time period whereby the ambient sound level can be measured, the sound level measured while the source is in operation shall be compared directly to the sound level standards of Table 1. (Ord. 3638 § 1, 2001.)

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

XIV. Population and Housing

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

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

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

Thresholds of Significance and Regulatory Setting:

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

Discussion of Checklist Answers:

a) The CEQA Guidelines identify several ways in which a project could have growth-inducing impacts (Public Resources Code Section 15126.2), either directly or indirectly. Growth-inducement may be the result of fostering economic growth, fostering population growth, providing new housing, or removing barriers to growth. Growth inducement may be detrimental, beneficial, or of no impact or significance under CEQA. An impact is only deemed to occur when it directly or indirectly affects the ability of agencies to provide needed public services, or if it can be shown that the growth will significantly affect the environment in some other way. The project is consistent with the land use designation of the site. Therefore, while the project in question will induce some level of growth, this growth was already identified and its effects disclosed and mitigated within the Sierra Vista Specific Plan EIR. Therefore, the impact of the project is less than significant.

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

XV. Public Services

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

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

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to public services is based directly on the CEQA Guidelines checklist items a–e listed above. The EIR for the Specific Plan addressed the level of public services which would need to be

provided in order to serve planned growth in the community. Development Agreements and other conditions have been adopted in all proposed growth areas of the City which identify the physical facilities needed to serve growth, and the funding needed to provide for the construction and operation of those facilities and services; the project is consistent with the Specific Plan. In addition, the project has been routed to the various public service agencies, both internal and external, to ensure that the project meets the agencies' design standards (where applicable) and to provide an opportunity to recommend appropriate conditions of approval.

Discussion of Checklist Answers:

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

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

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

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

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

XVI. Recreation

The project is in a developing part of the City with no existing parks within the vicinity of the subject property. There are parks planned northeast and northwest 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.

XVII. Transportation

The project site is located at the northeast corner of Westbrook Boulevard and Baseline Road. Both roads are designated as arterial lanes in the Sierra Vista Specific Plan. Baseline Road is planned to be constructed or improved in phases, which consist of 4-lane arterial roadway with a two-way left turn lane. The ultimate buildout of Baseline Road would accommodate 6 lanes (100-foot right-of-way). The ultimate buildout of Baseline Road would provide a 14'-wide landscaped median and landscape corridors on either side of the right of way. Westbrook Boulevard is also planned to be constructed and improved in phases, with an ultimate buildout of 6 lanes (100-foot right-of-way). Similar to the ultimate buildout of Baseline Roadway, Westbrook Boulevard would provide for 14'-wide landscape medians and landscape corridors on both side of the right of way.

The project proposes two (2) points of entry, one off of Baseline Road and the other on Westbrook Boulevard. As part of the project scope of work the applicant proposes frontage improvements along Baseline Road, which include a new driveway and landscaping along Baseline Road. The expansion of Baseline Road is not within the

scope of this project. Frontage improvements along Westbrook Boulevard have already been completed. The only improvements along Westbrook Boulevard proposed is the new driveway and landscaping improvements.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?			X	
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature(s) (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d) Result in inadequate emergency access?			X	

Thresholds of Significance and Regulatory Setting:

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

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

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

- Local-serving retail and other local-serving development, which generally reduces existing trip distances by providing services in closer proximity to residential areas, and therefore reduce VMT.

- Multi-family residences, which generally have fewer trips per household than single-family residences, and therefore also produce less VMT per unit.

- Infill projects in developed areas generally have shorter trips, reduced vehicle trips, and therefore less VMT.

- Pedestrian, bicycle, transit, and electric vehicle transportation projects.

- Residential projects in low per-capita household VMT areas and office projects in low per-worker VMT areas (85 percent or less than the regional average) as shown on maps maintained by SACOG or within low VMT areas as shown within Table 4.3-8 of the General Plan EIR.

When quantitative analysis is required, the threshold of 12.8 VMT/capita may be used for projects not within the scope of the General Plan EIR, provided the cumulative context of the 2035 General Plan has not changed substantially. Since approval of the 2035 General Plan, the City has not annexed new land, substantially changed roadway network assumptions, or made any other changes to the 2035 assumptions which would require an update to the City's VMT thresholds contained within the General Plan EIR. Therefore, the threshold of 12.8 VMT/capita remains appropriate.

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

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

Discussion of Checklist Answers:

a) The City of Roseville has adopted a Pedestrian Master Plan, Bicycle Master Plan, and Short-Range Transit Plan. The project was reviewed for consistency with these documents. Pedestrian facilities have already been constructed adjacent to Westbrook Boulevard, as well as a small portion of Baseline Road. Bicycle facilities have also been constructed adjacent to Westbrook Boulevard, frontage improvements along Baseline Road are proposed with the project. The project will not decrease the performance or safety of those facilities. The project design includes installation of sidewalks along the Baseline Road, which would complete a portion of the pedestrian circulation system in the project vicinity. Thus, the project results in a beneficial impact related to pedestrian access and circulation. The project is consistent with the policies of the Pedestrian Master Plan, Bicycle Master Plan, and Short-Range Transit Plan. Further, the project is consistent with the land use assumed by the SVSP, and therefore the project trips that were accounted for the roadway system were planned to accommodate the development. The proposed project would be constructed consistent with the planned roadway system and in compliance with the requirements of the SVSP and the General Plan.

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

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

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

XVIII. Tribal Cultural Resources

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

Would the project cause a substantial adverse change in the significance of a Tribal Cultural Resource as defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

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

Thresholds of Significance and Regulatory Setting:

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

Discussion of Checklist Answers:

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

b) Notice of the proposed project was mailed to tribes which had requested such notice pursuant to AB 52. On August 23, 2021, a consultation request was received from the United Auburn Indian Community (UAIC), which included a request for the results of a cultural resource survey work that had been conducted and inclusion of a mitigation measure to document processes in the event of an unanticipated discovery. The UAIC further requested an opportunity to review and comment on the project's CEQA documentation. Staff provided the analysis that was previously prepared for the SVSP. As a result of the consultation, UAIC provided staff with a mitigation measure intended to address the evaluation and treatment of inadvertent/unanticipated discoveries of potential tribal cultural resources (TCRs), archaeological, or cultural resources during a project's ground disturbing activities. The following mitigation measure was developed to address this potential impact taking into account tribal references and best practices.

Mitigation Measure TCR-1: Post-Review Discovery Procedures
If subsurface deposits believed to be cultural or human in origin, or tribal cultural resources, are discovered during construction, all work shall halt within a 100-foot radius of the discovery, and the Construction Manager shall immediately notify the City of Roseville Development Services Director by phone. The Construction Manager shall also immediately coordinate with the monitoring archeologist or project archaeologist and tribal monitor (if present), or, in the absence of either, contact consulting tribe(s) and a qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for archaeology and subject to approval by the City, to evaluate the significance of the find and develop appropriate management recommendations, in coordination with the consulting tribe(s) if the find is a tribal cultural resource.

All management recommendations shall be provided to the City in writing for the City's review and approval. If recommended by the qualified professional archeologist, and consulting tribe(s), and approved by the City, this may include modification of the no-work radius.

The professional archaeologist must make a determination, based on professional judgement and supported by substantial evidence, within one business day of being notified, as to whether or not the find represents a cultural or tribal cultural resource or has the potential to be a cultural or tribal cultural resource. The consulting tribe shall also be provided the opportunity to determine, within one business day of being notified, whether or not the find represents a tribal cultural resource or has the potential to be a tribal cultural resource. The subsequent actions will be determined by the type of discovery, as described below. These include: 1) a work pause that, upon further investigation, is not actually a discovery and the work pause was simply needed in order to allow for closer examination of soil (a "false alarm"); 2) a work pause and subsequent action for discoveries that are clearly

not related to tribal resources, such as can and bottle dumps, artifacts of European origin, and remnants of built environment features; and 3) a work pause and subsequent action for discoveries that are likely related to tribal resources, such as midden soil, bedrock mortars, groundstone, or other similar expressions.

Whenever there is question as to whether or not the discovery represents a tribal resource, culturally affiliated tribes shall be consulted in making the determination. Whenever a tribal monitor is present, the monitor shall be consulted.

The following processes shall apply, depending on the nature of the find, subject to the review and approval of the City:

- Response to False Alarms: If the professional archaeologist determine that the find is negative for any cultural indicators and tribal representatives have not indicated the find is a tribal cultural resource, then work may resume immediately upon notice to proceed from the City's representative. No further notifications or archaeological consultation is necessary if it is determined that the discovery is not a cultural or tribal cultural resource of any kind. The professional archaeologist shall provide written documentation of this finding to the City, which shall include as an attachment any written documentation provided by tribal representatives or monitors.

- Response to Non-Tribal Discoveries: If a tribal monitor is not present at the time of discovery and a professional archaeologist determines that the find represents a non-tribal cultural resource from any time period or cultural affiliation, the City shall be notified immediately, to consult on a finding of eligibility and implementation of appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines. The professional archaeologist shall provide a photograph of the find and a written description to the City of Roseville. The City of Roseville will notify any [tribe(s)] who, in writing, requested notice of unanticipated discovery of non-tribal resources. Notice shall include the photograph and description of the find, and a tribal representative shall have the opportunity to determine whether or not the find represents a tribal cultural resource. If a response is not received within 24 hours of notification (none of which time period may fall on weekends or City holidays), the City will deem this portion of the measure completed in good faith as long as the notification was made and documented. If requested by a [tribe(s)], the City may extend this timeframe, which shall be documented in writing (electronic communication may be used to satisfy this measure). If a notified tribe responds within 24 hours to indicate that the find represents a tribal cultural resource, then the Response to Tribal Discoveries portion of this measure applies. If the tribe does not respond or concurs that the discovery is non-tribal, work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the site either: 1) is not a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or 2) that the treatment measures have been completed to its satisfaction.

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

Tribal Cultural Resource, as defined in Section 21074 of the Public Resources Code; or 3) that the treatment measures have been completed to its satisfaction.

- Response to Human Remains: If the find includes human remains, or remains that are potentially human, the construction supervisor or on-site archaeologist and (if present) tribal monitor shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641) and shall notify the City and Placer County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California Public Resources Code, and Assembly Bill 2641 shall be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the Native American Heritage Commission (NAHC), which then will designate a Native American Most Likely Descendant (MLD) for the project (§ 5097.98 of the Public Resources Code). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. Public Resources Code § 5097.94 provides structure for mediation through the NAHC if necessary. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the Public Resources Code).

  If no agreement is reached, the landowner must rebury the remains in a respectful manner where they will not be further disturbed (§ 5097.98 of the Public Resources Code). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the treatment measures have been completed to its satisfaction.

With implementation of MM TCR-1, potential impacts to unknown subsurface tribal cultural resources that might be of significance to applicable tribes would be less than significant.

XIX. Utilities and Service Systems

The project site is within a developed area with the major utility infrastructure already installed, consistent with the Sierra Vista Specific Plan. Existing sewer system, stormwater treatment facilities, and water facilities are available to serve the project site.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?			X	
c) Result in a determination by the wastewater treatment provider which serves the project that it has adequate capacity to serve the project's projected demand in addition of the provider's existing commitments?			X	
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

Thresholds of Significance and Regulatory Setting:

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

Discussion of Checklist Answers:

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

b) The City of Roseville 2015 Urban Water Management Plan (UWMP), adopted May 2016, estimates water demand and supply for the City through the year 2040, based on existing land use designations and population projections. In addition, the General Plan EIR estimates water demand and supply for ultimate General Plan buildout. The project is consistent with existing land use designations, and is therefore consistent with the

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

c) The proposed project would be served by the Pleasant Grove Wastewater Treatment Plant (PGWWTP). The Central Valley Regional Water Quality Control Board (RWQCB) regulates water quality and quantity of effluent discharged from the City's wastewater treatment facilities. The Pleasant Grove WWTP has the capacity[4] to treat 12 million gallons per day (mgd) and is currently treating 7.0[5]. The project is consistent with existing land use designations, which is how infrastructure capacity is planned. Therefore, the volume of wastewater generated by the proposed project could be accommodated by the facility; the proposed project will not contribute to an exceedance of applicable wastewater treatment requirements. The impact would be less than significant.

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

XX. Wildfire

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

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X

[4] Waste Discharge Requirements/Monitoring & Reporting Program/NPDES Permit No. CA0079502, Adopted on 28 March 2014

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

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

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to wildfire is based directly on the CEQA Guidelines checklist items a–d listed above. The California Department of Forestry and Fire Protection (CAL FIRE) is the state agency responsible for wildland fire protection and management. As part of that task, CAL FIRE maintains maps designating Wildland Fire Hazard Severity zones. The City is not located within a Very High Fire Hazard Severity Zone, and is not in a CAL FIRE responsibility area; fire suppression is entirely within local responsibility.

Discussion of Checklist Answers:

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

XXI. Mandatory Findings of Significance

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the			X	

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

Significance Criteria and Regulatory Setting:

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

Discussion of Checklist Answers:

a–c) Long term environmental goals are not impacted by the proposed project. The cumulative impacts do not deviate beyond what was contemplated in the 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 COULD, but with mitigation agreed to by the applicant, clearly will not have a significant effect on the environment and a *MITIGATED NEGATIVE DECLARATION* has been prepared.

Initial Study Prepared by:

Escarlet Mar

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

Attachments:

1. Mitigation Monitoring & Reporting Program
2. CalEEMod Annual Calculation, November 29, 2021
3. Health Risk Assessment, December 2021

CITY OF ROSEVILLE CALIFORNIA

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

MITIGATION MONITORING AND REPORTING PROGRAM

Project Title/File Number:	SVSP PCL KT-42 – Circle K; File #PL21-0233
Project Location:	5900 Baseline Road, Roseville, Placer County; 499-010-081-000
Project Description:	The applicant requests approval of a Design Review Permit to allow the development of a 5,200 square feet convenience store with associated fuel canopy and car wash. The request also includes a Parcel Map to create a 2.0 acre parcel for the project and leave the remaining parcel for future development.
Environmental Document	Mitigated Negative Declaration
Project Applicant:	Justin Pierce, Land Development Consultants, LLC
Property Owner:	KV Sierra Vista LLC
Lead Agency Contact Person:	Escarlet Mar, Associate Planner; Phone (916) 774-5247

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

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

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

TABLE OF MITIGATION MEASURES

Mitigation Measure	Implementation	Timing	Reviewing Party	Staff Use Only
Mitigation Measure TCR-1: Post-Review Discovery Procedures If subsurface deposits believed to be cultural or human in origin, or tribal cultural resources, are discovered during construction, all work shall halt within a 100-foot radius of the discovery, and the Construction Manager shall immediately notify the City of Roseville Development Services Director by phone. The Construction Manager shall also immediately coordinate with the monitoring archeologist or project archaeologist and tribal monitor (if present), or, in the absence of either, contact consulting tribe(s) and a qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for archaeology and subject to approval by the City, to evaluate the significance of the find and develop appropriate management recommendations, in coordination with the consulting tribe(s) if the find is a tribal cultural resource. All management recommendations shall be provided to the City in writing for the City's review and approval. If recommended by the qualified professional archeologist, and consulting tribe(s), and approved by the City, this may include modification of the no-work radius. The professional archaeologist must make a determination, based on professional judgement and supported by substantial evidence, within one business day of being notified, as to whether or not the find represents a cultural or tribal cultural resource or has the potential to be a cultural or tribal cultural resource. The consulting tribe shall also be provided the opportunity to determine, within one business day of being notified, whether or not the find represents a tribal cultural resource or has the potential to be a tribal cultural resource. The subsequent actions will be determined by the type of discovery, as described below. These include: 1) a work pause that, upon further investigation, is not actually a discovery and the work pause was simply needed in order to allow for closer examination of soil (a "false alarm"); 2) a work pause and subsequent action for discoveries that are clearly not related to tribal resources, such as can and bottle dumps, artifacts of European origin, and remnants of built environment features; and 3) a work pause and subsequent action for discoveries that are likely related to tribal resources, such as midden soil, bedrock mortars, groundstone, or other similar expressions. Whenever there is question as to whether or not the discovery represents a tribal resource, culturally affiliated tribes shall be consulted in making the determination. Whenever a tribal monitor is present, the monitor shall be consulted. The following processes shall apply, depending on the nature of the find, subject to the review and approval of the City: • Response to False Alarms: If the professional archaeologist determine that the find is negative for any cultural indicators and tribal representatives have not indicated the find is a tribal cultural resource, then work may resume immediately upon notice to proceed from the City's representative. No further notifications or archaeological consultation is necessary if it is determined that the discovery is not a cultural or tribal cultural resource of any kind. The professional archaeologist shall provide written documentation of this finding to the City, which shall include as an attachment any written documentation provided by tribal representatives or monitors. • Response to Non-Tribal Discoveries: If a tribal monitor is not present at the time of discovery and a professional archaeologist determines that the find represents a non-tribal cultural resource from any time period or cultural affiliation, the City shall be notified immediately, to consult on a finding of eligibility and implementation of appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines. The professional archaeologist shall provide a photograph of the find and a written description to the City of Roseville. The City of Roseville will notify any [tribe(s)] who, in writing, requested notice of unanticipated discovery of non-tribal resources. Notice shall include the photograph and description of the find, and a tribal representative shall have the opportunity to determine whether or not the find represents a	This condition shall be reflected in all construction and building plans. The Development Services Department shall review plans for inclusion and permits of specifications prior to the issuance of building permits.	Prior to the issuance of grading permit and/or approval of improvement plans. Add as note on Improvement Plans.	The Development Services Department will ensure that appropriate measures are reflected in the grading permit and/or building improvement plans. The Building Official shall ensure that construction contractors comply with the measures. The Code Enforcement Inspector shall enforce the City's regulations.	

tribal cultural resource. If a response is not received within 24 hours of notification (none of which time period may fall on weekends or City holidays), the City will deem this portion of the measure completed in good faith as long as the notification was made and documented. If requested by a [tribe(s)], the City may extend this timeframe, which shall be documented in writing (electronic communication may be used to satisfy this measure). If a notified tribe responds within 24 hours to indicate that the find represents a tribal cultural resource, then the Response to Tribal Discoveries portion of this measure applies. If the tribe does not respond or concurs that the discovery is non-tribal, work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the site either: 1) is not a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or 2) that the treatment measures have been completed to its satisfaction. • Response to Tribal Discoveries: If the find represents a tribal or potentially tribal cultural resource that does not include human remains, the consulting tribe(s) and City shall be notified. The City will consult with the tribe(s) on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be either a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines, or a Tribal Cultural Resource, as defined in Section 21074 of the Public Resources Code. Preservation in place is the preferred treatment, if feasible. Work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the site either: 1) is not a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or 2) not a Tribal Cultural Resource, as defined in Section 21074 of the Public Resources Code; or 3) that the treatment measures have been completed to its satisfaction. • Response to Human Remains: If the find includes human remains, or remains that are potentially human, the construction supervisor or on-site archaeologist and (if present) tribal monitor shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641) and shall notify the City and Placer County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California Public Resources Code, and Assembly Bill 2641 shall be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the Native American Heritage Commission (NAHC), which then will designate a Native American Most Likely Descendant (MLD) for the project (§ 5097.98 of the Public Resources Code). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. Public Resources Code § 5097.94 provides structure for mediation through the NAHC if necessary. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the Public Resources Code). If no agreement is reached, the landowner must rebury the remains in a respectful manner where they will not be further disturbed (§ 5097.98 of the Public Resources Code). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the treatment measures have been completed to its satisfaction.				

CITY OF ROSEVILLE CALIFORNIA

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

MITIGATION VERIFICATION SUBMITTAL COVER SHEET

Project Title/Planning File # _____

Project Address _____

Property Owner _____

Planning Division Contact _____

SUMMARY OF VERIFICATION MATERIALS INCLUDED IN THIS SUBMITTAL

Mitigation Measure	Supporting Attachments Included	Date Complete

I HAVE ATTACHED THE FOLLOWING REQUIRED ITEMS:

☐ Table of Applicable Mitigation Measures

☐ Mitigation Verification Form(s)

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

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

_____ _____ _____

Signature and Date | Print Name | Contact Number

MITIGATION VERIFICATION FORM

Mitigation Measure

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

INSTRUCTIONS

COVER SHEET:

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

EXAMPLE MITIGATION VERIFICATION SUBMITTAL COVER SHEET

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

SUMMARY OF VERIFICATION MATERIALS INCLUDED IN THIS SUBMITTAL

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

MITIGATION VERIFICATION FORM:

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

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

EXAMPLE
MITIGATION VERIFICATION FORM

Mitigation Measure MM3

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

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

ATTACHMENT 2

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Circle K

Placer-Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Convenience Market with Gas Pumps	6.00	Pump	2.01	847.05	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	14			**Operational Year**	2023
Utility Company	Roseville Electric				
CO2 Intensity (lb/MWhr)	471.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Changed default to accurate depict project site size.

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	0.02	2.01

2.0 Emissions Summary

Circle K - Placer-Sacramento County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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					
2021	0.0245	0.2449	0.1748	3.1000e-004	0.0128	0.0124	0.0252	4.2300e-003	0.0115	0.0158	0.0000	27.1024	27.1024	7.0500e-003	3.0000e-005	27.2876
2022	0.2171	1.6943	1.6672	2.9000e-003	0.0160	0.0816	0.0976	7.1600e-003	0.0781	0.0852	0.0000	241.7012	241.7012	0.0478	2.0000e-005	242.9015
Maximum	**0.2171**	**1.6943**	**1.6672**	**2.9000e-003**	**0.0160**	**0.0816**	**0.0976**	**7.1600e-003**	**0.0781**	**0.0852**	**0.0000**	**241.7012**	**241.7012**	**0.0478**	**3.0000e-005**	**242.9015**

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					
2021	0.0245	0.2449	0.1748	3.1000e-004	0.0128	0.0124	0.0252	4.2300e-003	0.0115	0.0158	0.0000	27.1023	27.1023	7.0500e-003	3.0000e-005	27.2876
2022	0.2171	1.6943	1.6672	2.9000e-003	0.0160	0.0816	0.0976	7.1600e-003	0.0781	0.0852	0.0000	241.7009	241.7009	0.0478	2.0000e-005	242.9012
Maximum	**0.2171**	**1.6943**	**1.6672**	**2.9000e-003**	**0.0160**	**0.0816**	**0.0976**	**7.1600e-003**	**0.0781**	**0.0852**	**0.0000**	**241.7009**	**241.7009**	**0.0478**	**3.0000e-005**	**242.9012**

Circle K - Placer-Sacramento County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.02**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**11-29-2021**	**2-27-2022**	0.5988	0.5988
2	**2-28-2022**	**5-28-2022**	0.5291	0.5291
3	**5-29-2022**	**8-28-2022**	0.5408	0.5408
4	**8-29-2022**	**9-30-2022**	0.1940	0.1940
		Highest	0.5988	0.5988

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	3.7100e-003	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.1000e-004
Energy	3.0000e-005	3.0000e-004	2.5000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	2.6766	2.6766	1.7000e-004	3.0000e-005	2.6885
Mobile	0.6552	0.5673	3.7703	4.4300e-003	0.3819	4.7600e-003	0.3866	0.1023	4.4500e-003	0.1068	0.0000	409.5811	409.5811	0.0614	0.0370	422.1398
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0199	0.1015	0.1214	2.0500e-003	5.0000e-005	0.1873
Total	**0.6589**	**0.5676**	**3.7706**	**4.4300e-003**	**0.3819**	**4.7800e-003**	**0.3867**	**0.1023**	**4.4700e-003**	**0.1068**	**0.0199**	**412.3592**	**412.3791**	**0.0637**	**0.0371**	**425.0158**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	3.7100e-003	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.1000e-004
Energy	3.0000e-005	3.0000e-004	2.5000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	2.6766	2.6766	1.7000e-004	3.0000e-005	2.6885
Mobile	0.6552	0.5673	3.7703	4.4300e-003	0.3819	4.7600e-003	0.3866	0.1023	4.4500e-003	0.1068	0.0000	409.5811	409.5811	0.0614	0.0370	422.1398
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0199	0.1015	0.1214	2.0500e-003	5.0000e-005	0.1873
Total	**0.6589**	**0.5676**	**3.7706**	**4.4300e-003**	**0.3819**	**4.7800e-003**	**0.3867**	**0.1023**	**4.4700e-003**	**0.1068**	**0.0199**	**412.3592**	**412.3791**	**0.0637**	**0.0371**	**425.0158**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	11/29/2021	12/24/2021	5	20	
2	Site Preparation	Site Preparation	12/25/2021	12/29/2021	5	3	
3	Grading	Grading	12/30/2021	1/6/2022	5	6	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4	Building Construction	Building Construction	1/7/2022	11/10/2022	5	220	
5	Paving	Paving	11/11/2022	11/24/2022	5	10	
6	Architectural Coating	Architectural Coating	11/25/2022	12/8/2022	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 6

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,271; Non-Residential Outdoor: 424; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Grading	Graders	1	8.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Welders	3	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
Demolition	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	0.00	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
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

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	0.0199	0.1970	0.1449	2.4000e-004		0.0104	0.0104		9.7100e-003	9.7100e-003	0.0000	21.0713	21.0713	5.3900e-003	0.0000	21.2060
Total	**0.0199**	**0.1970**	**0.1449**	**2.4000e-004**		**0.0104**	**0.0104**		**9.7100e-003**	**9.7100e-003**	**0.0000**	**21.0713**	**21.0713**	**5.3900e-003**	**0.0000**	**21.2060**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2021

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	3.9000e-004	2.9000e-004	3.4300e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8482	0.8482	3.0000e-005	3.0000e-005	0.8565
Total	**3.9000e-004**	**2.9000e-004**	**3.4300e-003**	**1.0000e-005**	**1.0200e-003**	**1.0000e-005**	**1.0300e-003**	**2.7000e-004**	**1.0000e-005**	**2.8000e-004**	**0.0000**	**0.8482**	**0.8482**	**3.0000e-005**	**3.0000e-005**	**0.8565**

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	0.0199	0.1970	0.1449	2.4000e-004		0.0104	0.0104		9.7100e-003	9.7100e-003	0.0000	21.0713	21.0713	5.3900e-003	0.0000	21.2060
Total	**0.0199**	**0.1970**	**0.1449**	**2.4000e-004**		**0.0104**	**0.0104**		**9.7100e-003**	**9.7100e-003**	**0.0000**	**21.0713**	**21.0713**	**5.3900e-003**	**0.0000**	**21.2060**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2021

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	3.9000e-004	2.9000e-004	3.4300e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8482	0.8482	3.0000e-005	3.0000e-005	0.8565
Total	**3.9000e-004**	**2.9000e-004**	**3.4300e-003**	**1.0000e-005**	**1.0200e-003**	**1.0000e-005**	**1.0300e-003**	**2.7000e-004**	**1.0000e-005**	**2.8000e-004**	**0.0000**	**0.8482**	**0.8482**	**3.0000e-005**	**3.0000e-005**	**0.8565**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3200e-003	0.0274	0.0161	4.0000e-005		1.0500e-003	1.0500e-003		9.7000e-004	9.7000e-004	0.0000	3.2290	3.2290	1.0400e-003	0.0000	3.2551
Total	**2.3200e-003**	**0.0274**	**0.0161**	**4.0000e-005**	**2.3900e-003**	**1.0500e-003**	**3.4400e-003**	**2.6000e-004**	**9.7000e-004**	**1.2300e-003**	**0.0000**	**3.2290**	**3.2290**	**1.0400e-003**	**0.0000**	**3.2551**

Circle K - Placer-Sacramento County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.2000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0783	0.0783	0.0000	0.0000	0.0791
Total	**4.0000e-005**	**3.0000e-005**	**3.2000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0783**	**0.0783**	**0.0000**	**0.0000**	**0.0791**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3200e-003	0.0274	0.0161	4.0000e-005		1.0500e-003	1.0500e-003		9.7000e-004	9.7000e-004	0.0000	3.2290	3.2290	1.0400e-003	0.0000	3.2551
Total	**2.3200e-003**	**0.0274**	**0.0161**	**4.0000e-005**	**2.3900e-003**	**1.0500e-003**	**3.4400e-003**	**2.6000e-004**	**9.7000e-004**	**1.2300e-003**	**0.0000**	**3.2290**	**3.2290**	**1.0400e-003**	**0.0000**	**3.2551**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.2000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0783	0.0783	0.0000	0.0000	0.0791
Total	**4.0000e-005**	**3.0000e-005**	**3.2000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0783**	**0.0783**	**0.0000**	**0.0000**	**0.0791**

3.4 Grading - 2021

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					9.2000e-003	0.0000	9.2000e-003	3.6500e-003	0.0000	3.6500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8300e-003	0.0202	9.7600e-003	2.0000e-005		9.2000e-004	9.2000e-004		8.4000e-004	8.4000e-004	0.0000	1.8104	1.8104	5.9000e-004	0.0000	1.8250
Total	**1.8300e-003**	**0.0202**	**9.7600e-003**	**2.0000e-005**	**9.2000e-003**	**9.2000e-004**	**0.0101**	**3.6500e-003**	**8.4000e-004**	**4.4900e-003**	**0.0000**	**1.8104**	**1.8104**	**5.9000e-004**	**0.0000**	**1.8250**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2021

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	3.0000e-005	2.0000e-005	2.6000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0652	0.0652	0.0000	0.0000	0.0659
Total	**3.0000e-005**	**2.0000e-005**	**2.6000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0652**	**0.0652**	**0.0000**	**0.0000**	**0.0659**

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					9.2000e-003	0.0000	9.2000e-003	3.6500e-003	0.0000	3.6500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8300e-003	0.0202	9.7600e-003	2.0000e-005		9.2000e-004	9.2000e-004		8.4000e-004	8.4000e-004	0.0000	1.8104	1.8104	5.9000e-004	0.0000	1.8250
Total	**1.8300e-003**	**0.0202**	**9.7600e-003**	**2.0000e-005**	**9.2000e-003**	**9.2000e-004**	**0.0101**	**3.6500e-003**	**8.4000e-004**	**4.4900e-003**	**0.0000**	**1.8104**	**1.8104**	**5.9000e-004**	**0.0000**	**1.8250**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2021

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	3.0000e-005	2.0000e-005	2.6000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0652	0.0652	0.0000	0.0000	0.0659
Total	**3.0000e-005**	**2.0000e-005**	**2.6000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0652**	**0.0652**	**0.0000**	**0.0000**	**0.0659**

3.4 Grading - 2022

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					0.0152	0.0000	0.0152	6.9600e-003	0.0000	6.9600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0800e-003	0.0340	0.0184	4.0000e-005		1.4800e-003	1.4800e-003		1.3700e-003	1.3700e-003	0.0000	3.6205	3.6205	1.1700e-003	0.0000	3.6498
Total	**3.0800e-003**	**0.0340**	**0.0184**	**4.0000e-005**	**0.0152**	**1.4800e-003**	**0.0167**	**6.9600e-003**	**1.3700e-003**	**8.3300e-003**	**0.0000**	**3.6205**	**3.6205**	**1.1700e-003**	**0.0000**	**3.6498**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	4.9000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1265	0.1265	0.0000	0.0000	0.1277
Total	**6.0000e-005**	**4.0000e-005**	**4.9000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1265**	**0.1265**	**0.0000**	**0.0000**	**0.1277**

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					0.0152	0.0000	0.0152	6.9600e-003	0.0000	6.9600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0800e-003	0.0340	0.0184	4.0000e-005		1.4800e-003	1.4800e-003		1.3700e-003	1.3700e-003	0.0000	3.6205	3.6205	1.1700e-003	0.0000	3.6498
Total	**3.0800e-003**	**0.0340**	**0.0184**	**4.0000e-005**	**0.0152**	**1.4800e-003**	**0.0167**	**6.9600e-003**	**1.3700e-003**	**8.3300e-003**	**0.0000**	**3.6205**	**3.6205**	**1.1700e-003**	**0.0000**	**3.6498**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	4.9000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1265	0.1265	0.0000	0.0000	0.1277
Total	**6.0000e-005**	**4.0000e-005**	**4.9000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1265**	**0.1265**	**0.0000**	**0.0000**	**0.1277**

3.5 Building Construction - 2022

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	0.2041	1.6064	1.5789	2.7500e-003		0.0772	0.0772		0.0740	0.0740	0.0000	228.4481	228.4481	0.0441	0.0000	229.5500
Total	**0.2041**	**1.6064**	**1.5789**	**2.7500e-003**		**0.0772**	**0.0772**		**0.0740**	**0.0740**	**0.0000**	**228.4481**	**228.4481**	**0.0441**	**0.0000**	**229.5500**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2022

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	0.0000	0.0000	0.0000	0.0000	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	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.2041	1.6064	1.5789	2.7500e-003		0.0772	0.0772		0.0740	0.0740	0.0000	228.4478	228.4478	0.0441	0.0000	229.5497
Total	**0.2041**	**1.6064**	**1.5789**	**2.7500e-003**		**0.0772**	**0.0772**		**0.0740**	**0.0740**	**0.0000**	**228.4478**	**228.4478**	**0.0441**	**0.0000**	**229.5497**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2022

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	0.0000	0.0000	0.0000	0.0000	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	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2022

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	4.7100e-003	0.0467	0.0585	9.0000e-005		2.4400e-003	2.4400e-003		2.2500e-003	2.2500e-003	0.0000	7.7550	7.7550	2.4600e-003	0.0000	7.8165
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.7100e-003**	**0.0467**	**0.0585**	**9.0000e-005**		**2.4400e-003**	**2.4400e-003**		**2.2500e-003**	**2.2500e-003**	**0.0000**	**7.7550**	**7.7550**	**2.4600e-003**	**0.0000**	**7.8165**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.8300e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4744	0.4744	1.0000e-005	1.0000e-005	0.4789
Total	**2.1000e-004**	**1.5000e-004**	**1.8300e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**5.9000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.4744**	**0.4744**	**1.0000e-005**	**1.0000e-005**	**0.4789**

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	4.7100e-003	0.0467	0.0585	9.0000e-005		2.4400e-003	2.4400e-003		2.2500e-003	2.2500e-003	0.0000	7.7550	7.7550	2.4600e-003	0.0000	7.8165
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.7100e-003**	**0.0467**	**0.0585**	**9.0000e-005**		**2.4400e-003**	**2.4400e-003**		**2.2500e-003**	**2.2500e-003**	**0.0000**	**7.7550**	**7.7550**	**2.4600e-003**	**0.0000**	**7.8165**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.8300e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4744	0.4744	1.0000e-005	1.0000e-005	0.4789
Total	**2.1000e-004**	**1.5000e-004**	**1.8300e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**5.9000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.4744**	**0.4744**	**1.0000e-005**	**1.0000e-005**	**0.4789**

3.7 Architectural Coating - 2022

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	3.9300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	**4.9500e-003**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2022

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	0.0000	0.0000	0.0000	0.0000	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	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	3.9300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	**4.9500e-003**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2022

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	0.0000	0.0000	0.0000	0.0000	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	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.6552	0.5673	3.7703	4.4300e-003	0.3819	4.7600e-003	0.3866	0.1023	4.4500e-003	0.1068	0.0000	409.5811	409.5811	0.0614	0.0370	422.1398
Unmitigated	0.6552	0.5673	3.7703	4.4300e-003	0.3819	4.7600e-003	0.3866	0.1023	4.4500e-003	0.1068	0.0000	409.5811	409.5811	0.0614	0.0370	422.1398

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market with Gas Pumps	1,935.00	1,935.00	1935.00	1,037,942	1,037,942
Total	1,935.00	1,935.00	1,935.00	1,037,942	1,037,942

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
Convenience Market with Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market with Gas Pumps	0.463296	0.061073	0.209857	0.155594	0.036099	0.008566	0.013676	0.011873	0.000564	0.000399	0.032288	0.000990	0.005727

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2.3538	2.3538	1.6000e-004	2.0000e-005	2.3639
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2.3538	2.3538	1.6000e-004	2.0000e-005	2.3639
NaturalGas Mitigated	3.0000e-005	3.0000e-004	2.5000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.3227	0.3227	1.0000e-005	1.0000e-005	0.3247
NaturalGas Unmitigated	3.0000e-005	3.0000e-004	2.5000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.3227	0.3227	1.0000e-005	1.0000e-005	0.3247

Circle K - Placer-Sacramento County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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					
Convenience Market with Gas Pumps	6047.94	3.0000e-005	3.0000e-004	2.5000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.3227	0.3227	1.0000e-005	1.0000e-005	0.3247
Total		**3.0000e-005**	**3.0000e-004**	**2.5000e-004**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.3227**	**0.3227**	**1.0000e-005**	**1.0000e-005**	**0.3247**

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					
Convenience Market with Gas Pumps	6047.94	3.0000e-005	3.0000e-004	2.5000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.3227	0.3227	1.0000e-005	1.0000e-005	0.3247
Total		**3.0000e-005**	**3.0000e-004**	**2.5000e-004**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.3227**	**0.3227**	**1.0000e-005**	**1.0000e-005**	**0.3247**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market with Gas Pumps	10994.7	2.3538	1.6000e-004	2.0000e-005	2.3639
Total		**2.3538**	**1.6000e-004**	**2.0000e-005**	**2.3639**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market with Gas Pumps	10994.7	2.3538	1.6000e-004	2.0000e-005	2.3639
Total		**2.3538**	**1.6000e-004**	**2.0000e-005**	**2.3639**

6.0 Area Detail

6.1 Mitigation Measures Area

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	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	3.7100e-003	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.1000e-004
Unmitigated	3.7100e-003	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.1000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.3100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.1000e-004
Total	**3.7100e-003**	**0.0000**	**6.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.1000e-004**	**1.1000e-004**	**0.0000**	**0.0000**	**1.1000e-004**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.3100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.1000e-004
Total	**3.7100e-003**	**0.0000**	**6.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.1000e-004**	**1.1000e-004**	**0.0000**	**0.0000**	**1.1000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.1214	2.0500e-003	5.0000e-005	0.1873
Unmitigated	0.1214	2.0500e-003	5.0000e-005	0.1873

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market with Gas Pumps	0.0627431 / 0.0384554	0.1214	2.0500e-003	5.0000e-005	0.1873
Total		**0.1214**	**2.0500e-003**	**5.0000e-005**	**0.1873**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market with Gas Pumps	0.0627431 / 0.0384554	0.1214	2.0500e-003	5.0000e-005	0.1873
Total		**0.1214**	**2.0500e-003**	**5.0000e-005**	**0.1873**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

ATTACHMENT 3

HEALTH RISK ASSESSMENT

Placer County Air Pollution Control District

Land Development Consultants, LLC / Roseville, CA

Prepared By:

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Project 210506.0103

Trinity Consultants

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1. EXECUTIVE SUMMARY

Land Development Consultants, LLC is developing a gas pad (The Facility) in the northeast corner Baseline Road and Westbrook Boulevard in the Sierra Vista development in Roseville, California. The Facility is under the jurisdiction of the Placer County Air Pollution Control District (PCAPCD). In September, 2021, Land Development Consultants submitted a permit application to PCAPCD for the construction and operation of the Facility. In response to the application, PCAPCD has requested that Land Development Consultants prepare and submit a Health Risk Assessment (HRA) for the Project. Land Development Consultants is submitting this HRA for the Facility to demonstrate that health risk impacts are below 10 in 1 million cancer risk and a hazard index of 1. This report constitutes the results of the HRA performed in accordance with the Placer County Air Pollution Control District's guidelines for preparing a health risk assessment and the Office of Environmental Health Hazard Assessment (OEHHA) developed Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments (OEHHA HRA Guidance Manual).[1] The analysis uses the Hotspots Analysis and Reporting Program (HARP) Version 2.0 with inputs from US-EPA's AERMOD modeling program to perform the exposure/risk assessment.

The objectives of this HRA are to: (1) estimate off-site air concentrations of the substances identified in AB2588 and emitted from the facility, (2) evaluate potential exposures to the surrounding community, (3) characterize the potential health risks to individuals and the exposed population associated with those levels of exposure, and (4) determine if additional actions are required. This report presents the results of the HRA analysis. In addition to this HRA report, supplemental modeling and HRA files have been provided via an electronic data transfer system.

The results obtained from HARP provide the necessary information to generate the zones of impact (ZOIs) and identify potentially exposed populations. In addition, potential health effects were evaluated for the maximum exposed individual resident (MEIR) and the maximum exposed individual worker (MEIW) for both non-carcinogenic and carcinogenic health impacts. The results of the HRA are summarized in Table 1-1 below.

[1] Office of Environmental Health Hazard Assessment (OEHHA), *Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments,* February 2015, California Environmental Protection Agency.

Table 1-1. HRA Results Summary

Receptor Type	Cancer Risk		Chronic		Acute	
	Receptor ID	Risk (in a million)	Receptor ID	Hazard Index	Receptor ID	Hazard Index
Point of Maximum Impact	319	38.69	319	0.17	398	0.81
Maximum Exposed Individual Resident	1373	0.39	1373	0.002	1373	0.02
Maximum Exposed Individual Worker	264	0.85	264	0.04	264	0.56

1.1 Applicable Regulations

In accordance with Trinity's correspondence with Emmanuel Orozco of Placer County, dated March 24, 2016, and "AB2588 District Prioritization Scores and Risk Threshold Levels"[2], public notice and risk reduction are triggered for a cancer risk greater than or equal to 10 in 1 million and non-cancer hazard index greater than or equal to 1. The thresholds for cancer and chronic health impacts apply only to receptors where it is expected that an individual would spend significant time over a multi-year time period. While the point of maximum impacts (PMI) exceeds the 10 in 1 million threshold for cancer risk, the location of the PMI is within the gas station boundary and therefore the thresholds for cancer and chronic impacts do not apply to this location. As such, the results in Table 1-1 show that the Facility does not trigger the public notice or risk reduction thresholds for cancer risk or any of the non-cancer hazard indices.

HARP – Air Dispersion and Risk Tool (Version 2.0 dated 21081) was utilized for the preparation of this HRA.

[2] https://ww2.arb.ca.gov/ab-2588-district-prioritization-scores-and-risk-threshold-levels, accessed on 12/6/2021

2. FACILITY INFORMATION

Table 2-1. Facility Information

Facility Name	Roseville Circle K
Facility Address	5990 Baseline Road Roseville, CA 95747
UTM Coordinates	640,542.55 m E, 4,290,520.76 m N
Datum	UTM, NAD83, Zone Grid 10S

2.1 Facility Operations

The Facility is a gas station that is being installed as part of the Sierra Vista development project in Roseville, California. The Facility specifically contains fuel pumps and underground fuel tanks with a Phase I & II vapor recovery system. The annual throughput of the Facility will have a maximum throughput of 5 million gallons per year.

2.2 Emissions

The emissions for this HRA are based on the 2017 Risk Assessment Procedures provided by South Coast Air Quality Management District[3], the 1997 and 2021 Gasoline Service Station Industrywide Risk Assessment Technical Guidance provided by CARB and CAPCOA[4,5], and the maximum annual gasoline throughput. A summary of facility-wide emissions is provided in Table 2-2. Detailed emissions calculations are included in Appendix C.

Table 2-2. Facility Emissions Summary

Pollutant ID	Pollutant Name	Throughput	
		Lbs/yr	Lbs/hr
71432	Benzene	19.76	4.96E-03
100414	Ethylbenzene	18.14	3.97E-03
91203	Naphthalene	2.10	4.38E-04

[3] South Coast Air Quality Managememtn District, Risk Assessment, procedures for Rule 1401, 1401.1 and 212 version 8.1, September 1, 2017

[4] Toxics Committee of the California Air Pollution Control Officers Association, Gasoline Service Station Industrywide Risk Assessment Guidelines, November 1997

[5] California Air Resources Board and California Air Pollution Control Officers Association Gasoline Service Station Industrywide Risk Assessment Technical Guidance, Draft - September 2021

3. SOURCE AND EMISSION INVENTORY INFORMATION

3.1 Release Information

Emission Source locations and elevations are provided in Table 3-1. Tables 3-2 and 3-3 identify the release information for the point sources and volume sources at the Facility, respectively.

Table 3-1. Emission Source Modeling Locations

Model ID	X (m)	Y (m)	Elevation (m)	Emission Rate (g/s)
LOADING	640,541	4,290,525	30.78	1
BREATHING	640,541	4,290,525	30.78	1
REFUEL	640,541.3	4,290,525	30.78	1
SPILL	640,541.3	4,290,525	30.78	1

Table 3-2. Emission Source Modeling Parameters – Point Sources

Model ID	Stack Height (ft)	Temp (˚F)	Stack Velocity (m/s)	Stack Diameter (in.)
LOADING	12	60	0	2
BREATHING	12	60	0	2

Table 3-3. Emission Source Modeling Parameters – Volume Sources

Model ID	Release Height (m)	Init. Lat. Dimension (m)	Init. Vert. Dimension (m)
REFUEL	1	3.02	1.86
SPILL	0	3.02	1.86

4. EMISSION QUANTIFICATION

The emission factors and weight percent values from South Coast Air Quality Management District Risk Assessment Procedures were used to determine emission rates and potential health impacts. Emissions from the Project were estimated using a maximum yearly throughput of 5 million gallons per year, a maximum Phase I Loading hourly throughput of 8,800 gal/hr, a maximum Phase II (dispensing) throughput of 1,040 gal/hr, and the emission factors listed in Table 4-1. The annual and maximum hourly emissions from the project are summarized in Tables 4-2 below. Detailed emissions calculations are included in Appendix C.

Table 4-1. SCAQMD Risk Assessment Procedure Emission Factors

Pollutant	Source	Pollutant Emission Factor (lb Pollutant/1,000 gal)
Benzene	BREATHING	6.83E-04
	LOADING	1.09E-04
	SPILL	1.70E-03
	REFUEL	1.46E-03
Ethylbenzene	BREATHING	1.61E-04
	LOADING	2.57E-05
	SPILL	3.10E-03
	REFUEL	3.42E-04
Naphthalene	BREATHING	6.00E-07
	LOADING	9.60E-08
	SPILL	4.18E-04
	REFUEL	1.28E-06

Table 4-2. Annual and Hourly Project Emissions

Pollutant	Source	Throughput (gal)	Emission Rate (lb/yr)	Emission Rate (lb/hr)
Benzene	BREATHING	5,000,000	3.42E+00	7.10E-04
	LOADING	5,000,000	5.45E-01	9.59E-04
	SPILL	5,000,000	8.50E+00	1.77E-03
	REFUEL	5,000,000	7.30E+00	1.52E-03
Ethylbenzene	BREATHING	5,000,000	8.05E-01	1.67E-04
	LOADING	5,000,000	1.29E-01	2.26E-04
	SPILL	5,000,000	1.55E+01	3.22E-03
	REFUEL	5,000,000	1.71E+00	3.56E-04
Naphthalene	BREATHING	5,000,000	3.00E-03	6.24E-07
	LOADING	5,000,000	4.80E-04	8.45E-07
	SPILL	5,000,000	2.09E+00	4.35E-04
	REFUEL	5,000,000	6.40E-03	1.33E-06

5. AIR DISPERSION INFORMATION

5.1 Spatial Averaging

Spatial averaging was not used to determine risk values for receptors. Instead, the most conservative, representative value for each receptor was chosen. This methodology results in a higher risk values than spatial averaging and is therefore a more conservative approach.

5.2 Meteorological and Elevation Data

Five years of pre-processed meteorological data supplied by Sacramento Metropolitan Air Quality Management District for 2014 through 2018 were used for this model.[6] The surface station data and upper air data are from Sacramento International Airport (WBAN 23232). Terrain data were obtained from the Multi-Resolution Land Characteristics Consortium (MRLC) in the form of National Elevation Dataset (NED) files at 1/3 arc second resolution.[7]

5.3 Model Options

Air dispersion modeling is performed with US-EPA AERMOD through the EPA approved BREEZE user interface. All modeling exercises were conducted using the previous version of EPA AERMOD (v21112). Modeling was performed utilizing all regulatory defaults as defined by EPA. Selected outputs were for the 1st high 1-hr and 1st high period values.

The following modeling input files are included electronically in Appendix D.

- Surface Met Data File (*.sfc)
- Profile Met Data File (*.pfl)
- National Elevation Database File (*ned)
- AERMAP Source File (*aermap.src)
- AERMAP Receptor File (*aermap.rec)
- BPIP Input File (*bpip.inp)
- AERMOD Input File (*aermod.inp)

The following modeling output files are included electronically in Appendix D.

- AERMAP Output File (*aermap.out)
- BPIP Summary File (*bpip.sum)
- BPIP Output File (*bpip.out)
- AERMOD Output File (*aermod.out)
- AERMOD Error File (*aermod.err)
- Plotfiles (*.plt and *txt)

5.4 Receptor Placement

The following receptors were used for this HRA.

[6] https://www.airquality.org/businesses/ceqa-land-use-planning/ceqa-guidance-tools

[7] https://www.mrlc.gov/viewerjs/

- **Nearby Residences and Workers (Discrete Grid) -** The modeling discrete receptor grid uses a variable density receptor grid with 10 m spacing out to 150 m from the center of the facility, and 25m spacing out to 500m from the center of the facility. An additional discrete receptor grid with 25m spacing was placed over a nearby business facility, approximately 2,000 meters west of the Facility. Given the nature of the facility emissions and the nearby workplaces and residences, a high density receptor approach was used to ensure the worst case Residential and Worker impacts were captured in the modeling exercise. Residential and workplace receptors were identified using a an overlay of modeled HRA impacts with satellite imagery. The MEI receptors were conservatively matched to grid receptors with the maximum impacts on parcels identified as residences and workplaces.

- **Sensitive Receptors -** No sensitive receptors were identified within the Zone of Influence (ZOI) of the facility.

- **Census Block Receptors -** AB2588 also requires an estimate of the number of impacted individuals in residences and off-site workplaces within the ZOI. Census data is used to determine affected populations within geographic areas defined by census tracts. A census tract centroid (geographical center) is identified as a receptor location, which represents exposure to the population within that census tract. For this HRA, affected populations were estimated based on census data obtained from the built-in HARP 2.0 2010 Census Database. Figure B-2 shows the impacted census tracts for this HRA within the ZOI. Census tract information was obtained directly from HARP 2.0 by inputting the facility center point and requesting receptors out to a radius of 1,000 meters. All census block receptors with a population of 0 were excluded from the Cancer Burden analysis. Only one census block receptor was identified within the ZOI and is listed in Table 5-1 below.

- **Onsite Receptors –** No onsite receptors were identified.

Table 5-1. Census Block Receptor

Tract No.	Block No.	X (m)	Y (m)	Elevation (m)	Population
21322	2103	640,781.14	4,291,266.61	34.65	2

5.5 Receptors Evaluated for Multipathway Analysis

A summary of receptor pathways chosen for the analysis is shown in Table 5-2 below.

Table 5-2. Receptor Pathways Evaluated

Pathway	Residential Receptors	Worker Receptors
Inhalation	Y	Y
Soil	Y	Y
Dermal	Y	Y
Mother's Milk	Y	
Homegrown Crop		

Pathway	Residential Receptors	Worker Receptors
Chicken		
Egg		

5.6 Multipathway and Exposure Parameters

Default HARP2 values were used for the pathways identified in Section 5.5 of this report.

5.7 Health Values and HARP Version Used in Risk Analysis

For this HRA, Trinity used the latest version of HARP – Air Dispersion and Risk Tool (Version 2.0 Dated 21081).

6. SUMMARY OF RESULTS

Summary results are presented in Appendix A, Tables A-1 through A-4. The content contained within each table is listed below:

- Table A-1. Summary of Maximum Cancer Health Risk Impacts
- Table A-2. Summary of Maximum Chronic Non-Cancer Health Risk Impacts
- Table A-3. Summary of Maximum Acute Non-Cancer Health Risk Impacts
- Table A-4. Census Block Receptors and Impacts

6.1 Risk Driver Tables

Tables A-5 through A-7 show the driving devices and pollutants for each MEIR, MEIW, and PMI for cancer, non-cancer chronic, and non-cancer acute impacts.

7. MAPS AND AERIAL PHOTOS REQURIRED BY DISTRICT

Figures B-1 through B-6 included in Appendix B include the required imagery and isopleths and are summarized below:

- Figure B-1. Facility Location
- Figure B-2. Census Receptor
- Figure B-3. 1 in 1 million resident cancer risk isopleth
- Figure B-4. 1 in 1 million worker cancer risk isopleth
- Figure B-5. Acute non-cancer HI of 0.1 risk isopleth
- Figure B-6. Chronic non-cancer HI of 0.1 risk isopleth

8. REQUIRED FILES

The following files are provided electronically.

Written HRA report (*.pdf)
HARP 2 Facility and Emissions Database (*.mdb)
Project Summary Report (ProjectSummaryReport.txt)
Ground Level Concentration Files (*.txt)
Health Database (*.mdb)
Air Dispersion Files

- Surface Met Data File (*.sfc)
- Profile Met Data File (*.pfl)
- National Elevation Database File (*ned)
- AERMAP Source File (*aermap.src)
- AERMAP Receptor File (*aermap.rec)
- BPIP Input File (*bpip.inp)
- AERMOD Input File (*aermod.inp)
- AERMAP Output File (*aermap.out)
- BPIP Summary File (*bpip.sum)
- BPIP Output File (*bpip.out)
- AERMOD Output File (*aermod.out)
- AERMOD Error File (*aermod.err)
- Plotfiles (*.plt and *txt)

Risk Analysis Files

- Input file with risk scenario and site specific information (*HRAInput.hra)
- Supplemental input file with health values (*PolDB.csv)
- Supplemental input file with GLCs (*GLCList.csv)
- Output log file (*output.txt)
- Output file with cancer risk details (*CancerRisk.csv)
- Output file with chronic non-cancer risk details (*NCCHronicRisk.csv)
- Output file with acute non-cancer risk details (*NCAcuteRisk.csv)
- Pathway Receptor Information (*PathwayRec.csv)

APPENDIX A. TABLES

Table A-1. Summary of Maximum Cancer Health Risk Impacts

Receptor Type	Cancer Risk (in a million)	Significance Threshold	Receptor Number	UTME (m)	UTMN (m)
PMI	38.69	N/A	319	640531	4290544.8
MEIR	0.39	≥10	1373	640641	4290724.8
MEIW	0.85	≥10	264	640511	4290534.8

Table A-2. Summary of Maximum Chronic Non-Cancer Health Risk Impacts

Receptor Type	Chronic Non-Cancer HI	Significance Threshold	Receptor Number	UTME (m)	UTMN (m)
PMI	0.17	N/A	319	640531	4290544.8
MEIR	0.002	≥1	1373	640641	4290724.8
MEIW	0.04	≥1	264	640511	4290534.8

Table A-3. Summary of Maximum Acute Non-Cancer Health Risk Impacts

Receptor Type	Acute Non-Cancer HI	Significance Threshold	Receptor Number	UTME (m)	UTMN (m)
PMI	0.81	N/A	398	640561	4290534.8
MEIR	0.02	≥1	1373	640641	4290724.8
MEIW	0.56	≥1	264	640511	4290534.8

Table A-4. Census Block Receptors and Impacts

Track	Block	X (m)	Y (m)	Population	Excess Cancer Risk	Burden
21322	2103	640781.14	4291266.6	2	5.3229E-08	1.06458E-07
					Total:	1.06458E-07

Table A-5. PMI Risk Drivers

Receptor Type	Receptor Number	UTME (m)	UTMN (m)	Driving Pollutant	Driving Source
PMI - Cancer	319	640531	4290544.8	Benzene	SPILL
PMI - NC Chronic	319	640531	4290544.8	Ethyl Benzene	SPILL
PMI - NC Acute	398	640561	4290534.8	Benzene	SPILL

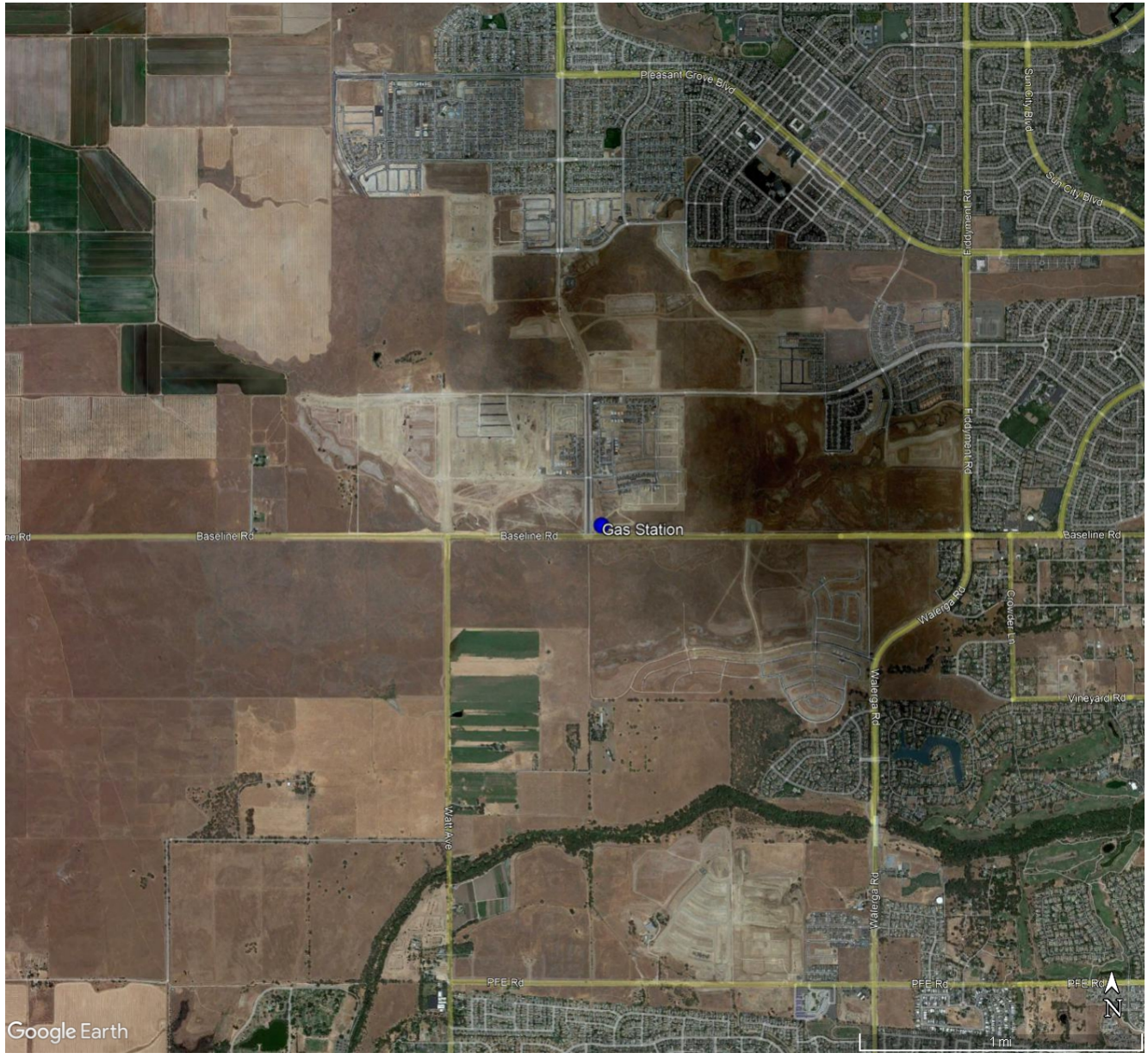
Table A-6. MEIR Risk Drivers

Receptor Type	Receptor Number	UTME (m)	UTMN (m)	Driving Pollutant	Driving Source
MEIR - Cancer	1373	640641	4290724.8	Benzene	SPILL
MEIR - NC Chronic	1373	640641	4290724.8	Benzene	SPILL
MEIR - NC Acute	1373	640641	4290724.8	Benzene	SPILL

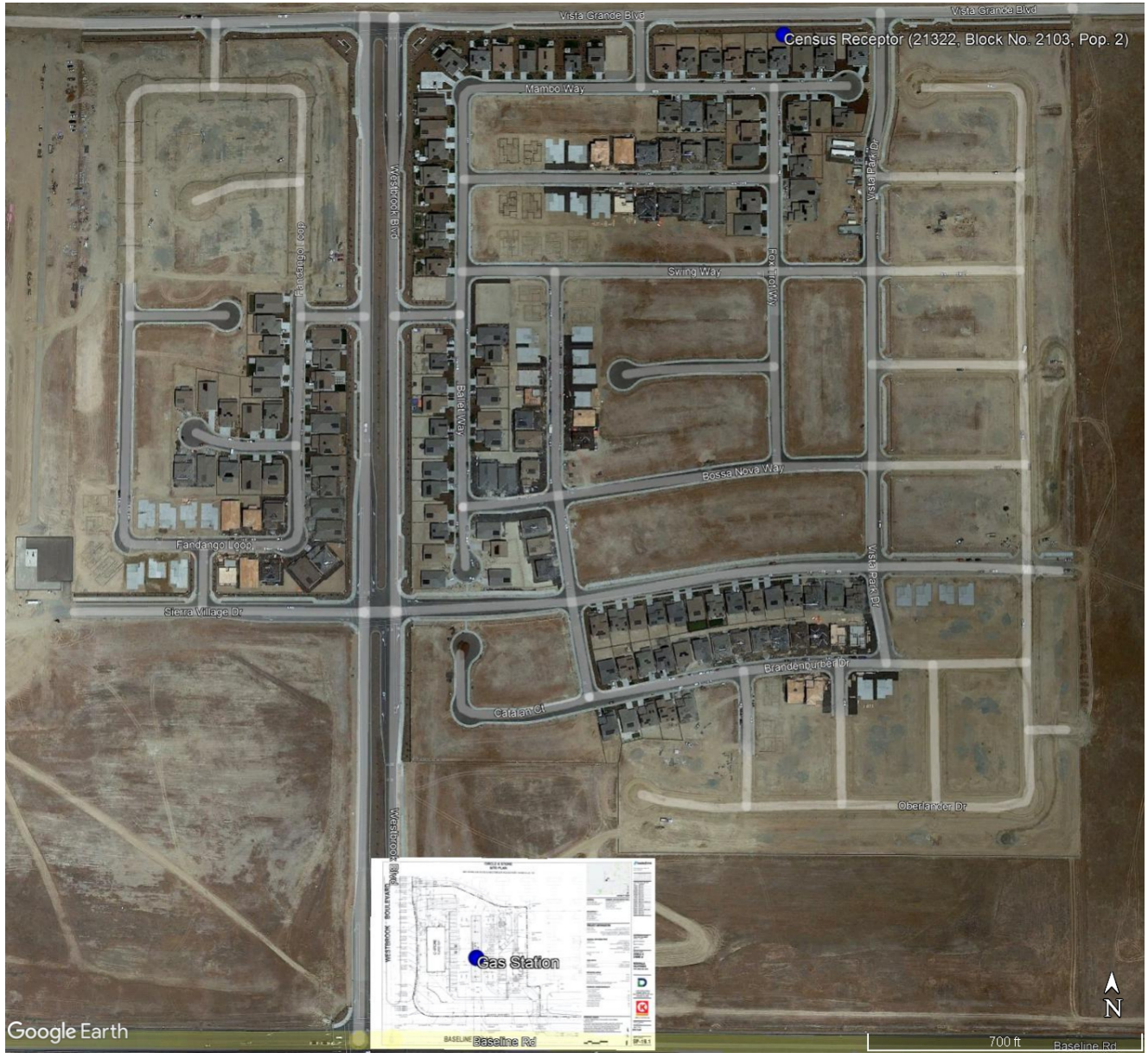
Table A-7. MEIW Risk Drivers

Receptor Type	Receptor Number	UTME (m)	UTMN (m)	Driving Pollutant	Driving Source
MEIW - Cancer	264	640511	4290534.8	Benzene	BREATHING
MEIW - NC Chronic	264	640511	4290534.8	Benzene	SPILL
MEIW - NC Acute	264	640511	4290534.8	Benzene	REFUEL

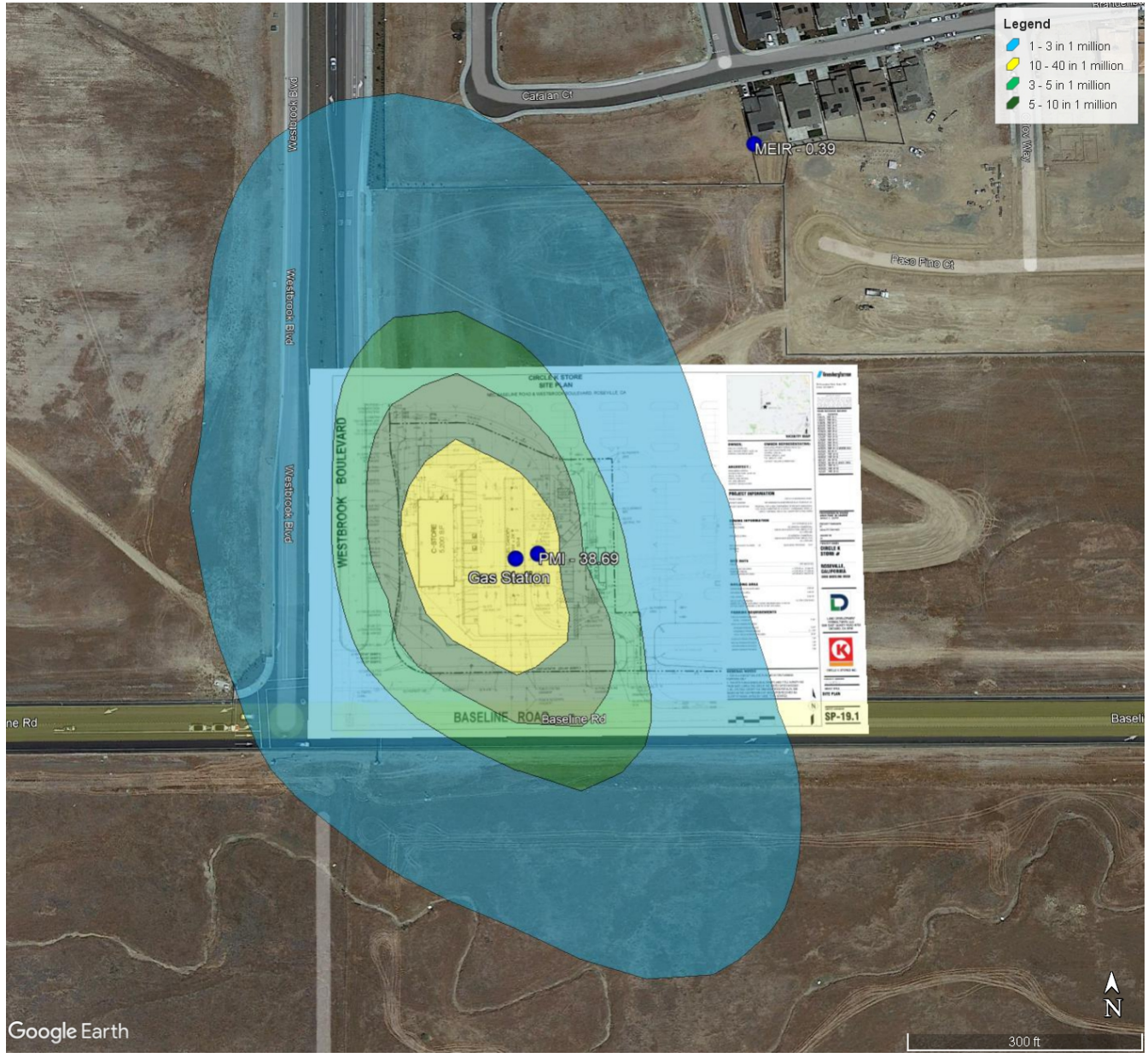
APPENDIX B. FIGURES



Trinity Consultants	Land Development Consultants 5590 Baseline Road Roseville, CA 95747	Description Figure B-1. Facility Location	
		Scale N/A	Date December 2021
			Figure 1

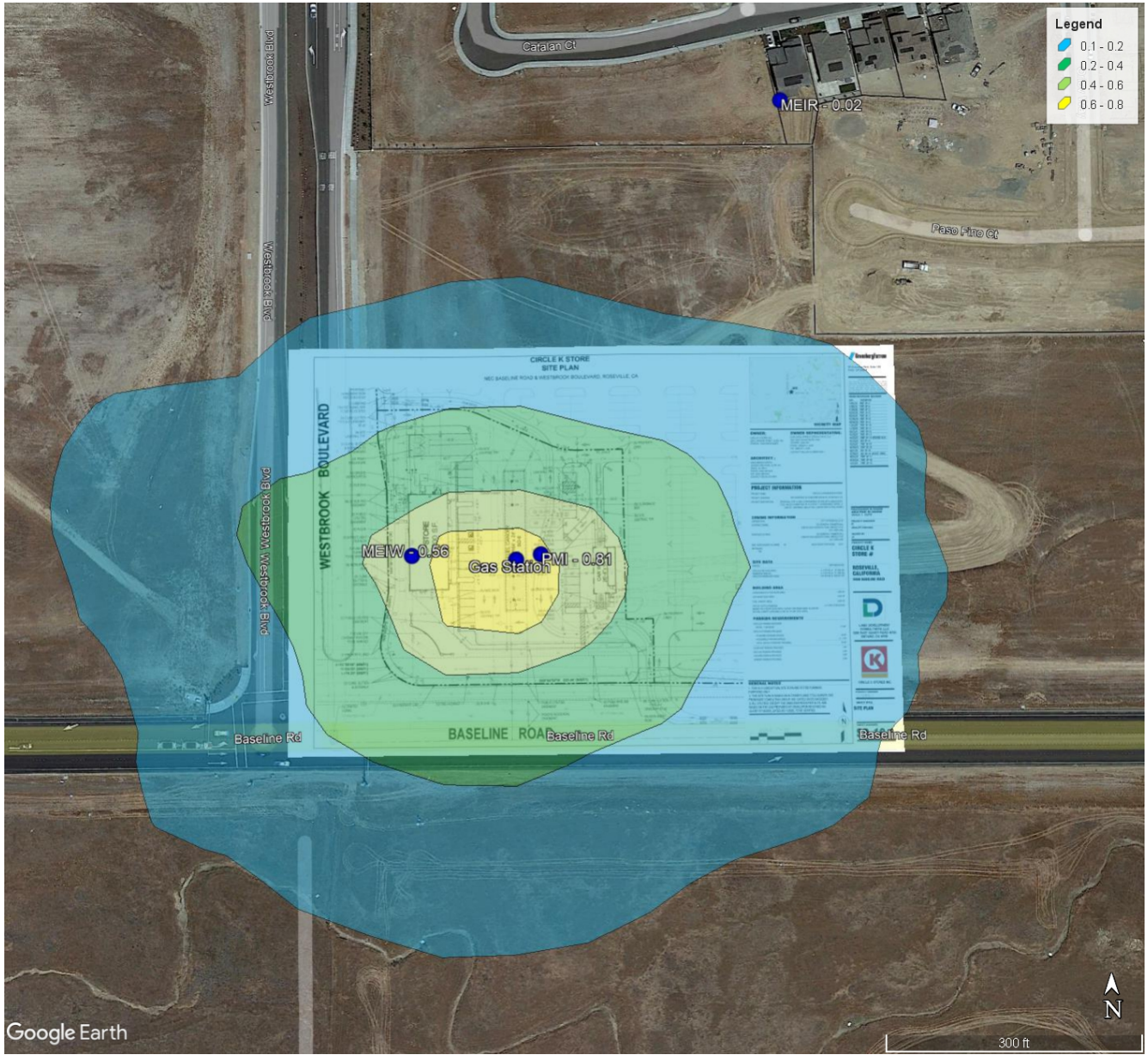


Trinity Consultants	Land Development Consultants 5590 Baseline Road Roseville, CA 95747	Description: Figure B-2. Census Receptor	
		Scale: N/A	Date: December 2021
			Figure: 1

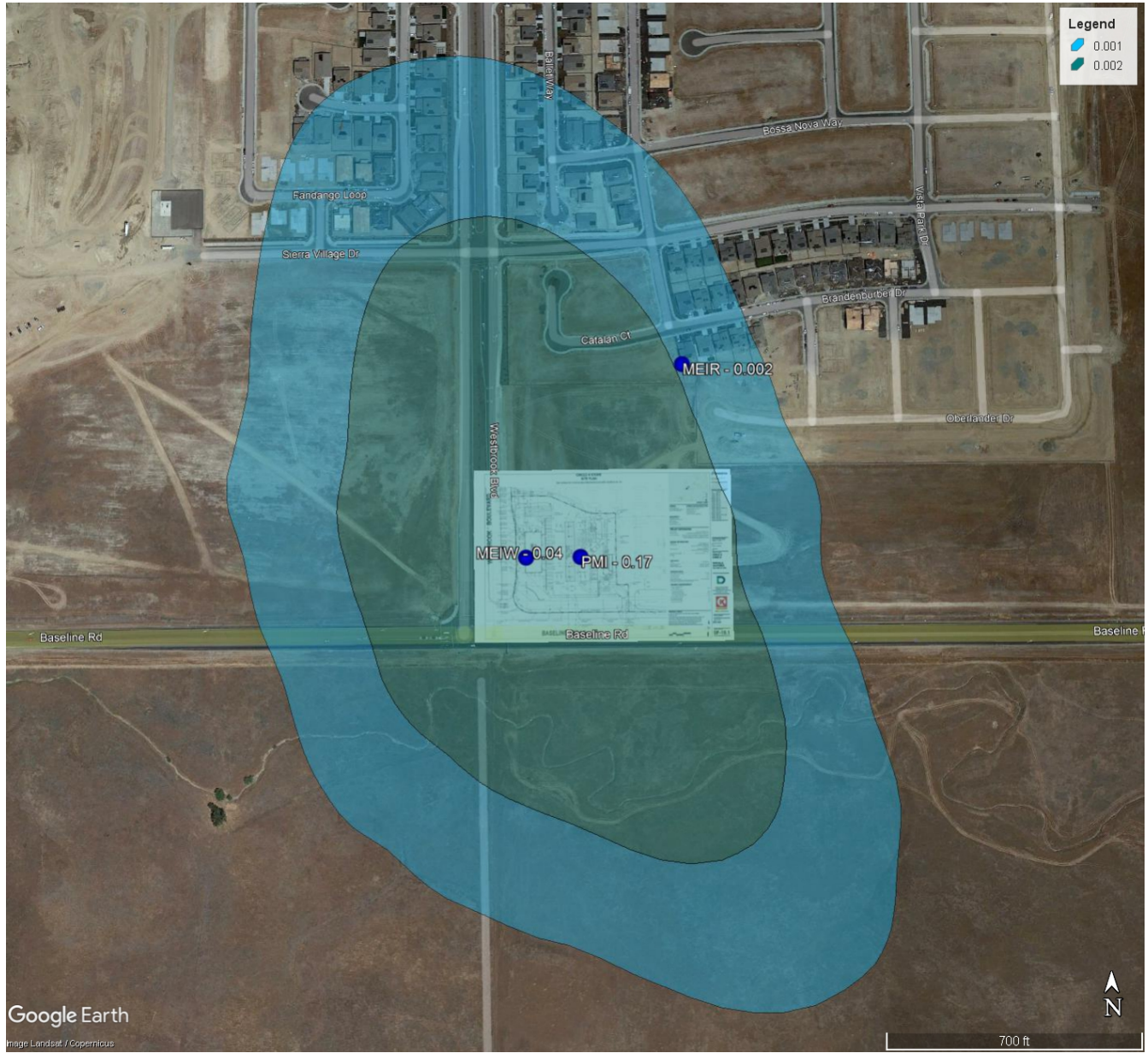


Trinity Consultants	Land Development Consultants 5590 Baseline Road Roseville, CA 95747	Description Figure B-3. 1 in 1 Million Resident Cancer Risk Isopleth	
		Scale N/A	Date December 2021
			Figure 1

Trinity Consultants	Land Development Consultants 5590 Baseline Road Roseville, CA 95747	Description Figure B-4. 1 in 1 Million Worker Cancer Risk Isopleth	
		Scale N/A	Date December 2021
			Figure 1



Trinity Consultants	Land Development Consultants 5590 Baseline Road Roseville, CA 95747	Description Figure B-5. Acute Non-Cancer HI of 0.1 Risk Isopleth	
		Scale N/A	Date December 2021
			Figure 1



Trinity Consultants	Land Development Consultants 5590 Baseline Road Roseville, CA 95747	Description Figure B-6. Chronic Non-Cancer HI of 0.1 Risk Isopleth	
		Scale N/A	Date December 2021
			Figure 1

APPENDIX C. DETAILED EMISSIONS CALCULATIONS

Table C-1: Gasoline Station Emission Summary [1]

Pollutant	Source	% Weight pollutant in Gasoline Vapor	Pollutant Emission Factor (lb Pollutant/1,000 gal)	Throughput (gal/yr)	Emission Rate (lb/yr)	Emission Rate[2] (lb/hr)
Benzene	BREATHING	0.455	6.83E-04	5,000,000	3.42E+00	7.10E-04
	LOADING	0.455	1.09E-04	5,000,000	5.45E-01	9.59E-04
	SPILL	0.707	1.70E-03	5,000,000	8.50E+00	1.77E-03
	REFUEL	0.455	1.46E-03	5,000,000	7.30E+00	1.52E-03
Ethylbenzene	BREATHING	0.107	1.61E-04	5,000,000	8.05E-01	1.67E-04
	LOADING	0.107	2.57E-05	5,000,000	1.29E-01	2.26E-04
	SPILL	1.29	3.10E-03	5,000,000	1.55E+01	3.22E-03
	REFUEL	0.107	3.42E-04	5,000,000	1.71E+00	3.56E-04
Naphthalene	BREATHING	0.0004	6.00E-07	5,000,000	3.00E-03	6.24E-07
	LOADING	0.0004	9.60E-08	5,000,000	4.80E-04	8.45E-07
	SPILL	0.174	4.18E-04	5,000,000	2.09E+00	4.35E-04
	REFUEL	0.0004	1.28E-06	5,000,000	6.40E-03	1.33E-06

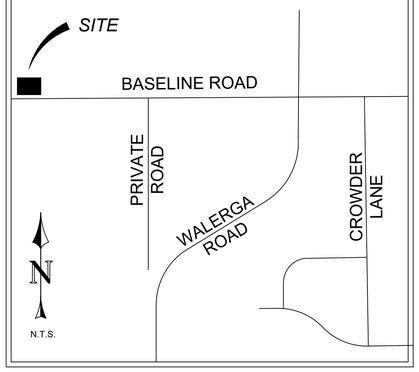
1. Emission factors and weight percent values from South Coast Air Quality Management District Risk Assessment Procedures, Version 8.1, Table X-1

Available here: http://www.aqmd.gov/docs/default-source/permitting/rule-1401-risk-assessment/riskassessproc-v8-1.pdf?sfvrsn=12

2. Phase I Loading maximum hourly throughput is assumed to be 8,800 gal/hour and Phase II (dispensing) throughput is conservatively assumed to be 1,040 gal/hour per California Air Resources Board and California Air Pollution Control Officers Association Gasoline Service Station Industrywide Risk Assessment Technical Guidance, Draft - September 2021, Table 10. Available here: https://ww2.arb.ca.gov/sites/default/files/2021-10/Draft_2021_Gas_Station_IWG_Technical%20Guidance_PublicComment.pdf

APPENDIX D. MODELING FILES – ELECTRONIC COPY

VICINITY MAP



PROPERTY DESCRIPTION

BEING ALL OF LOT 4, AS SHOWN ON THE FINAL MAP OF SIERRA VISTA KV SIERRA VISTA, LLC, LARGE LOT SUBDIVISION, SUBDIVISION NO. PL 15- 1092, RECORDED OCTOBER 22, 2019, IN BOOK EE OF MAPS, PAGE 71, PLACER COUNTY RECORDS.

NOTES

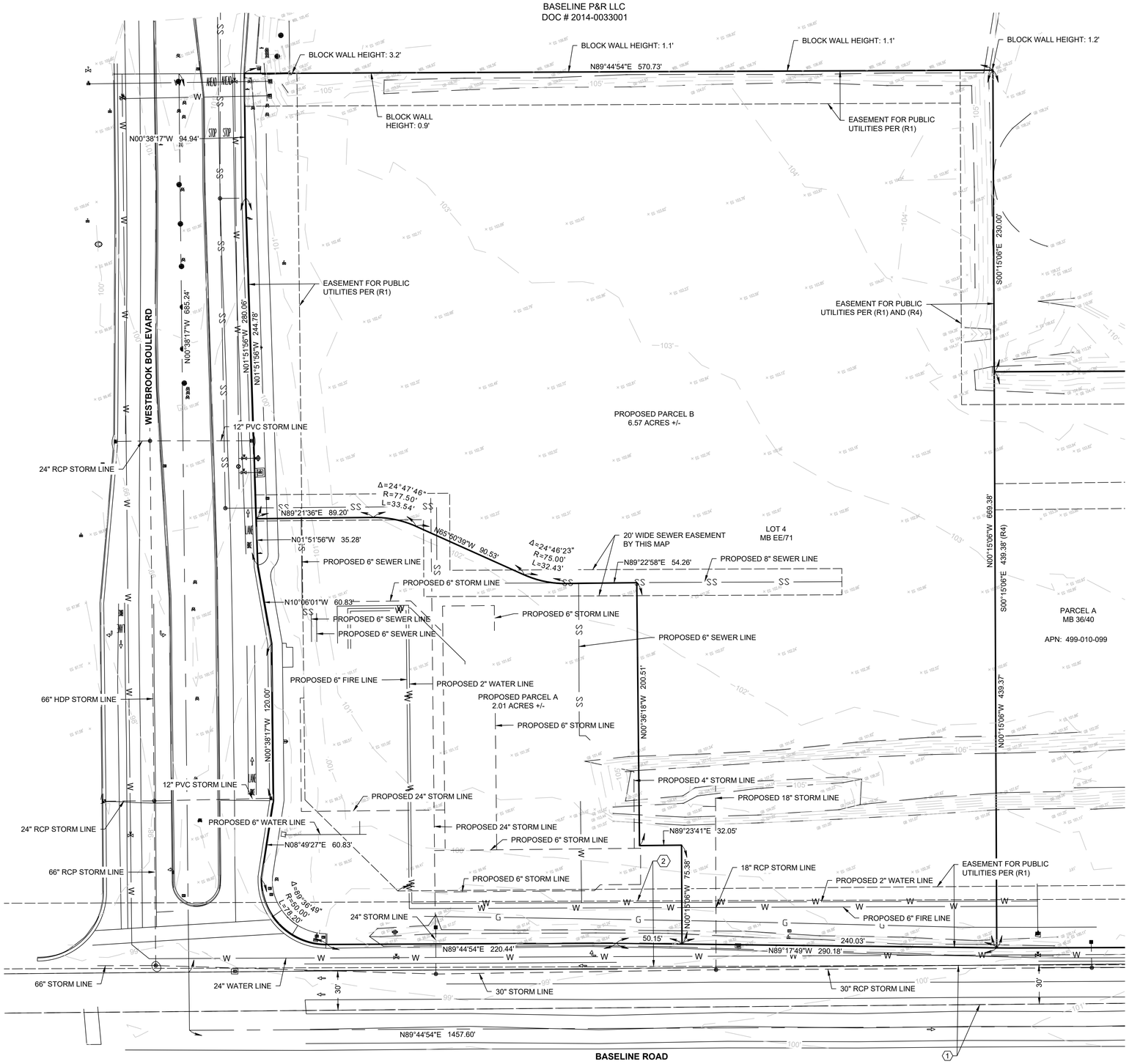
1. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE.
2. THE PROPOSED UTILITIES AND INFRASTRUCTURE SHOWN ARE CONCEPTUAL ONLY AND ARE SUBJECT TO REVISION.
3. UTILITIES MAY BE PHASED DEPENDING UPON THE DEVELOPMENT SEQUENCES OF THE PROJECT, SUBJECT TO THE REVIEW OF THE CITY OF ROSEVILLE.
4. THE EXISTING GROUND CONTOURS SHOWN ON THIS EXHIBIT REPRESENT THE EXISTING GRADE CONDITIONS AND ARE FOR PLANNING LEVEL STUDIES ONLY.

TENTATIVE PARCEL MAP NOTES

1. LOT DIMENSIONS AND ACREAGES ON THIS TENTATIVE PARCEL MAP ARE APPROXIMATE AND ARE SUBJECT TO CHANGE.
2. LOT LINES AND LOT AREAS MAY BE ADJUSTED AT THE TIME OF FINAL MAP(S) PREPARATION PROVIDED NO ADDITIONAL LOTS ARE CREATED, SUBJECT TO APPROVAL BY THE CITY OF ROSEVILLE. FLEXIBILITY IN LARGE LOT PARCEL CONFIGURATION AND PHASING AS SHOWN HEREON IS PERMITTED WITH THE FINAL MAP(S) PROVIDED THAT THE CONFIGURATION IS IN SUBSTANTIAL COMPLIANCE WITH THIS TENTATIVE PARCEL MAP, SUBJECT TO APPROVAL BY THE CITY OF ROSEVILLE.
3. PROJECT IMPROVEMENTS ARE DEFERRED TO INDIVIDUAL FINAL MAPS OR PROJECT DEVELOPMENT PLANS.
4. THE FINAL MAPPING AND SUBSEQUENT DEVELOPMENT OF LOTS MAY BE PHASED IN ANY SEQUENCE PROVIDED EACH PHASE PROVIDES FOR ACCESS AND FOR BACKBONE INFRASTRUCTURE, SUBJECT TO THE APPROVAL OF THE CITY OF ROSEVILLE.
5. PURSUANT TO THE GOVERNMENT CODE SECTION 66456.1, MULTIPLE FINAL MAPS MAY BE FILED BASED UPON THIS TENTATIVE PARCEL MAP. THE FILING OF A FINAL MAP ON A PORTION OF THIS TENTATIVE PARCEL MAP SHALL NOT INVALIDATE ANY PART OF THIS TENTATIVE PARCEL MAP.
6. RECIPROCAL ACCESS, PARKING, DRAINAGE, AND UTILITY INFRASTRUCTURE AGREEMENTS ARE TO BE RECORDED AS NEEDED WITH THE FILING OF EACH FINAL PARCEL MAP OR DEVELOPMENT PLAN RELATING TO THIS TENTATIVE PARCEL MAP.
7. ADDITIONAL EASEMENTS TO ACCOMMODATE NEW PUBLIC UTILITY IMPROVEMENTS, ACCESS REQUIRED FOR LOT DEVELOPMENT, OR OTHER SIMILAR MAPPING REQUIREMENTS NEEDED TO ACCOMPLISH THE FINAL DESIGN MAY BE ADDED WITH EACH FINAL PARCEL MAP OR DEVELOPMENT PLAN BASED ON THIS TENTATIVE PARCEL MAP.

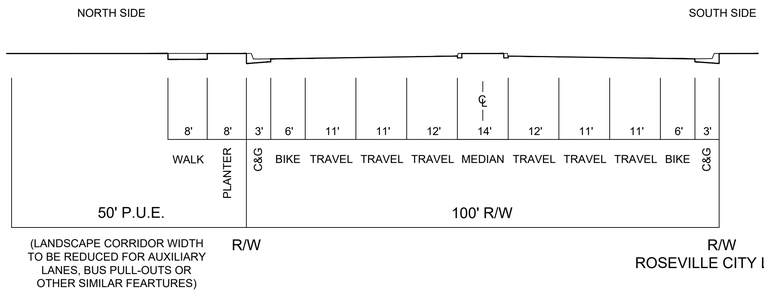
TENTATIVE PARCEL MAP INFORMATION

APPLICANT:	LAND DEVELOPMENT CONSULTANTS, LLC 3281 EAST GUASTI ROAD, SUITE 700 ONTARIO, CA 91761
ENGINEER:	BASE CONSULTING GROUP, INC. 1713 11TH STREET, SUITE #1 REEDLEY, CA 93654
ASSESSOR'S PARCEL NUMBER:	499-010-081
SITE ADDRESS:	VACANT LAND, BASELINE ROAD, ROSEVILLE, CA
TOTAL ACREAGE:	8.57 ACRES +/-
LAND USE:	
EXISTING / PROPOSED DESIGNATION	COMMUNITY COMMERCIAL (CC)
ZONING:	
EXISTING / PROPOSED ZONING DISTRICT	GENERAL COMMERCIAL (GC)
NUMBER OF LOTS / PARCELS:	2
SERVICE PROVIDERS:	
PARKS AND RECREATION:	CITY OF ROSEVILLE
POLICE AND FIRE PROTECTION:	CITY OF ROSEVILLE
SANITARY SEWER:	CITY OF ROSEVILLE
DOMESTIC WATER:	CITY OF ROSEVILLE
ELECTRICITY:	CITY OF ROSEVILLE
TELEPHONE:	CONSOLIDATED COMMUNICATIONS
GAS:	PACICIF GAS & ELECTRIC
CABLE:	COMCAST / CONSOLIDATED COMMUNICATIONS



EASEMENT TABLE

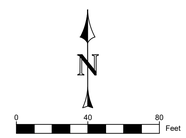
1. COUNTY OF PLACER, HOLDER OF AN EASEMENT FOR ROAD AND INCIDENTAL PURPOSES, RECORDED DECEMBER 22, 1890, (BOOK) 55 (PAGE) 641 OF DEEDS.
2. PACIFIC GAS AND ELECTRIC COMPANY, HOLDER OF AN EASEMENT FOR PIPELINE AND INCIDENTAL PURPOSES, AS GRANTED PURSUANT TO FINAL ORDER OF CONDEMNATION IN DEED RECORDED NOVEMBER 12, 2019, (INSTRUMENT) 2019-0090221, OFFICIAL RECORDS.



BASELINE ROAD

6-LANE ARTERIAL

NOT TO SCALE



SCALE: 1" = 40'

COVER SHEET

TENTATIVE PARCEL MAP

PARCEL _____

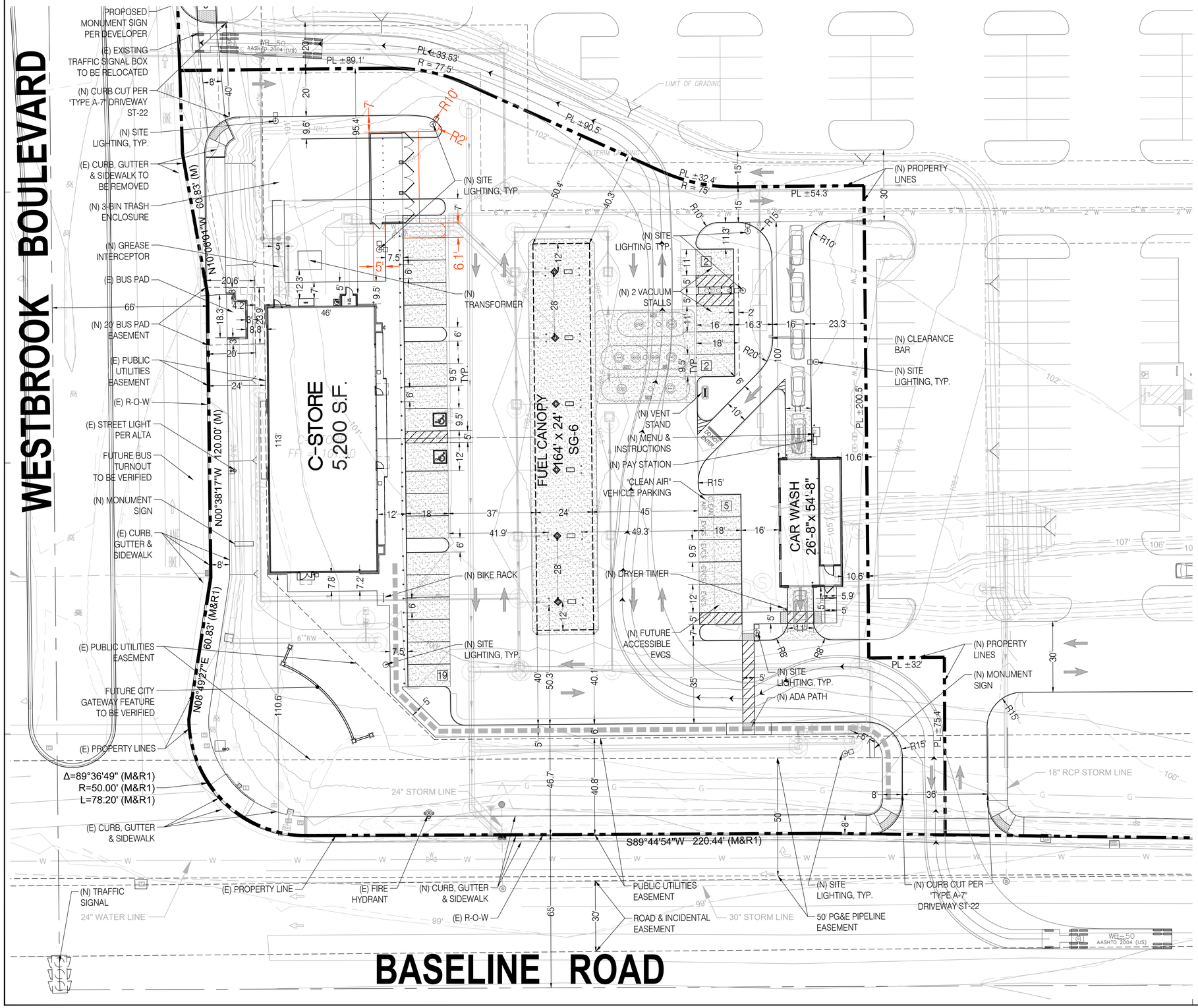
ROSEVILLE, CA

OCTOBER, 2021

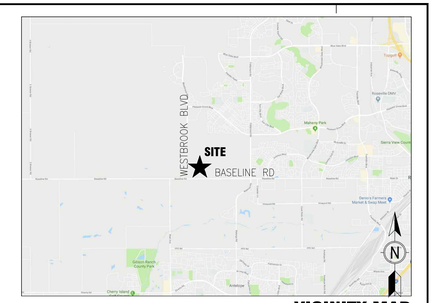
BASE CONSULTING GROUP, INC.

CIRCLE K STORE
SITE PLAN

NEC BASELINE ROAD & WESTBROOK BOULEVARD, ROSEVILLE, CA



VICINITY MAP



OWNER:

CIRCLE K STORES INC.
255 E. RINCON STREET, SUITE 100
CORONA, CALIFORNIA 92879

OWNER REPRESENTATIVE:

LAND DEVELOPMENT CONSULTANTS, LLC
3281 EAST GUASTI ROAD #700
ONTARIO, CA 91761
PHONE: (909) 974 - 8422
FAX: (909) 974 - 8422
CONTACT: WILLIAM SCARBROUGH

ARCHITECT :

GREENBERG FARROW
30 EXECUTIVE PARK, SUITE 100
IRVINE, CA 92614
PHONE: (949) 296-0450
FAX: (949) 296-0479
CONTACT: DOUG COUPER

PROJECT INFORMATION

PROJECT NAME:	CIRCLE K CONVENIENCE STORE
PROJECT ADDRESS:	NEC BASELINE RD & WESTBROOK BLVD, ROSEVILLE, CA
PROJECT DESCRIPTION:	PROPOSAL FOR A NEW CONVENIENCE STORE WITH ASSOCIATED FUEL SALES CONSISTING OF A 5,200 S.F. CONVENIENCE STORE, A 1,458 S.F. CAR WASH, AND A FUEL CANOPY WITH 6 FUEL PUMPS

ZONING INFORMATION

JURISDICTION:	CITY OF ROSEVILLE, CA
EXISTING ZONING:	GC (GENERAL COMMERCIAL) SIERRA VISTA SPECIFIC PLAN, PARCEL KT-42 (CC LAND USE)
PROPOSED ZONING:	GC (GENERAL COMMERCIAL) SIERRA VISTA SPECIFIC PLAN, PARCEL KT-42 (CC LAND USE)
MAX. BLDG HEIGHT ALLOWED: 50'	BLDG HEIGHT PROVIDED: 23'-0"
SETBACKS: TBV	

SITE DATA

PARCEL:	APN 499-010-081
CIRCLE K NET SITE AREA:	± 2.010 AC (± 87,569 SF)
REMAINING PARCEL:	± 8.533 AC (± 371,706 SF)
CIRCLE K GROSS SITE AREA:	±10.543 AC (± 459,275 SF)

BUILDING AREA

CONVENIENCE STORE BLDG AREA	5,200 SF
CAR WASH BLDG AREA	1,458 SF
FUEL CANOPY AREA	3,936 SF
CIRCLE K SITE COVERAGE (BASED ON 5,200 SF BLDG AREA, 1,458 SF CAR WASH AREA & 3,963 SF OF FUEL CANOPY AREA AND ±2.001 AC OF NET SITE AREA)	±12.15% (5,294 SF/AC)

PARKING REQUIREMENTS

CIRCLE K PARKING REQUIRED	
RETAIL: 1 SP/300 SF	17 SP
CIRCLE K PARKING PROVIDED	
STANDARD PARKING SPACES	23 SP
ACCESSIBLE PARKING SPACES	2 + 1 SP
TOTAL CIRCLE K PARKING PROVIDED	26 SP
CLEAN AIR PARKING PROVIDED	1 SP
BICYCLE PARKING PROVIDED	2 SP
VACUUM PARKING PROVIDED	2 SP
VENDOR PARKING PROVIDED	2 SP

GENERAL NOTES

1. THIS IS A CONCEPTUAL SITE PLAN AND IS FOR PLANNING PURPOSES ONLY.
2. THIS SITE PLAN IS BASED ON ALTA/NSPS LAND TITLE SURVEY CAD FROM BASE CONSULTING GROUP, INC. DATED DATED 04/22/2021.
3. ALL UTILITIES, EXCEPT THE ONES IDENTIFIED PER ALTA, ARE BASED ON THE CAD PREPARED BY DEVELOPER RECEIVED VIA CLIENT 07/16/2020, DATED 05/11/2020, TO BE VERIFIED.
4. ADDITIONAL ACCESSIBILITY REQUIREMENTS TO BE VERIFIED WITH JURISDICTION.

SCALE: 1"= 20'

0 10' 20' 40' 60'

GreenbergFarrow
30 Executive Park, Suite 100
Irvine, CA 92614

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ISSUE/REVISION RECORD

DATE	DESCRIPTION
02/18/20	PREP SP-6
06/18/20	PREP SP-7
07/28/20	PREP SP-8
08/06/20	PREP SP-9
11/04/20	PREP SP-10
11/19/20	PREP SP-11
04/13/21	PREP SP-12
04/20/21	PREP SP-13
04/23/21	PREP SP-14 UPDATED ALTA
04/23/21	REV SP-14
05/18/21	PREP SP-15
06/09/21	PREP SP-16
06/11/21	REV SP-16
07/09/21	REV SP-16 UPDATE TANKS
08/10/21	PREP SP-17
09/07/21	PREP SP-18
10/13/21	PREP SP-19
12/10/21	PREP SP-20
12/13/21	REV SP-20
01/13/22	PREP SP-21

PROFESSIONAL IN CHARGE
ARCH PROF IN CHARGE
DOUGLAS S. COUPER

PROJECT MANAGER
DC

QUALITY CONTROL

DRAWN BY
JN

PROJECT NAME
CIRCLE K STORE #

ROSEVILLE, CALIFORNIA
NEC BASELINE ROAD & WESTBROOK BOULEVARD

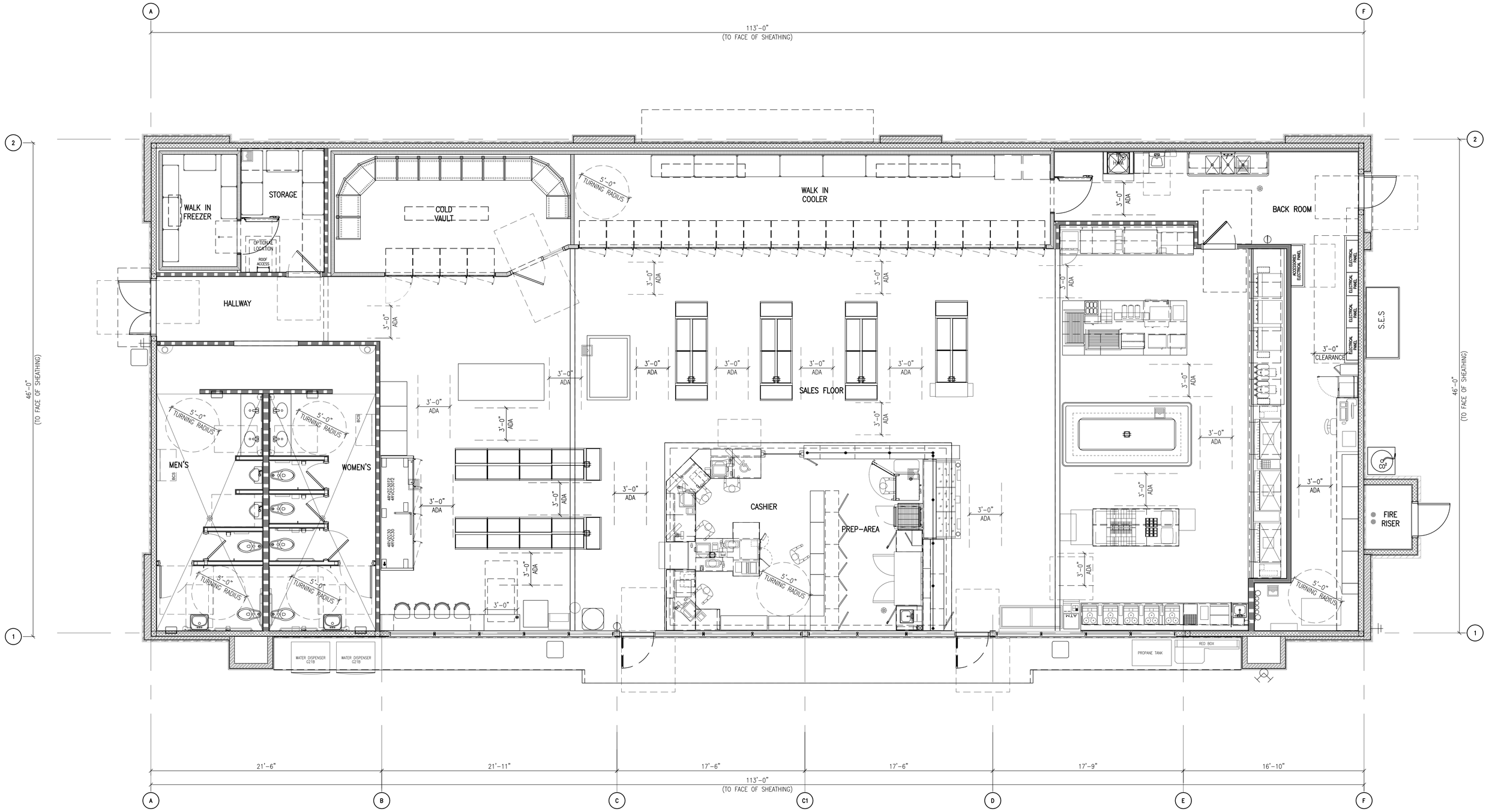
LAND DEVELOPMENT CONSULTANTS, LLC
3281 EAST GUASTI ROAD #700
ONTARIO, CA 91761

CIRCLE K STORES INC.

PROJECT NUMBER
20190856.0

SHEET TITLE
SITE PLAN

SHEET NUMBER
SP-21.1



1 BUILDING FLOOR PLAN
SCALE: 1/4" = 1'-0"

30 Executive Park
Suite 100
Irvine, CA 92614
t: 949 296 0450

CIRCLE K STORES INC.
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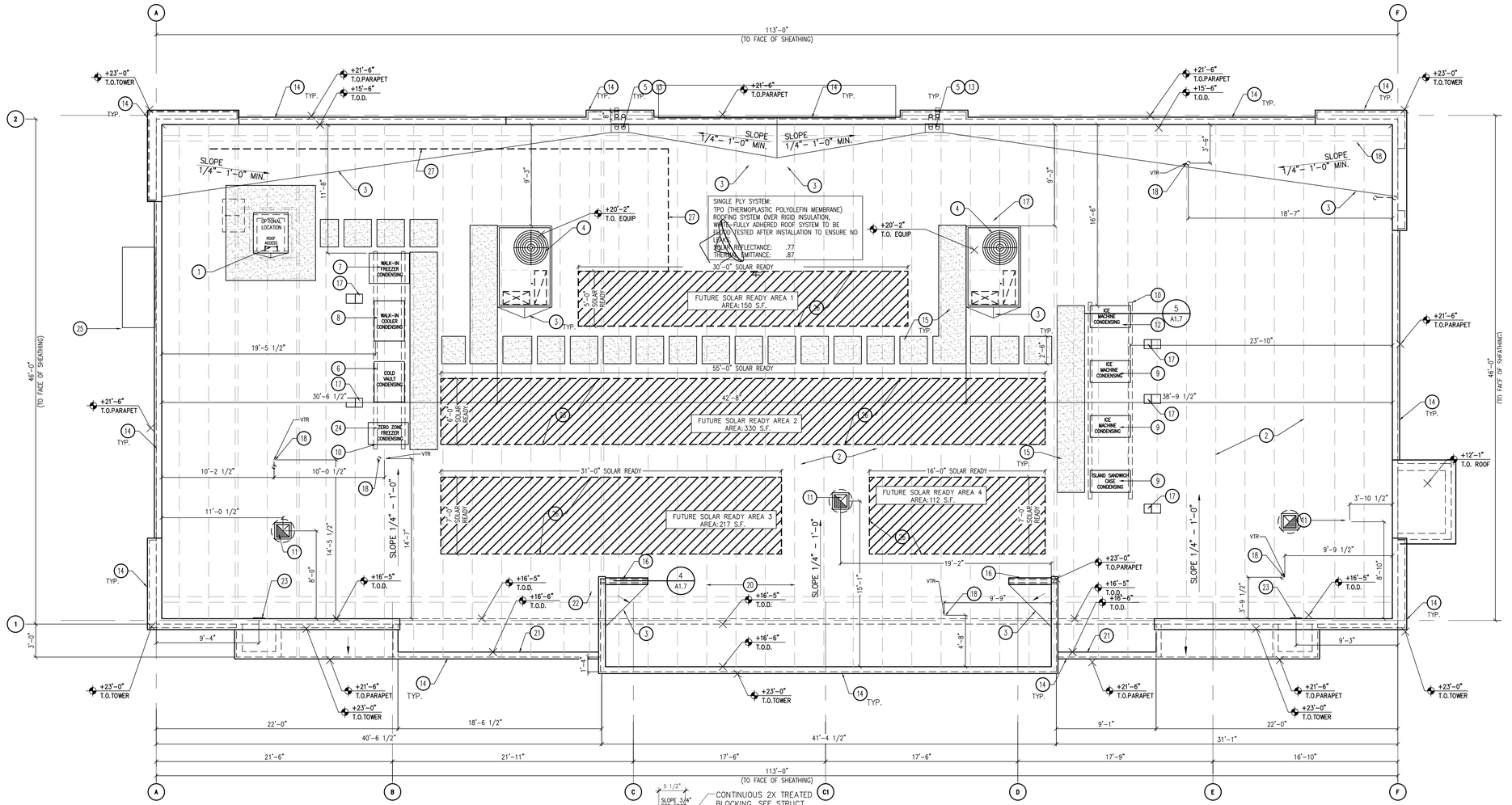
BUILDING FLOOR PLAN - 5200-ER
SCALE: AS NOTED

A-1

12/14/2021



KEY NOTES (X)

1. METAL ROOF ACCESS LADDER WITH SECURITY DOOR BELOW.
2. TPO (THERMOPLASTIC POLYOLEFIN MEMBRANE) ROOFING SYSTEM OVER RIGID INSULATION, WHITE-FULLY ADHERED
3. TAPERED INSULATION DRAINAGE VALLEY CRICKET, MINIMUM SLOPE 1/4" PER. FOOT.
4. ROOF TOP HVAC UNIT
5. COMBINATION ROOF DRAIN / OVERFLOW DRAIN
6. COLD VAULT CONDENSING UNIT
7. WALK-IN FREEZER CONDENSING UNIT
8. WALK-IN COOLER CONDENSING UNIT
9. ICE MACHINE CONDENSING UNIT
10. 4"x4" PRE-TREATED WOOD SLEEPER CONDENSER SUPPORT WITH PROTECTION PAD. PROVIDE EQUIPMENT STRAPS TO SECURE CONDENSERS TO SLEEPERS.
11. EXHAUST FAN UNITS
12. ISLAND SANDWICH CASE CONDENSING UNIT
13. EMERGENCY OVERFLOW ROOF DRAIN TAIL PIECE. EXTEND 4" BEYOND FINISH SURGACE
14. PRE-FINISHED GALVANIZED METAL COPING, SEE EXTERIOR ELEVATIONS
15. 30" WIDE WALKING PATH FOR EQUIPMENT ACCESS. "ULTRA PLY TPO" WALKWAY PAD BY FIRESTONE OR EQUAL. INSTALL PER MANUFACTURER INSTRUCTIONS. VERIFY PATH LOCATION WITH CIRCLE K PROJECT MANAGER.
16. PARAPET BRACING AS REQUIRED.
17. ROOF JACK FOR REFRIGERANT LINE
18. VTR LOCATION
19. NOT USED
20. PRE-FAB WOOD TRUSSES
21. TPO ROOF AT PARAPET TYP.
22. FREEZELESS ROOF HYDRANT
23. RUSKIN LOUVER VENT # ELF6350DMP OR ALTERNATE-GIBRALTAR GLPG1212G
24. ZERO ZONE FREEZER CONDENSING UNIT
25. ALUMINUM AWNING WITH SUPPORT RODS BY CIRCLE K VENDOR. PROVIDE BLOCKING IN EXTERIOR WALL FOR AWNING AND SUPPORTS. GC PROVIDE WATERTIGHT SEAL/FLASHING AT ALL WALL OPENINGS AND ATTACHMENT CONNECTIONS.
26. FUTURE SOLAR PANELS AREA, 15% OF ROOF AREA PER CEC SECTION 110.10 (b)
27. FUTURE SOLAR POWER PATHWAY

GENERAL NOTES

1. SEE BUILDING ELEVATIONS FOR PARAPET HEIGHTS.

SINGLE PLY ROOFING SPECIFICATION

SINGLE PLY ROOFING SPECIFICATION
FIRESTONE
TPO-60MIL (THERMOPLASTIC POLYOLEFIN MEMBRANE) FULLY ADHERED TPO WHITE ASTM D6878
CLASSIFICATION: UL CLASS: A FM CLASS: 1
-45 PSF DESIGN
MAX. SLOPE 1"
DECK: NON-COMBUSTIBLES AND COMBUSTIBLE
INSULATION: POLYISOCYANURATE INSULATION BOARD ASTM C1289
LTTR = R-15. INSTALLED IN TWO LAYERS WITH STAGGERED JOINTS

TAPERED INSULATION: FACTORY TAPERED BOARDS FABRICATED TO PRODUCE SLOPE OF 1/4" PER FOOT. SLOPE TOWARDS DRAIN.

CRICKETS: PROVIDE CRICKETS TAPERED. EDGE STRIPS WHERE INDICATED.

AUXILIARY MATERIALS
SHEET FLASHING: SAME SHEET AS FIELD SHEET

BONDING ADHESIVE: MANUFACTURERS STANDARD BONDING ADHESIVE

METAL TERMINATION BARS: PRE-DRILLED STAINLESS STEEL OR ALUMINUM BARS

FASTENERS: FACTORY-COATED STEEL FASTENERS AND METAL PLATES MEETING CORROSION-RESISTANCE PROVISIONS OF FMG 4470

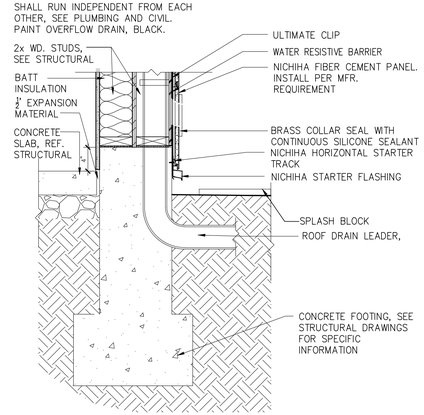
MISCELLANEOUS: PROVIDE POURABLE SEALER, PREFORMED CONES, PREFORMED INSIDE AND OUTSIDE CORNER FLASHING, T-JOINT COVERS, TERMINATION REGLETS, AND COVER STRIPS.

WALK-WAY PADS: FACTORY FORMED, NON-POUROUS, HEAVY-DUTY SLIP RESISTANT PADS OR ROLLS ACCEPTABLE TO MEMBRANE ROOFING SYSTEM MANUFACTURER.

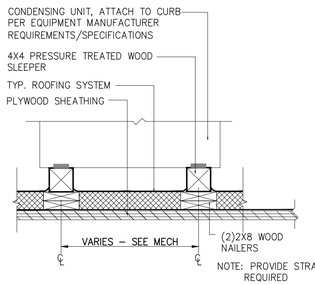
ROOF ASSEMBLY SHALL BE INSTALLED PER MANUFACTURER RECOMMENDATIONS.

PROVIDE PATCH OVER ALL 'T'-LAP JOINTS IN THE ROOF.

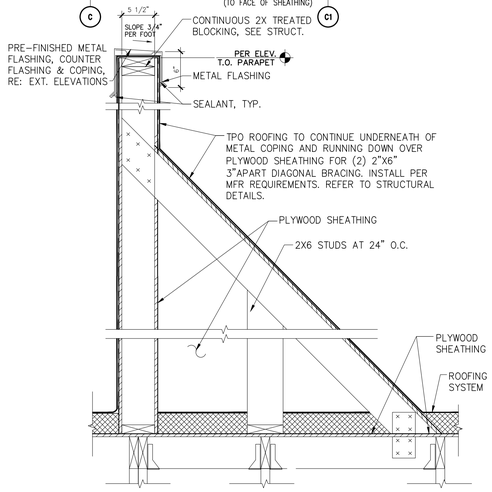
1 ROOF PLAN
SCALE: 3/16" = 1'-0"



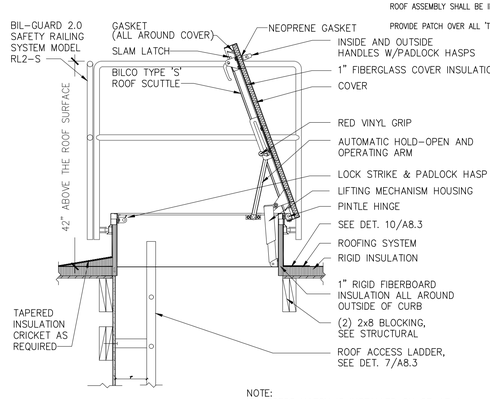
6 ROOF DRAIN LEADER
1" = 1'-0"



5 SLEEPER DETAIL @ CONDENSERS
1" = 1'-0"



4 PARAPET DETAIL
1" = 1'-0"



NOTE:
IF ACCESS HATCH IS INSTALLED ON OR AT A ROOFING SYSTEM, HATCH MUST BE EXTENDED UP TO MAINTAIN MANUFACTURERS CLEARANCE.

2 ROOF SCUTTLE
3/4" = 1'=0"

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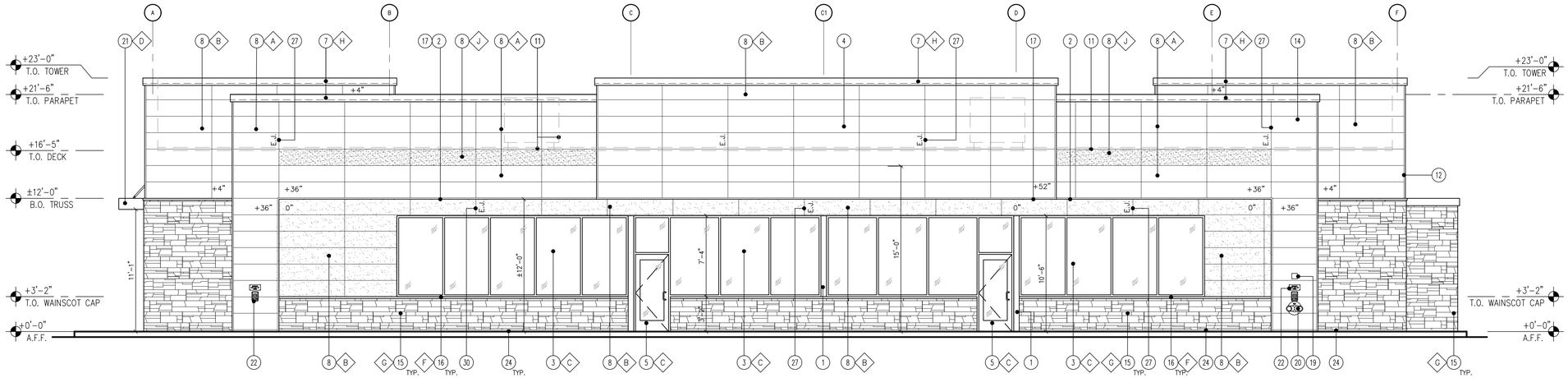
BUILDING ROOF PLAN - 5200-ER
SCALE: AS NOTED

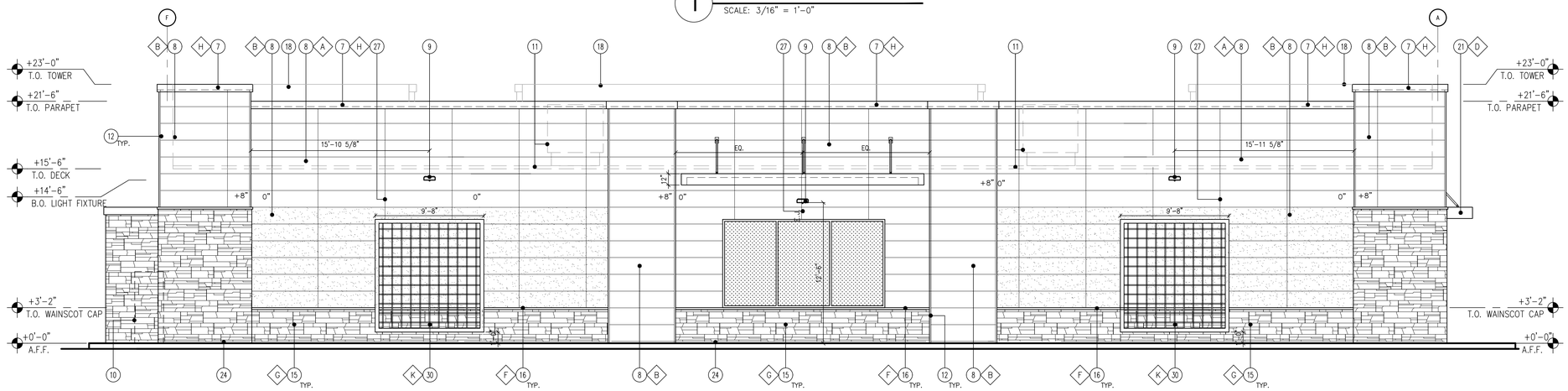
A-1.7

12/14/2021



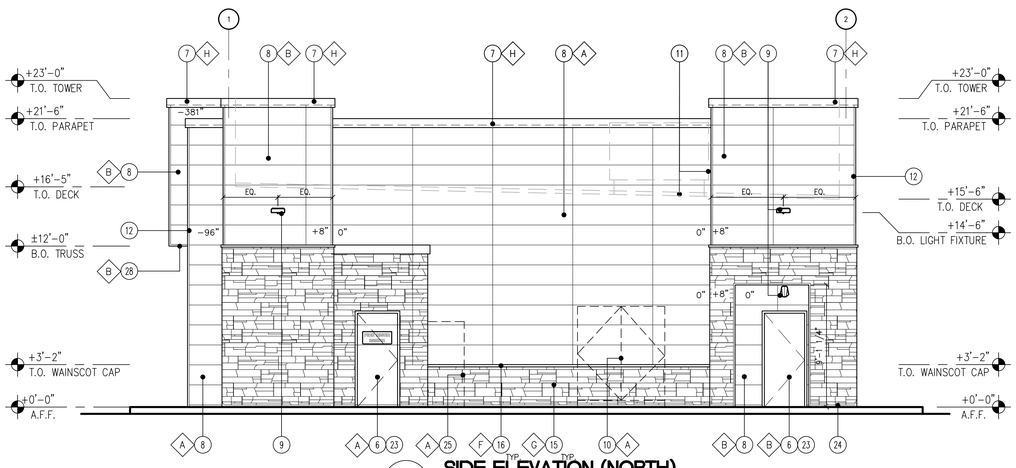
1 FRONT ELEVATION (EAST)

SCALE: 3/16" = 1'-0"



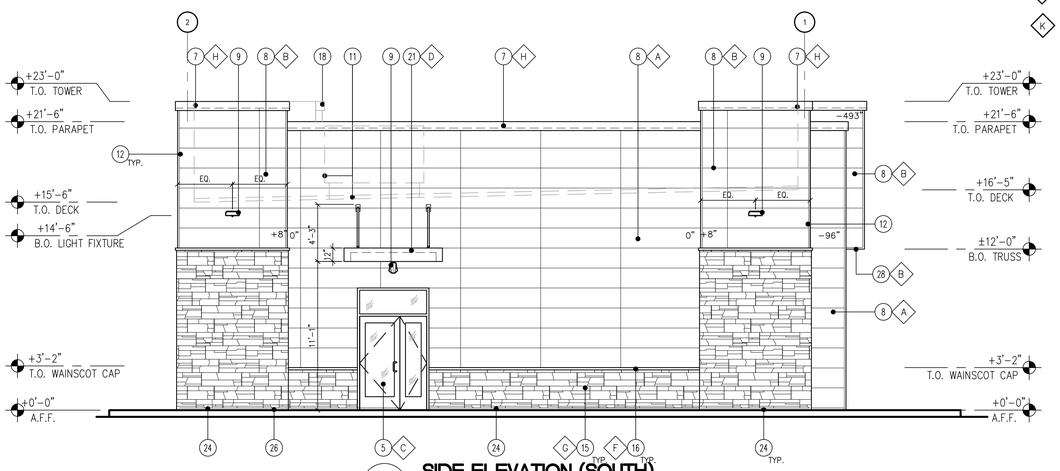
2 BACK ELEVATION (WEST)

SCALE: 3/16" = 1'-0"



3 SIDE ELEVATION (NORTH)

SCALE: 3/16" = 1'-0"



4 SIDE ELEVATION (SOUTH)

SCALE: 3/16" = 1'-0"

KEY NOTES (X)

1. STEEL COLUMN WRAP WITH BREAK METAL
2. LINE OF CANOPY / SOFFIT
3. DARK BRONZE ANODIZED WINDOW FRAME W/ GRAY TINTED GLASS PER SOLARBAN SOLARGRAY SPECS.
4. POTENTIAL SIGN LOCATION (UNDER SEPARATE PERMIT)
5. DARK BRONZE ANODIZED DOOR W/ GRAY TINTED GLASS STOREFRONT SYSTEM
6. SERVICE DOOR, PAINT TO MATCH SURROUNDING WALL
7. PRE-FINISHED METAL COPING
8. NICHIHA FIBER CEMENT WALL PANEL SYSTEM
9. WALL MOUNTED LIGHT FIXTURE, COLOR: BRONZE.
10. SES PANEL LOCATION.
11. ROOF LINE AND HVAC UNITS
12. 1-1/2" CORNER KEY EDGE, TYP. TO ALL CORNERS
13. DOWNSPOUT.
14. ADDRESSING LOCATION: 8" TALL INCH BLACK NUMBERS. FINAL AREA LOCATION TO BE DETERMINED BY FIRE DEPARTMENT.
15. 1 3/8" THK. X 6" NICHIHA KURASTONE HIGH FIBER CEMENT WAINSCOT
16. 1-1/2" HIGH NICHIHA FIBER CEMENT CAP INSTALL PER MFR. SPECS.
17. FRY REGLET DRIP CAP
18. PARAPET WALL BEYOND
19. (KNOX) KEY-BOX AT 6'-0" AFF (IF REQUIRED BY FIRE DEPARTMENT)
20. FIRE DEPARTMENT CONNECTION (IF REQUIRED)
21. ALUMINUM AWNING WITH SUPPORT RODS ABOVE THE SIDE ENTRY DOOR BY CIRCLE K VENDOR. PROVIDE BLOCKING IN EXTERIOR WALL FOR AWNING AND SUPPORTS
22. EMERGENCY FUEL SHUT-OFF SWITCH.
23. INSULATED METAL DOOR
24. NICHIHA ESSENTIAL "STARTER" FLASHING
25. CO2 TANK WITH METAL LOUVERED CONTAINER
26. EXTERIOR FINISH TO EXTEND ABOVE SIDEWALK/GRADE.
27. CONTROL/EXPANSION JOINT "E.J." LOCATION
28. HARDIESOFFIT FIBER CEMENT PANELS
29. SPANDREL GLASS WINDOW
30. METAL LATTICE / GREEN SCREEN TO BE FREESTANDING, 1' OFF OF THE BUILDING

FINISH SCHEDULE (X)

- A – ***NICHIHA TUFF BLOCK – COLOR TO MATCH #SW 6095 TOASTY
- B – ***NICHIHA TUFF BLOCK – COLOR TO MATCH #SW 6115 TOTALLY TAN
- C – 1" INSULATED, DOUBLE PANED GRAY TINTED GLASS
- D – *SHERWIN WILLIAMS #SW 4081 – **SAFETY RED
- E – NOT USED
- F – ***NICHIHA CHISELED SILL TAN
- G – ***NICHIHA LEDGESTONE BLUFF
- H – *SHERWIN WILLIAMS #SW 6090 – JAVA – FIRESTONE MANSARD BROWN SR (USE FOR PRE-FINISHED METAL COPING)
- I – NOT USED
- J – ***NICHIHA TUFF BLOCK – COLOR TO MATCH #SW 4081
- K – *SHERWIN WILLIAMS #SW 7022 – ALPACA – PAINT PRIMER-"LOXON" CONCRETE & MASONRY PRIMER/SEALER PAINT PRIMMER WITH A GREY TINT COLOR – PAINT TOP COAT: "SUPERPAINT" EXTERIOR ACRYLIC LATEX PAINT – SHEEN: SATIN

* USE SHERWIN WILLIAMS MANUFACTURER ONLY
** COLOR TO BE PRE-ORDERED TO ENSURE AVAILABILITY AT TIME OF CONSTRUCTION
*** PURCHASED BY CIRCLE K/INSTALLED BY G.C.
G.C. TO COORDINATE WITH CK PM AND OWNER'S REP circlek@nichiha.com

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BUILDING EXTERIOR ELEVATIONS 5200

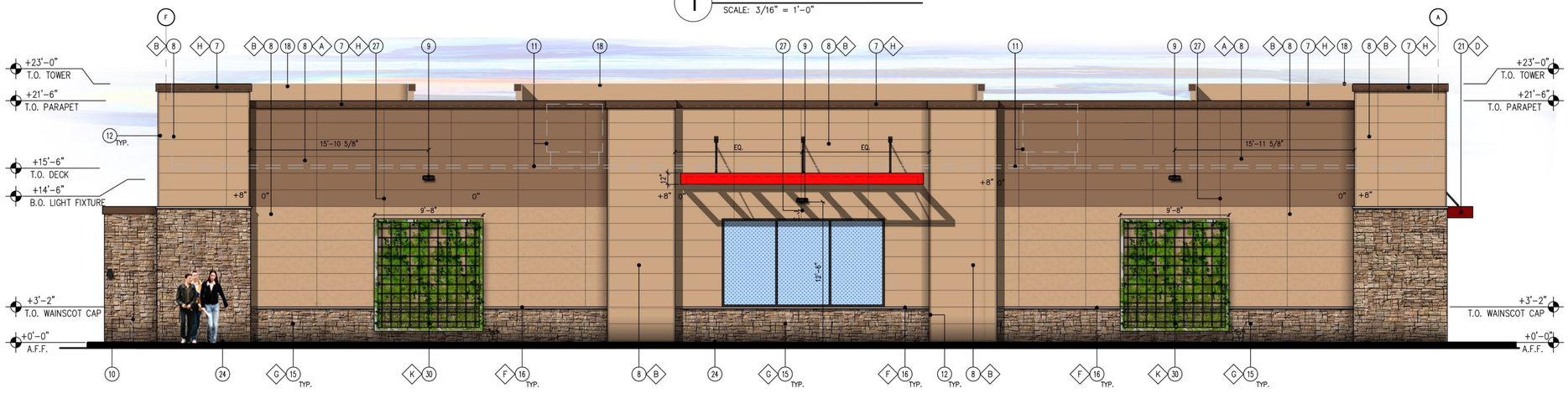
SCALE: AS NOTED

A2.0

12/14/2021

1 FRONT ELEVATION (EAST)

SCALE: 3/16" = 1'-0"

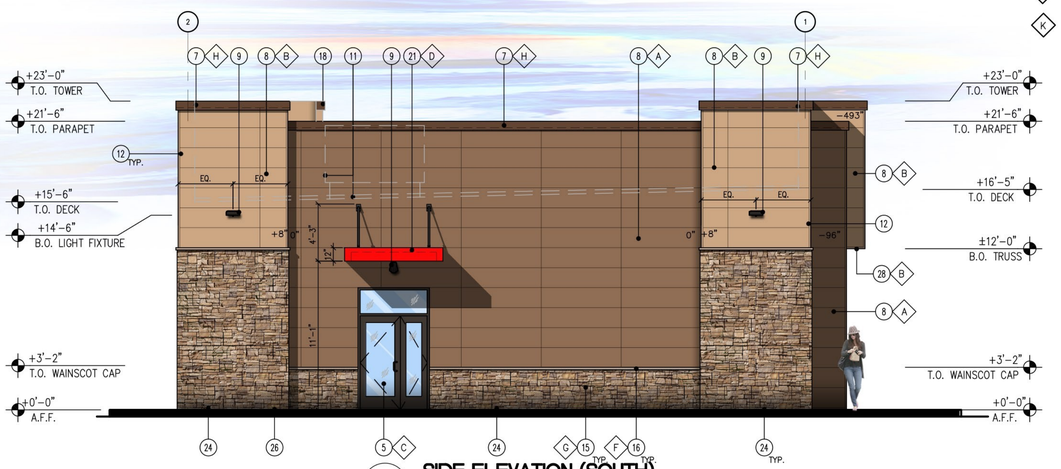


2 BACK ELEVATION (WEST)

SCALE: 3/16" = 1'-0"

3 SIDE ELEVATION (NORTH)

SCALE: 3/16" = 1'-0"



4 SIDE ELEVATION (SOUTH)

SCALE: 3/16" = 1'-0"

KEY NOTES (X)

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2. LINE OF CANOPY / SOFFIT
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4. POTENTIAL SIGN LOCATION (UNDER SEPARATE PERMIT)
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6. SERVICE DOOR, PAINT TO MATCH SURROUNDING WALL
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- (D) – *SHERWIN WILLIAMS #SW 4081 – **SAFETY RED
- (E) – NOT USED
- (F) – ***NICHIHA CHISELED SILL TAN
- (G) – ***NICHIHA LEDGESTONE BLUFF
- (H) – *SHERWIN WILLIAMS #SW 6090 – JAVA – FIRESTONE MANSARD BROWN SR (USE FOR PRE-FINISHED METAL COPING)
- (I) – NOT USED
- (J) – ***NICHIHA TUFF BLOCK – COLOR TO MATCH #SW 4081
- (K) – *SHERWIN WILLIAMS #SW 7022 – ALPACA – PAINT PRIMER:"LOXON" CONCRETE & MASONRY PRIMER/SEALER PAINT PRIMMER WITH A GREY TINT COLOR – PAINT TOP COAT: "SUPERPAINT" EXTERIOR ACRYLIC LATEX PAINT – SHEEN: SATIN

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BUILDING EXTERIOR ELEVATIONS 5200

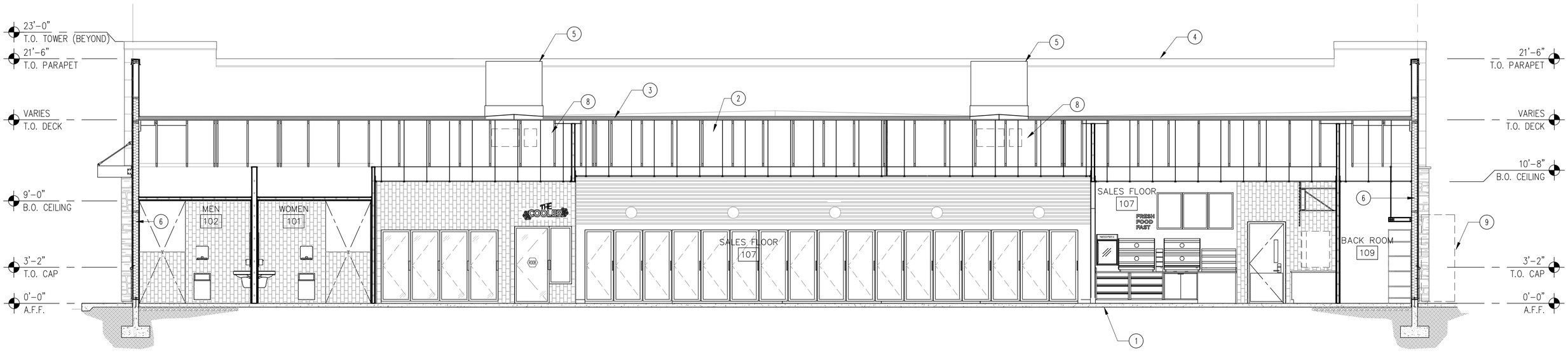
SCALE: AS NOTED

A2.0

10/06/2021

KEY NOTES (X)

1. CONCRETE SLAB WITH MINIMUM 15MIL VAPOR BARRIER LAPPED A MINIMUM OF 6" & TAPED PER MANUFACTURER'S SPECIFICATIONS, SEE STRUCTURAL. CONCRETE SLAB, SEE STRUCTURAL FOR REINFORCING.
2. ROOF JOIST, SEE STRUCTURAL DRAWINGS FOR SPECIFIC INFORMATION.
3. TPO ROOFING SYSTEM OVER RIGID INSULATION. WALKWAYS AS REQUIRED BY ROOFING MANUFACTURE.
4. PARAPET BEYOND
5. ROOF TOP HVAC UNIT, SEE MECHANICAL DRAWINGS.
6. R-21 BATT INSULATION
7. WALK IN FREEZER/COOLER WALL
8. ALL DUCT WORK TO GO THROUGH TRUSSES - SEE MECH.
9. SWITCHGEAR CABINET BEYOND
10. NOT USED
11. SIGN BY VENDOR. SUBMITTED UNDER SEPARATE PERMIT.
12. PARAPET BRACE, SEE ROOF PLAN



1 BUILDING SECTION
SCALE: 1/4" = 1'-0"

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BUILDING SECTION - 5200
SCALE: AS NOTED

A-4.0

12/14/2021

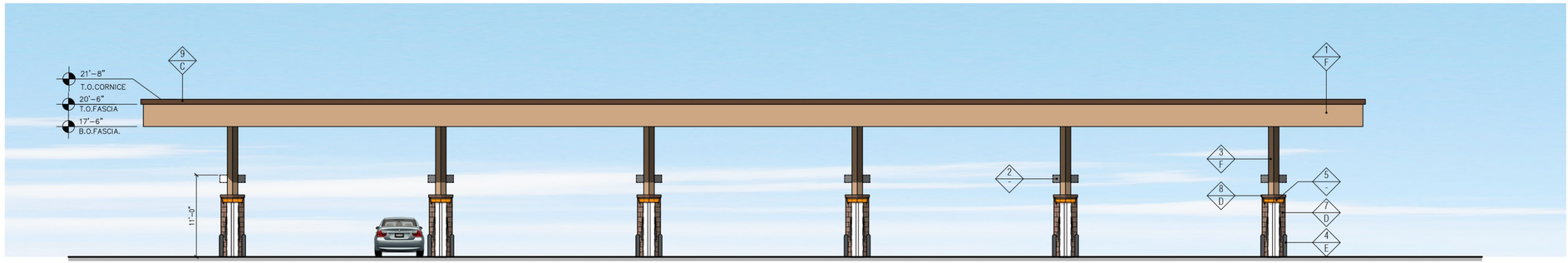
3 "SIDE" ELEVATION (NORTH)
SCALE: 1/8" = 1'-0"

4 "SIDE" ELEVATION (SOUTH)
SCALE: 1/8" = 1'-0"

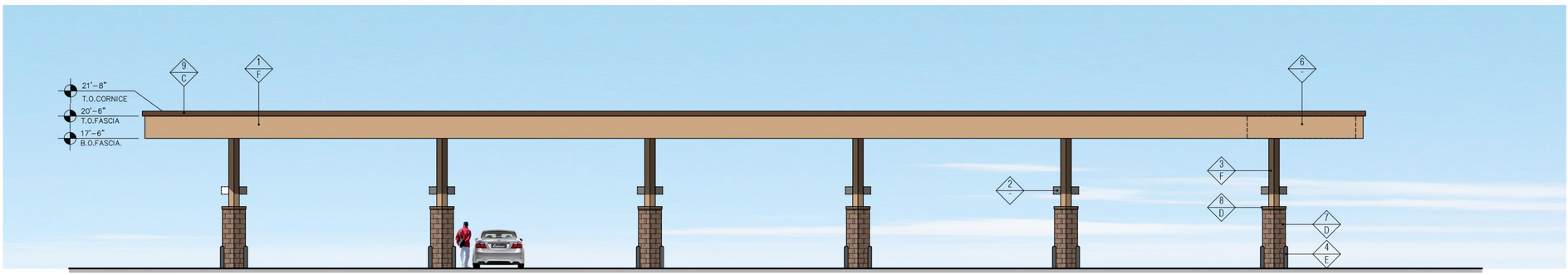
FINISH SCHEDULE

◢	FINISH MATERIAL
1	ACM PANEL
2	COLUMN FLAGS BY SIGNAGE VENDOR
3	STEEL COLUMN WITH PAINT FINISH
4	6" Ø BOLLARD, 36" HIGH
5	FUEL PUMP
6	POTENTIAL SIGN LOCATION (UNDER SEPARATE PERMIT)
7	4X8X16 CMU VENEER, SPLIT FACE, GROUTED TO MATCH CMU COLOR
8	4X8X16 SOLID CMU CAP, INSTALL PER MFR. SPECS.
9	PRE-FINISHED METAL COPING
◥	FINISH COLOR
A	NOT USED
B	NOT USED
C	FIRESTONE MANSARD BROWN SR (FOR PRE-FINISHED METAL COPING)OR MATCH SHERWIN WILLIAMS - #SW6090 - JAVA
D	SUPERLITE BLOCK SPLITFACE CMU - "BOOT BROWN"
E	PVC BOLLARD SLEEVE "DARK GRAY"
F	SHERWIN WILLIAMS - SW6115 - TOTALLY TAN

Notes:
1. Colors shown on these elevations are for illustration purposes only. For actual colors, refer to manufacturer's samples.
2. The fascia panels are pre-finished by signage vendor
3. All signs require a separate submittal.
4. All lighting on canopy to be flush mounted with fascia



2 "FRONT" ELEVATION (EAST)
SCALE: 1/8" = 1'-0"



1 "REAR" ELEVATION (WEST)
SCALE: 1/8" = 1'-0"

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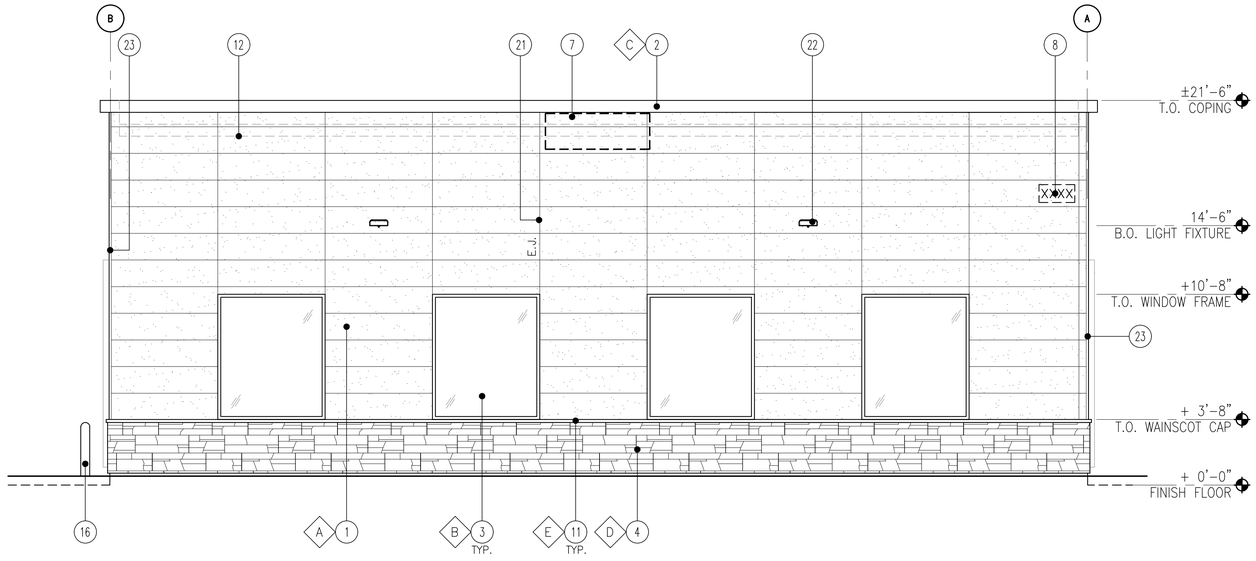
FUEL CANOPY EXTERIOR ELEVATIONS - VS06
SCALE: AS NOTED

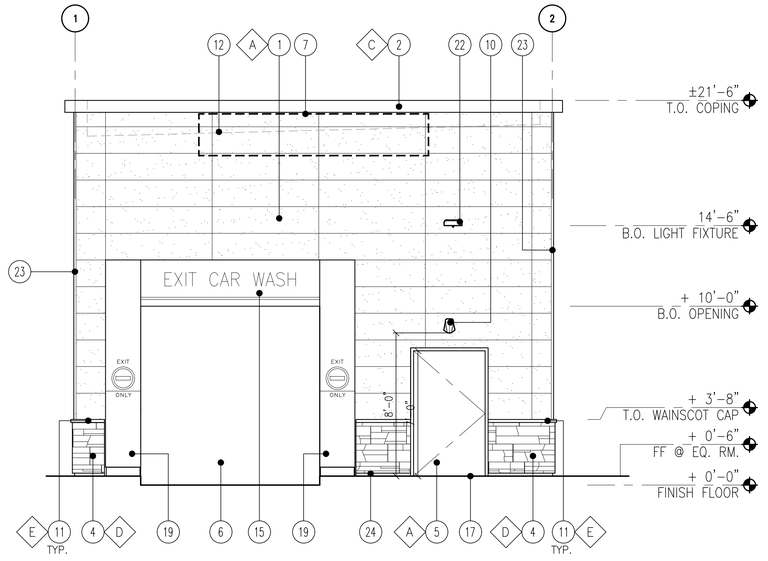
A-4

08/09/2021



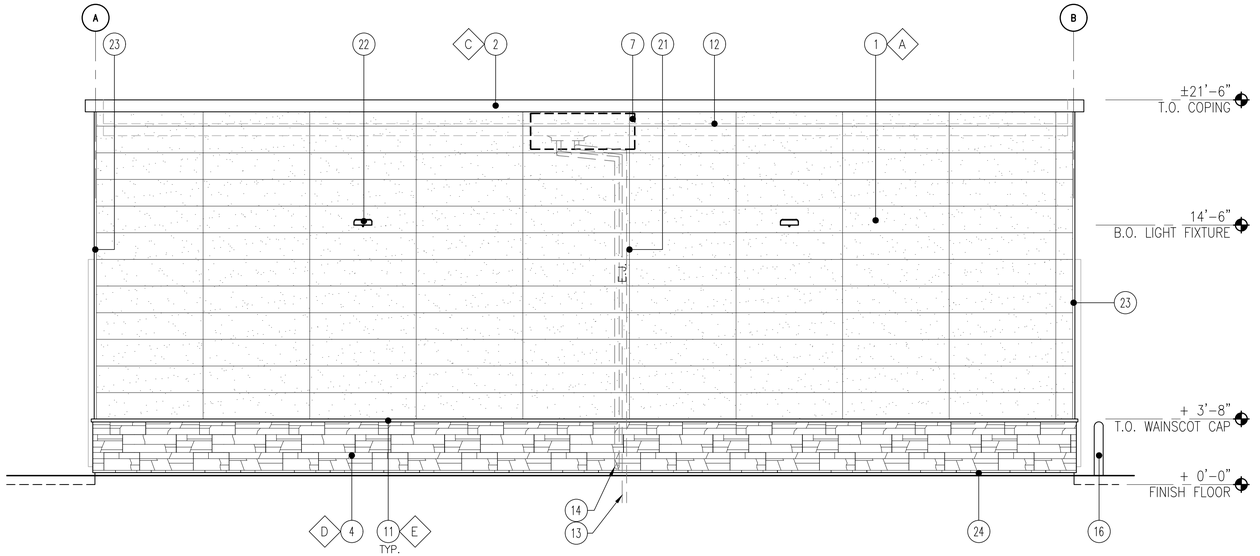
4 SIDE ELEVATION - WEST

SCALE: 1/4" = 1'-0"



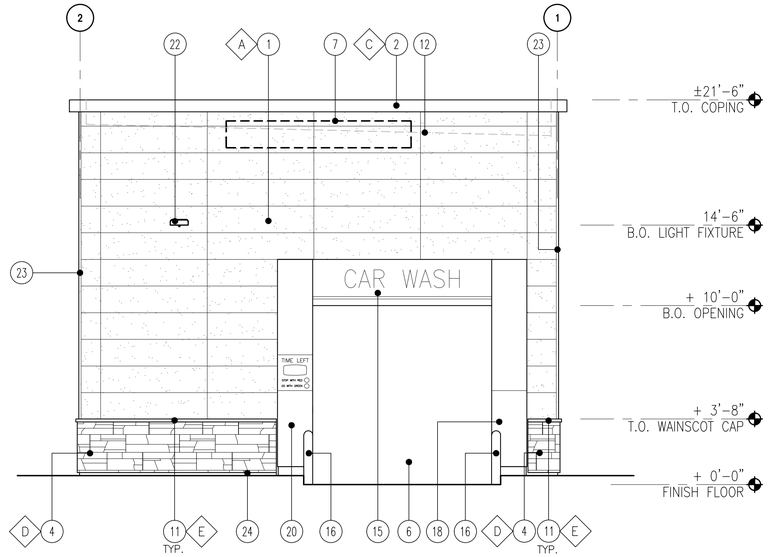
2 REAR ELEVATION - SOUTH

SCALE: 1/4" = 1'-0"



3 SIDE ELEVATION - EAST

SCALE: 1/4" = 1'-0"



1 FRONT ELEVATION - NORTH

SCALE: 1/4" = 1'-0"

KEY NOTES (X)

1. NICHIHA FIBER CEMENT WALL PANEL SYSTEM
2. PREFINISHED METAL COPING
3. FRP WINDOW FRAME W/ GRAY TINTED GLASS WINDOW SYSTEM. PAINT WINDOW FRAME TO MATCH DARK BRONZE
4. 1 3/8" THK. X 6" NICHIHA KURASTONE HIGH FIBER CEMENT WAINSCOT
5. INSULATED FRP DOOR IN FRP FRAME. PAINT TO MATCH NICHIHA PANEL AS NOTED.
6. WASH BAY OPENING.
7. POTENTIAL SIGN LOCATION (UNDER SEPARATE PERMIT)
8. ADDRESS SIGN NUMBERS, 8" HIGH & 1" CONTRASTING BACKGROUND
9. NOT USED
10. EXTERIOR WALL-MOUNTED LIGHTING ABOVE EXTERIOR DOOR
11. 1-1/2" HIGH NICHIHA FIBER CEMENT CAP INSTALL PER MFR. SPECS.
12. LINE OF ROOF
13. ROOF DRAIN, SEE CIVIL DRAWINGS FOR CONTINUATION
14. OVERFLOW WITH SHEEP TONGUE, CONTRACTOR TO PROVIDE A CONCRETE SPLASH BLOCK AT THIS DOWNSPOUT LOCATION AT LANDSCAPE AREA.
15. PRE-FINISHED ACM PORTAL HEADER. PROVIDE POWER FOR LED LIGHTS AND BACK LIT LETTERS. COORDINATE WITH VENDOR.
16. 42"H. 6" DIA. BOLLARD, WITH TRAFFIC YELLOW PLASTIC COVER
17. ISLAND/SIDEWALK WITH BROOM FINISH. SLOPED 1/4" PER FT. AWAY FROM BUILDING. REFER TO CIVIL DRAWINGS.
18. PRE-FINISHED ACM ENTRANCE PORTAL LEG W/ TIMER. PROVIDE POWER FOR TIMER. COORDINATE WITH VENDOR.
19. PRE-FINISHED ACM EXIT PORTAL LEG
20. PRE-FINISHED ACM PORTAL LEG
21. CONTROL/EXPANSION JOINT "E.J." LOCATION
22. WALL MOUNTED LIGHT FIXTURE, COLOR: BRONZE.

FINISH SCHEDULE (X)

- (A) - ***NICHIHA TUFF BLOCK
  - COLOR TO MATCH #SW 6095 TOASTY
- (B) - 1" INSULATED, DOUBLE PANED GRAY TINTED GLASS
- (C) - *SHERWIN WILLIAMS #SW 6090 - JAVA
  - FIRESTONE MANSARD BROWN SR (USE FOR PRE-FINISHED METAL COPING)
- (D) - ***NICHIHA LEDGESTONE BLUFF
- (E) - ***NICHIHA CHISELED SILL TAN

*USE SHERWIN WILLIAMS MANUFACTURER ONLY.
*** CONFIRM WITH OWNER'S REP

GF
30 Executive Park
Suite 100
Irvine, CA 92614
t: 949 296 0450

CIRCLE K STORES INC.
255 E. Rincon St. Ste 100
Corona, California 92879
t: (866) 371-2205

LAND DEVELOPMENT CONSULTANTS, LLC
3281 E. Guasti Rd. Suite #700
Ontario, California 91761
t: (909) 974-8422

CIRCLE K
5990 BASELINE RD
ROSEVILLE, CA
20190856.0

CAR WASH EXTERIOR ELEVATIONS

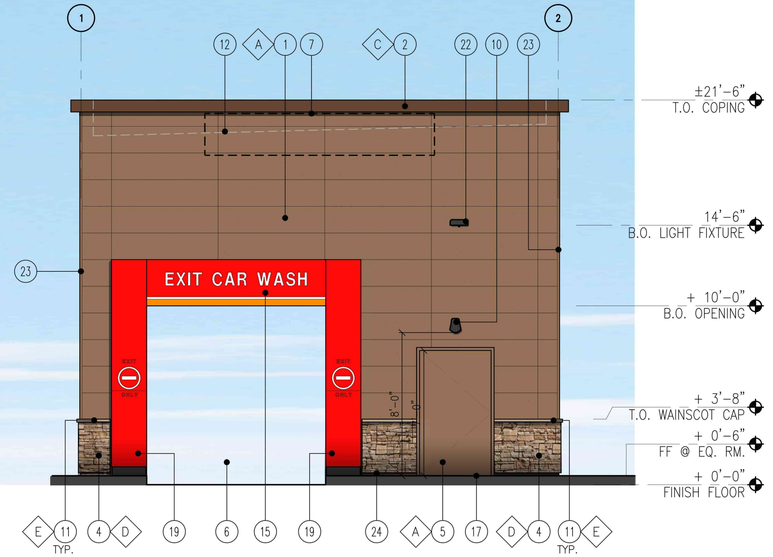
SCALE: AS NOTED

CW-1

12/14/2021

4 SIDE ELEVATION - WEST

SCALE: 1/4" = 1'-0"

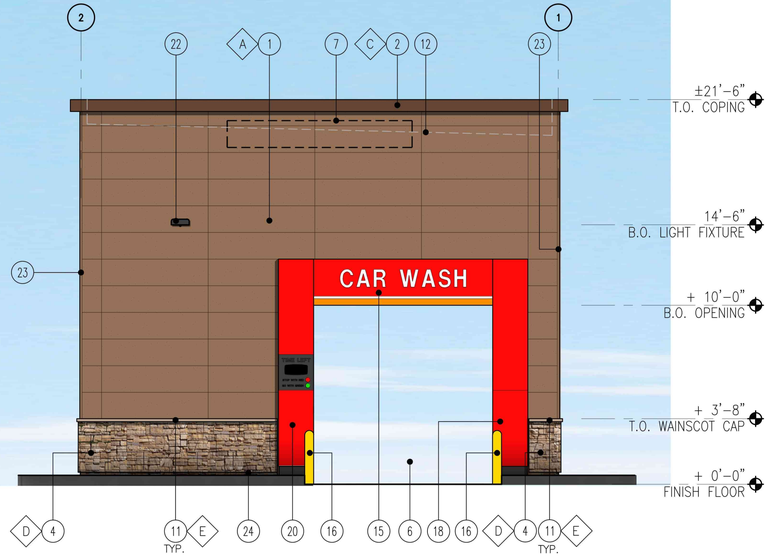


2 REAR ELEVATION - SOUTH

SCALE: 1/4" = 1'-0"

3 SIDE ELEVATION - EAST

SCALE: 1/4" = 1'-0"



1 FRONT ELEVATION - NORTH

SCALE: 1/4" = 1'-0"

KEY NOTES (X)

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20. PRE-FINISHED ACM PORTAL LEG
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22. WALL MOUNTED LIGHT FIXTURE, COLOR: BRONZE.

FINISH SCHEDULE (X)

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– COLOR TO MATCH #SW 6095 TOASTY

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t: (909) 974-8422

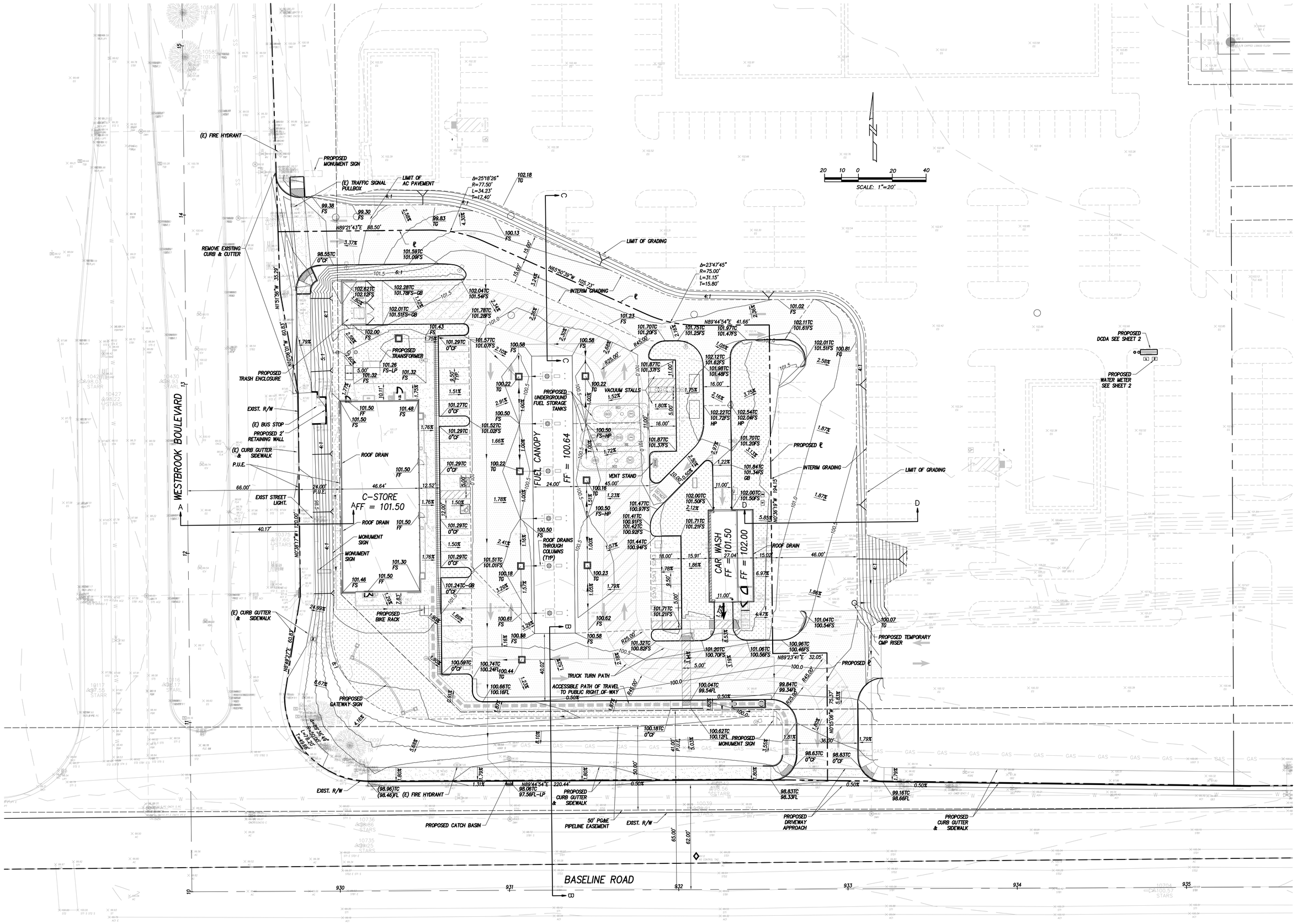
CIRCLE K
NEC BASELINE ROAD & WESTBROOK BOULEVARD
ROSEVILLE, CA
20190856.0

CAR WASH EXTERIOR ELEVATIONS

SCALE: AS NOTED

CW-1

10/06/2021



BLUE PEAK ENGINEERING
16543 YORBA LINDA BLVD
#235
YORBA LINDA, CA 92886
714.749.3077
WWW.BLUEPEAKENG.COM

DRAWING ISSUE RECORD

DATE	DESCRIPTION

REVISION RECORD

NO.	DATE	DESCRIPTION

PROJECT INFORMATION

CIRCLE K
NEC BASELINE RD. & WESTBROOK BLVD.
ROSEVILLE, CA

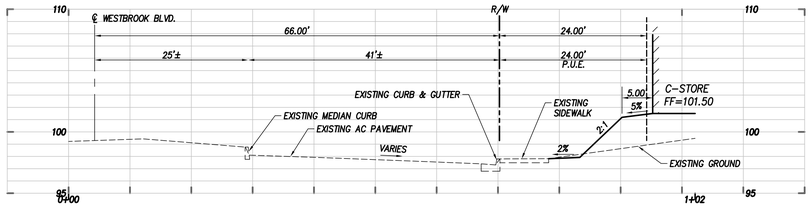
PROFESSIONAL SEAL

REGISTERED PROFESSIONAL ENGINEER
MATTHEW J. HOLDEN
No. 83871
CIVIL
STATE OF CALIFORNIA

SHEET TITLE
PRELIMINARY PRECISE GRADING PLAN

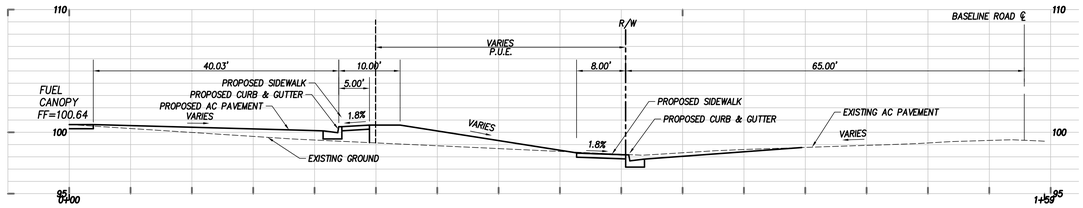
SHEET NUMBER
1 of 3

BLUE PEAK JOB #: 0888
DATE: 12/14/2021



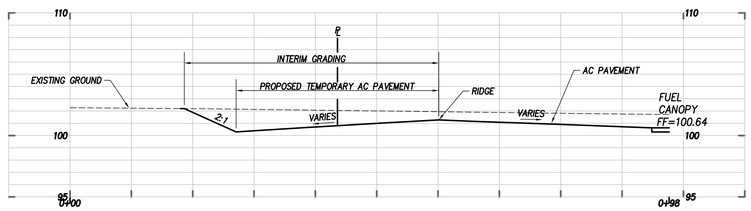
SECTION A–A

SCALE: HORIZ 1"=10' VERT 1"=5'



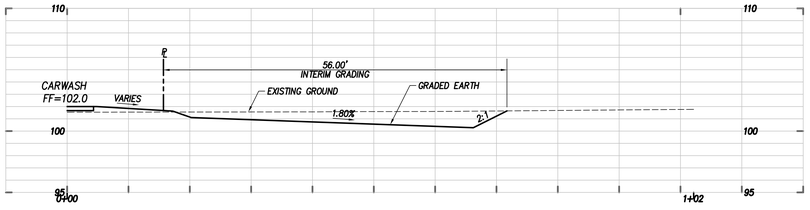
SECTION B–B

SCALE: HORIZ 1"=10' VERT 1"=5'



SECTION C–C

SCALE: HORIZ 1"=10' VERT 1"=5'



SECTION D–D

SCALE: HORIZ 1"=10' VERT 1"=5'

16543 YORBA LINDA BLVD
#235
YORBA LINDA, CA 92886
714.749.3077
WWW.BLUEPEAKENG.COM

BLUE PEAK ENGINEERING

DRAWING ISSUE RECORD

DATE	DESCRIPTION

REVISION RECORD

NO.	DATE	DESCRIPTION

PROJECT INFORMATION

CIRCLE K

NEC BASELINE RD. & WESTBROOK BLVD.
ROSEVILLE, CA

PROFESSIONAL SEAL

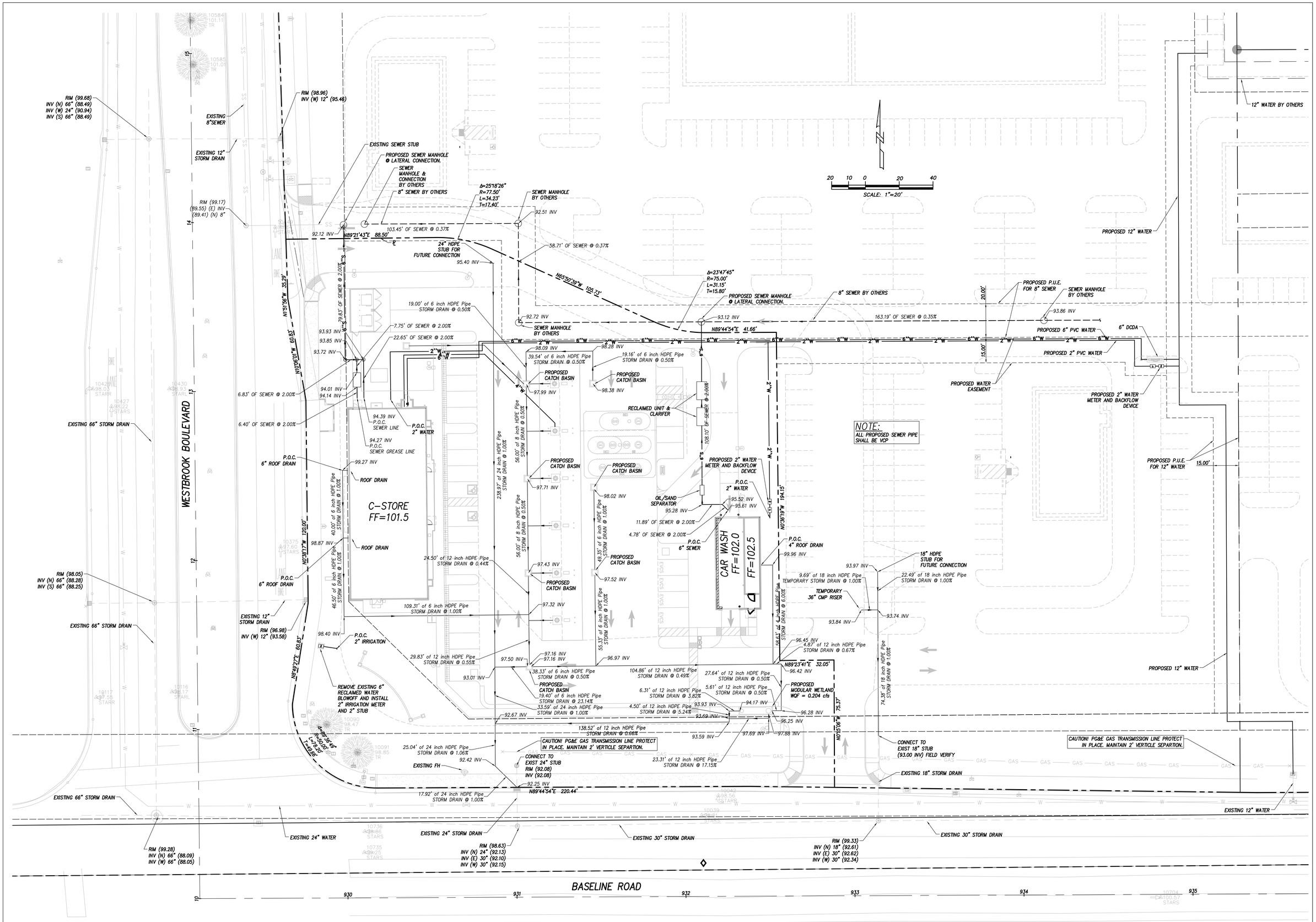
SHEET TITLE

GRADING SECTIONS

SHEET NUMBER

2 of 3

BLUE PEAK JOB #: 0888
DATE: 12/14/2021



16543 YORBA LINDA BLVD
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BLUE PEAK ENGINEERING

DRAWING ISSUE RECORD

DATE	DESCRIPTION

REVISION RECORD

NO.	DATE	DESCRIPTION

PROJECT INFORMATION

CIRCLE K

NEC BASELINE RD. & WESTBROOK BLVD.
ROSEVILLE, CA

PROFESSIONAL SEAL

REGISTERED PROFESSIONAL ENGINEER
CIVIL
STATE OF CALIFORNIA

SHEET TITLE

PRELIMINARY WET UTILITY PLAN

SHEET NUMBER

3 of 3

BLUE PEAK JOB #: 0888
DATE: 12/14/2021

Post-Construction
Storm Water Quality Plan

For:

Circle K
City of Roseville, CA

5900 Baseline Road

Prepared for:
Circle K

Land Development Consultants
11811 N. Tatum Blvd., Ste. 1051
Phoenix, AZ 85028
(602)-850-8101

Prepared by:
Blue Peak Engineering
18543 Yorba Linda Boulevard
Yorba Linda, CA 92886
714-749-3077

Preparation Date: January, 2022
Approval Date:_____

Section 1 General Project Information

The undersigned owner of the subject property, is responsible for the implementation of the provisions of this plan, including ongoing operations and maintenance (O&M), consistent with the requirements of the West Placer Storm Water Quality Design Manual and the State of California Phase II Small MS4 General Permit (Order No: 2013-0001-DWQ). If the undersigned transfers its interest in the property, its successors-in-interest shall bear the aforementioned responsibility to implement the SWQP.

For all Regulated Projects (As identified in Form 1-2 below), the undersigned owner hereby grants access to all representatives of the Jurisdictional Agency for the sole purpose of performing O&M inspections of the installed treatment system(s) and hydromodification control(s) if any.

A copy of the final signed and fully approved SWQP shall be available on the subject site for the duration of construction and then stored with the project approval documentation and improvement plans in perpetuity.

Form 1-1 Project Identification and Owner's Certification

Project Site Address:	5900 Baseline Road, Roseville, CA	
Owner Name:	Circle K	
Title		0
Company	Land Development Consultants	
Address	11811 N. Tatum Blvd., Ste. 1051	
City, State, Zip Code	Phoenix, AZ 85028	
Email	info@ldcaz.com	
Telephone #	(602)-850-8101	
Signature	Date	

Engineer:*	Thomas Hawksworth, PE	PE Stamp* (Required for all Regulated Projects)
Title	Senior Vice President	
Company	Blue Peak Engineering	
Address	18543 Yorba Linda Boulevard	
City, State, Zip Code	Yorba Linda, CA 92886	
Email	thomash@bluepeakeng.com	
Telephone #	714-749-3077	
Signature		

Brief Description of Project: (Attach additional sheets as necessary)	The proposed Circle K parcel comprises about 2.178 acres of land at the Northeast Corner of Baseline Road and Westbrook Boulevard in Roseville, California. The site is bound to the north by a screen wall and active construction and grading activities beyond; to the east by vacant land; to the south by Baseline Road; and to the west by the newly constructed Westbrook Boulevard.

* Not required for Small Projects as determined in Form 1-2 below. Project owners are responsible for ensuring that all storm water facilities are designed by an appropriately licensed and qualified professional.

Form 1-2 Project Category	
Development Category (Select all that apply)	
[1]**Small Project** – All projects, except LUPs, that create and/or replace between 2,500-5,000 ft^2 of impervious surface or detached single family homes that create and/or replace 2,500 ft^2 or more of impervious surface and are not part of a larger plan of development.	
[2]Enter total new and/or replaced impervious surface (ft^2)	
[3]**Regulated Project** – All projects that create and/or replace 5,000 ft^2 or more of impervious surface.	X
[4]**Regulated Redevelopment Project** with equal to, or greater than 50 percent increase in impervious area	
[5]**Regulated Redevelopment Project** with less than 50 percent increase in impervious area	
[6]Enter total pre-project impervious surface (ft^2)	0
[7]Enter total new and/or replaced impervious surface (ft^2)	57,835
[8]**Regulated Road or linear underground/overhead project (LUP)** creating 5,000 ft^2 or more of newly constructed contiguous impervious surface.	
[9]Enter total new and/or replaced impervious surface (ft^2)	57,835
[10]**Regulated Hydromodification Management Project** – Regulated projects that create and/or replace 1 acre or more of impervious surface. A project that does not increase impervious surface area over the pre-project condition is not a hydromodification management project.	X
[11]Enter total new and/or replaced impervious surface (ft^2)	57,835

Section 2 Small Projects

Form 2-1 Site Assessment and Layout Documentation

	Has this Item been considered in the Site Layout and depicted in the Site Plan?	
	Yes	**Not Applicable (Include brief explaination)**
Define the development envelope and protected areas, identifying areas that are most suitable for development and areas to be landscaped , or left undisturbed, and used for infiltration.	X	
Minimize overall impervious coverage (paving and roofs) of the site.	X	
Set back development from creeks, wetlands, and riparian habitats in accordance with local ordinances.	X	
Preserve significant trees and native vegetation.	X	
Conform site layout along natural landforms.	X	
Avoid excessive grading and disturbance of vegetation and soils and stabilize disturbed areas.	X	
Replicate the site's natural drainage patterns.	X	

Attach a Site Plan that incorporates the applicable considerations above. Ensure that the following items are included in the Site Plan:

Site Boundary
Topographic data with 1 ft. contours (5 ft.contours are acceptable on steeper sites).
Existing natural hydrologic features (depressions, watercourses, wetlands, riparian corridors)
Environmentally sensitive areas and areas to be preserved.
Proposed locations and footprints of improvements creating new, or replaced, impervious surfaces
Proposed site drainage with flow directions and site run-on and discharge locations
Proposed Site Design Measures to reduce runoff

Form 2-2 Runoff Reduction Calculator for Site Design Measures on Small Projects

[1] Project Site Elevation (ft. above seal level)	N/A			
Site Design Measure	**Runoff Reduction Parameters**			**Runoff Reduction (ft^3)**
[2] Adjacent/On-Site Stream Setbacks and Buffers	A_{imp} (ft^2)	*impervious drainage area*		0
	V_{85} (in)	*runoff volume from 85th percentile, 24-hour storm*	1.0	
[3] Soil Quality Improvement and Maintenance	A_{pond} (ft^2)	*ponding area*		0
	D_{pond} (ft)	*ponding depth*		
	A_{sa} (ft^2)	*soil amendment area*		
	D_{sa} (ft)	*depth of amended soil*		
	n	*porosity of amended soil*		
[4] Tree Planting and Preservation	n_e	*number of new evergreen trees*		0
	n_d	*number of new deciduous trees*		
	A_{tc} (ft^2)	*Canopy area of existing trees to remain on the property*		
	V_{85} (in)	*runoff volume from 85th percentile, 24-hour storm*	1.0	
[5] Rooftop and Impervious Area Disconnection	A_{imp} (ft^2)	*impervious drainage area*		0
	V_{85} (in)	*runoff volume from 85th percentile, 24-hour storm*	1.0	
[6] Porous Pavement	A_{res} (ft^2)	*area of gravel storage layer*		0
	D_{res} (ft)	*depth of gravel storage layer*		
	n_{agg}	*porosity of aggregate*		
	C	*efficiency factor*		
[7] Vegetated Swales	A_{imp} (ft^2)	*impervious drainage area*		0
	V_{85} (in)	*runoff volume from 85th percentile, 24-hour storm*	1.0	
[8] Rain Barrels and Cisterns	N	*number of rain barrels and/or cisterns*		0
	V_a (ft^3)	*volume of each rain barrel and/or cistern*		
[9] Total Volume Reduction (ft^3)				**0**
[10] Effective Treated Impervious Area (ft^2)				**0**

85th Percentile, 24 Hour Design Storm Depth

Elevation <500 feet = 0.9 inch

Elevation 500-1,000 feet = 1.0 inch

Elevation 1,000-1,500 feet = 1.1 inch

Section 3 Regulated Projects

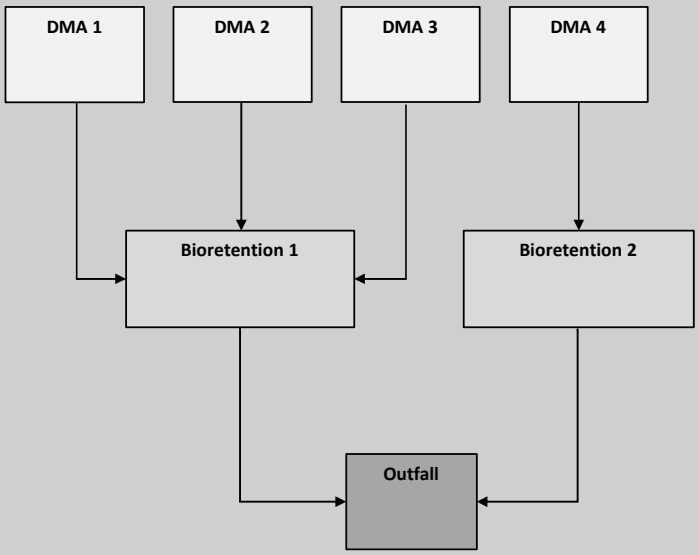
Section 3 forms are to be completed for all Regulated Projects.

Form 3-1 Site Location and Hydrologic Features

Site coordinates: *Take GPS measurement at approximate center of site*	[1] Latitude	[2] Longitude	[3] Elevation (ft. above sea level)	[4] 85th Percentile, 24 Hour Design Storm Depth (in):
	38°45'08.05"N.	121°22'57.74"W.	100	0.9

[5] Receiving waters *Name of stream, lake or other downstream waterbody to which the site runoff eventually drains*	Curry Creek
[6] 303(d) listed pollutants of concern *Refer to State Water Resources Control Board website* www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/#impaired	None
[7] Is Project going to be phased? *If yes, ensure that the SWQP evaluates each phase with distinct DMAs, requiring LID BMPs to address runoff at time of completion*	No

[8] *Use this form to show a conceptual schematic depicting DMAs and conveyance features connecting DMAs to the site outlet(s). An example is provided below that can be modified for the proposed project or a drawing clearly showing DMAs and flow routing may be attached.*



Form 3-2 Site Assessment and Layout Documentation

	Has this Item been considered in the Site Layout and depicted in the Site Plan?	
	Yes	**Not Applicable (Include brief explanation)**
Define the development envelope and protected areas, identifying areas that are most suitable for development areas to be left undisturbed.	X	
Concentrate development on portions of the site with less permeable soils and preserve areas that can promote infiltration.	X	
Limit overall impervious coverage of the site with paving and roofs.	X	
Set back development from creeks, wetlands, and riparian habitats.	X	
Preserve significant trees.	X	
Conform site layout along natural landforms.	X	
Avoid excessive grading and disturbance of vegetation and soils.	X	
Replicate the site's natural drainage patterns.	X	
Detain and retain runoff throughout the site.	X	

Attach a Site Plan that incorporates the applicable considerations above. Ensure that the following items are included in the Site Plan:

Site Boundary
Soil types and areal extents, test pit and infiltration test locations
Topographic data with 1 ft. contours
Existing natural hydrologic features (depressions, watercourses, wetlands, riparian corridors)
Environmentally sensitive areas and areas to be preserved.
Proposed locations and footprints of improvements creating new, or replaced, impervious surfaces
Potential pollutant sources and locations
Entire site divided into separate DMAs with unique identifiers
Existing and proposed site drainage network with flow directions and site run-on and discharge locations
Proposed design features and surface treatments used to minimize imperviousness and reduce runoff
Proposed locations and footprints of treatment and hydromodification management facilities
Design features for managing authorized non-stormwater discharges
Areas of soil and/or groundwater contamination
Existing utilities and easements
Maintenance areas

Form 3-3 Source Control Measures			
Potential Pollutant Generating Activity or Source	Check One		Describe the source control measures to be implemented for each potential pollutant generating activity or source present on the project as listed in Appendix C and in the CASQA Fact Sheets. Include any special features, materials, or methods of construction that will be used.
	Present	Not Applicable	
Accidental spills or leaks	☑	☐	
Interior floor drains	☑	☐	
Parking/storage areas and maintenance	☐	☑	
Indoor and structural pest control	☐	☑	
Pools, spas, ponds, decorative fountains, and other water features	☐	☑	
Landscape/outdoor pesticide use	☑	☐	
Restaurants, grocery stores, and other food service operations	☑	☐	
Refuse areas	☑	☐	
Industrial Processes	☐	☑	
Outdoor storage of equipment or materials	☐	☑	
Vehicle and equipment cleaning	☐	☑	
Vehicle and equipment repair and maintenance	☐	☑	
Fuel dispensing areas	☑	☐	
Loading docks	☐	☑	
Fire sprinkler test water	☑	☐	
Drain or wash water from boiler drain lines, condensate drain lines, rooftop equipment, drainage sumps, and other sources	☑	☐	
Unauthorized non-storm water discharges	☐	☑	
Building and grounds maintenance	☑	☐	

The source control measures identified in this table shall be designed consistent with recommendations from the CASQA Stormwater BMP Handbook for New Development and Redevelopment[1], or from another equivalent manual.

[1] California Stormwater BMP Handbook New Development and Redevelopment. California Stormwater Quality Association (CASQA). January 2003.

Form 3-4 Runoff Reduction Calculator for Site Design Measures on Regulated P

[1]DMA ID No.			1		2		
Site Design Measure	**Runoff Reduction Parameters**			**Runoff Reduction (ft^3)**		**Runoff Reduction (ft^3)**	
[2] Adjacent/On-Site Stream Setbacks and Buffers	A_{imp} (ft^2)	*impervious drainage area*		0		0	
	V_{85} (in)	*runoff volume from 85th percentile, 24-hour storm*	0.8		0.8		0.8
[3] Soil Quality Improvement and Maintenance	A_{pond} (ft^2)	*ponding area*		0		0	
	D_{pond} (ft)	*ponding depth*					
	A_{sa} (ft^2)	*soil amendment area*					
	D_{sa} (ft)	*depth of amended soil*					
	n	*porosity of amended soil*					
[4] Tree Planting and Preservation	n_e	*number of new evergreen trees*		0		0	
	n_d	*number of new deciduous trees*					
	A_{tc} (ft^2)	*canopy area of existing trees to remain on the property*					
	V_{85} (in)	*runoff volume from 85th percentile, 24-hour storm*	0.8		0.8		0.8
[5] Rooftop and Impervious Area Disconnection	A_{imp} (ft^2)	*impervious drainage area*		0		0	
	V_{85} (in)	*runoff volume from 85th percentile, 24-hour storm*	0.8		0.8		0.8

Form 3-5 Computation of Water Quality Design Criteria for Stormw

DMA ID No.	1	2	3	4	5	6	7	8	9
[1]Total impervious area requiring treatment	54650	1900	1285						
[2] Impervious area untreated by Site Design Measures (ft^2) *Item 1 – Form 3-4 Item 11*	54650	1900	1285	0	0	0	0	0	0
[3]Additional pervious area draining to BMP (ft^2)	14819	11233	10109						
[4] Composite DMA Runoff Coefficient (Rc) *Enter area weighted composite runoff coefficient representing entire DMA*	0.80	0.30	0.53						
[5] Water Quality Volume (WQV) (ft^3) *WQV = 1/12 * [Item 2 + Item 3) *Item 4] * Unit WQV*	3010	213	327	0	0	0	0	0	0
[6] Water Quality Flow (WQF) (cfs) *WQF = 1/43,200 * [0.2* (Item 2 + Item 3) * Item4]*	0.257	0.018	0.028	0.000	0.000	0.000	0.000	0.000	0.000

DMA ID No.	23	24	25	26	27	28	29	30	31
[1]Total impervious area requiring treatment									
[2] Impervious area untreated by Site Design Measures (ft^2) *Item 1 – Form 3-4 Item 11*	0	0	0	0	0	0	0	0	0
[3]Additional pervious area draining to BMP (ft^2)									
[4] Composite DMA Runoff Coefficient (Rc) *Enter area weighted composite runoff coefficient representing entire DMA*									
[5] Water Quality Volume (WQV) (ft^3) *WQV = 1/12 * [Item 2 + Item 3) *Item 4] * Unit WQV*	0	0	0	0	0	0	0	0	0
[6] Water Quality Flow (WQF) (cfs) *WQF = 1/43,200 * [0.2* (Item 2 + Item 3) * Item4]*	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Form 3-6 Volume-Based Infiltrating Bioretention Measures

[1]**DMA ID No.** *If combining multiple DMAs from Form 3-5, enter a new unique DMA ID No.*			
[2]WQV (ft^3) *Item 5 in Form 3-5* *If combining multiple DMAs from Form 3-5, enter the sum of their respective WQVs.*			
[3]Surface Loading Rate *Maximum 5.0 in/hr*			
[4]BMP Surface Area (ft^2) *Top of BMP*			
[5]Infiltration rate of underlying soils (in/hr)			
[6]Maximum ponding depth (ft) *BMP specific, see BMP design details*			
[7]Ponding Depth (ft) d_{BMP} *= Minimum of (1/12 * Item 5 * 48 hrs) or Item 6*	-	-	-
[8]Infiltrating surface area, SA_{BMP} (ft^2) *Bottom of BMP*			
[9]Planting media depth, d_{media} (ft)			
[10]Planting media porosity			
[11]Gravel depth, d_{media} (ft) *Only included in certain BMP types*			
[12]Gravel porosity			
[13]Retention Volume (ft^3) $V_{retention}$ *= Item 8 * [Item7 + (Item 9 * Item 10) + (Item 11 * Item 12) + (1.5* (Item 5 / 12))]*	-	-	-
[14]Untreated Volume (ft^3) $V_{untreated}$ *= Item 2 – Item 13* *If greater than zero, adjust BMP sizing variables and re-compute retention volume*	0	0	0
[15] Treated Flow Rate (ft^3/s) $Q_{treated}$ *= 1/43,200*(Item 3 * Item 4)*	0.0000	0.0000	0.0000
[16]Total Treated Flow Rate for Project (ft^3/s) Q_{total} *= Sum of Item 15 for all DMAs*			
[17]Is WQV for each DMA treated on-site?	**Yes**		**No**

Form 3-7 Flow-Through Planters, Tree Box and Media Filters				
[1]**DMA ID No.** *If combining multiple DMAs from Form 3-5, enter a new unique DMA ID No.*	**1**	**2**	**3**	
[2]WQF (ft3/s) *Item 6 in Form 3-5* *If combining multiple DMAs from Form 3-5, enter the sum of their respective WQFs.*	0.2570	0.0180	0.0028	
[3]Surface Loading Rate *Maximum 5.0 in/hr*				
[4]Maximum Ponding Depth (ft) *BMP Specific, see BMP design details*				
[5]Soil/Media Surface Area (ft^2) *Top of BMP*				
[6]Soil/Media Depth (ft)				
[7]Soil/Media porosity				
[8]Gravel Depth (ft)				
[9]Gravel porosity				
[10]Detention Volume (ft^3) *Vd = Item 5 * [Item4 + (Item 6 * Item 7) + (Item 8 * Item 9) + (3* (Item 3 / 12))]*	0.00	0.00	0.00	0.00
[11]Manufacturers' specified flow rate for proprietary devices (ft3/s) (attach a copy of the product specifications)	0.2600			
[12] Treated Flow Rate (ft^3/s) $Q_{treated}$ *= 1/43,200*(Item 3 * Item 5) or Item 11*	0.2600	0.0000	0.0000	0.0000
[13]Untreated Flow Rate (ft^3/s) $Q_{untreated}$ *= Item 2 - Item 12* *If greater than zero, adjust BMP sizing variables and re-compute treated flow*	0.0000	0.0180	0.0028	0.0000
[14]Total Treated Flow Rate for Project (ft^3/s) Q_{total} *= Sum of Item 12 for all DMAs*	0.26			
[15] Is WQF for each DMA treated on-site?	**Yes**		**No**	**X**

Section 4
Regulated Hydromodification Management Projects

Form 4-1 Peak Runoff Response Time

(Complete Section 4 forms for Regulated Hydromodification Projects only)

Determine total runoff response time for pre- and post-construction conditions at each project outlet.

Variables	Pre-construction DMAs to Project Outlet				Post-construction DMAs to Project Outlet			
	1	2	3	4	1	2	3	4
[1]Length of longest overland flow path *Not to exceed 100 ft*	100				62	100	100	
[2]Slope of overland flow path (ft/ft)	0.0064				0.0180	0.0050	0.0050	
[3]Manning's roughness coefficient for overland flow surface *See Table 5-5 of the Placer County SWMM*	0.4000				0.1100	0.1100	0.1100	
[4]Overland flow response time (min) $(0.355*(\text{Item 1}*\text{Item 3})^{0.6})/(\text{Item 2}^{0.3})$	15	-	-	-	4	7	7	-
[5]Hydrologic Soil Group *Refer to Section 3.1.1. or NRCS Web Soil Survey*	D				D	D	D	
[6]Current Land Cover Type(s) *Select from categories shown in Table 5-3 of the SWMM*	OPEN SPACE				PAVED	PAVED	PAVED	
[7]Pervious Area Condition: *Based on the extent of vegetated cover Good >75%; Fair 50-75%; Poor <50% Attach photos of site to support rating*	POOR				POOR	POOR	POOR	
[8]Infiltration Rate (in/hr) *Refer to Table 5-3 of the SWMM using Items 3, 4, and 5 above or obtain site specific field measurements (See Section 3.1.1)*	0.06				0.03	0.03	0.03	
[9]Length of collector flow (ft)	174				606	156	168	
[10]Cross-sectional area of collector flow facility (ft^2)	1				20	20	20	
[11]Wetted perimeter of collector flow facility (ft)	4				1	1	1	
[12]Manning's roughness of collector flow facility	0.4000				0.0130	0.1100	0.1100	
[13]Slope of collector flow facility (ft/ft)	0.0064				0.0050	0.0050	0.0050	
[14]Channel flow velocity (ft/sec) $V = (1.49 / \text{Item 12}) * (\text{Item 10}/\text{Item 11})^{\wedge 0.67} * (\text{Item 13})^{\wedge 0.5}$	0.1	-	-	-	52.2	7.1	7.1	-
[15]Collector flow facility response time (min) $T_c = \text{Item 9} / (\text{Item 14} * 60)$	38.9	-	-	-	0.2	0.4	0.4	-
[16]Total runoff response time or T_t (min) $T_t = \text{Item 4} + \text{Item 15}$	53.7	-	-	-	3.9	7.7	-	-

Form 4-2 Hydromodification Target for Peak Runoff								
Variables	Pre-construction DMAs to Project Outlet				Post-construction DMAs to Project Outlet			
	1	2	3	4	1	2	3	4
[1] Drainage Area (ft^2) *Sum of all outlet level DMAs should equal total project area.*	101,500				69,469	13,133	11,394	
[2] Impervious Area (ft^2) *Sum of all outlet level DMAs should equal total project impervious area.*	0				54,650	1,900	1,285	
[3] Rainfall depth for 2yr storm with duration equal to response time (in) *See Placer County SWMM Table 5-A-1 for elevation of site and duration equal to response time*	0.54				0.13	0.13	0.13	
[4] Unit peak runoff (cfs/acre) *q = 60/Form 4-1 Item 16 * Item 3*	0.60	-	-	-	2.04	1.01	-	-
[5] Infiltration factor (cfs/acre) *F_i = Form 4-1 Item 8 * (1 + 1 /(1.3 + 0.0005 * Form 3-1 Item 3))*	0.10	-	-	-	0.05	0.05	0.05	-
[6] Peak runoff from DMAs (cfs) *Q_p = Item 1 * Item 4 – Item 5 * (Item 1 - Item 2)*	1.17	-	-	-	3.26	0.29	(0.01)	-
[7] Total Pre-Project Peak Runof (ft^3/s) *Q_{total} = Sum of Item 6 for all Pre-construction DMAs*	1.17							
[8] Is the total post-project peak runoff equal to or less than the total pre-project peak runoff? *Yes, if Item 7 is greater than or equal to the sum of the Total Treated Flow Rates from Form 3-6 Item 16 and 3-7 Item 12.*	**YES**							

Form 4-3 Detention Volumes for Hydromodification Management

	Post-construction DMAs to Project Outlet			
	1	**2**	**3**	**4**
[1] Land cover and hydrologic condition *See NRCD TR-55 Manual Table 2-2 for types*	COMMERCIAL			
[2] Hydrologic Soil Group *Refer to Section 3.1.1. or NRCS Web Soil Survey*	D	D	D	-
[3] Drainage Area (A) (ft^2)	69,469	13,133	11,394	-
[4] Curve Number (CN) *Use Items 1 and 2 to select curve number from NRCS TR-55 Manual Table 2-2*	95	95	95	
[5] Post-development soil storage capacity, S (in): *S = (1000 / Item 4) – 10*	0.5	0.5	0.5	#DIV/0!
[6] Precipitation for 2-yr, 24-hr storm (in) *See Placer County SWMM Table 5-A-1 for elevation of site and 24-hr duration depths*	1.90	1.90	1.90	
[7] Post-developed runoff volume for 2-yr – 24-hour storm, V_{runoff} (ft^3): *V_{runoff} = Item 3 * (1 / 12) * [(Item 6 – 0.2 * Item 5)^2 / (Item 6 + 0.8 * Item 5)]*	8,034	1,519	1,318	#DIV/0!
[8] Attenuation Factor, $q_{out/in}$ (ratio of target outflow rate to peak inflow rate): *$q_{out/in}$ = Form 4-2 Item 6 Pre-Construction / Form 4-2 Item 6 Post-Construction*	0.36	0.00	0.00	#DIV/0!
[9] Equalization Factor, Vs/Vr (ratio of storage capacity to runoff volume) *Vs/Vr obtained using Item 8 and nomograph in Figure 6-1 of NRCS TR-55 Manual for Rainfall Type IA*	0.13	0.13	0.13	
[10] Runoff detention capacity to achieve hydromodification management criteria (ft^3) *$D_{hydromod}$ = Item 7 * Item 9*	1044	197	171	#DIV/0!
[11] Site Design Measure (SDM) Volume (ft^3): *Sum of Item 10 in Form 3-4 for all SDMs in this DMA.*	0	0	0	
[12] Bioretention Volume (ft3): *Sum of Item 14 in Form 3-6 for all bioretention measures in this DMA.*	0	0	0	
[13] Flow-Through Detention Volume (ft3): *Sum of Item 10 in Form 3-7 for all flow-through facilities in this DMA.*	0	0	0	
[14] Supplemental Detention Volume (ft^3):	3392	1129	1005	
[15] Combined Detention Volume in this DMA (ft^3): *Sum of Items 11 through 14*	3,392	1,129	1,005	-
[16] Is detention capacity to achieve hydromodification management criteria achieved at all project outlets? *Yes, if Item 10 is less than or equal to Item 15. If not provide additional storage capacity*	**Yes**		**No**	

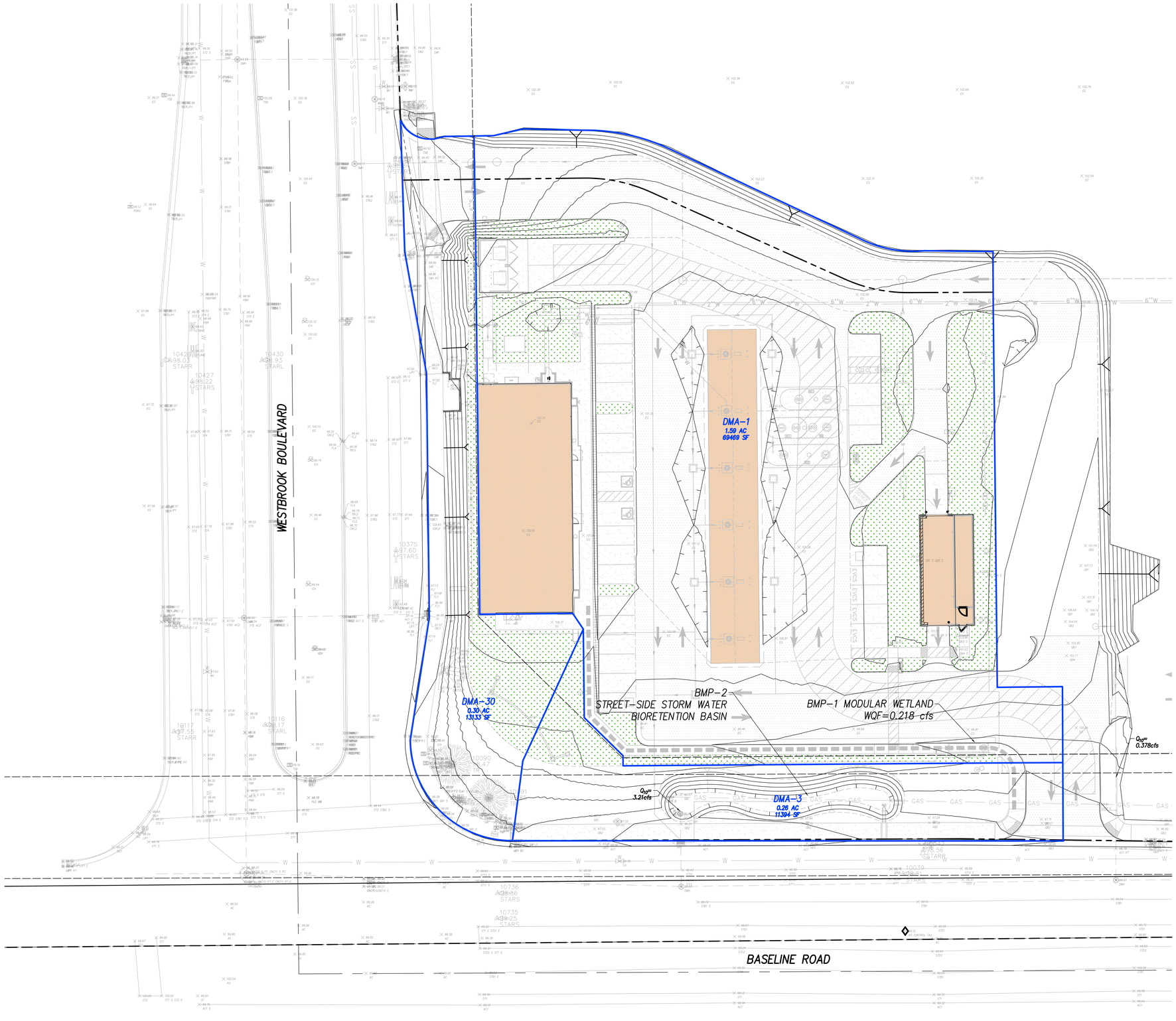
Form 5-1 BMP Inspection and Maintenance		
BMP	**Inspection Point and Frequency**	**Maintenance Activity Required**
Modular Wetland System	Monthly and after Rain Events	As required by manufacturer. Monthy and after major storm events.

Form 6-1 Post-Construction Stormwater BMPs

Following is a summary of all BMPs included in the Project design. This checklist must be included on the cover sheet of the Improvement Plans for all Regulated Projects.

BMP		Plan Sheet Number(s)
Structural Source Controls (list BMPs)	**Intets marked "NO DUMPING"**	**1**
	Landscaping shall be maintained without pesticides.	**1**
	Trash enclosure marked "NO DUMPING HAZARDOUS MATERIAL"	**1**
Site Design Measures	Stream Setbacks and Buffers	**N/A**
	Soil Quality Improvement and Maintenance	**N/A**
	Tree Planting and Preservation	**N/A**
	Rooftop and Impervious Area Disconnection	**N/A**
	Porous Pavement	**N/A**
	Vegetated Swales	**N/A**
	Rain Barrels and Cisterns	**N/A**
Stormwater Treatment and Baseline Hydromodification Measures	Bioretention with Infiltration	**N/A**
	Flow-Through Planters, Tree Box Filters and Media Filters	**N/A**
Hydromodification Management Measures	Supplemental Detention	**N/A**

ATTACHMENTS



20 10 0 20 40

SCALE: 1"=20'

SITE AREA:

87,556 SQ. FT. OR 2.01 AC. GROSS AND NET

DISTURBED AREA:

107,711 SQ. FT.

IMPERVIOUS AREA:

52,542 SQ. FT.

NON-STRUCTURAL SOURCE CONTROL BMPS

N1 – EDUCATION OF PROPERTY OWNERS, TENANTS, AND OCCUPANTS ON STORMWATER BMPS

N2 – ACTIVITY RESTRICTIONS

N3 – LANDSCAPE MANAGEMENT BMPS

N4 – BMP MAINTENANCE

N11 – LITTER/DEBRIS CONTROL PROGRAM

N12 – EMPLOYEE TRAINING

N15 – VACUUM SWEEPING OF PRIVATE STREETS AND PARKING LOTS

N17 – COMPLY WITH ALL OTHER APPLICABLE NPDES PERMITS

STRUCTURAL SOURCE CONTROL BMPS

S3 – DESIGN AND CONSTRUCT TRASH AND WASTE STORAGE AREAS TO REDUCE POLLUTION INTRODUCTION

S4 – USE EFFICIENT IRRIGATION SYSTEMS & LANDSCAPE DESIGN, WATER CONSERVATION, SMART CONTROLLERS AND SOURCE CONTROL

S5 – FINISH GRADE OF LANDSCAPE AREAS AT A MINIMUM OF 1–2 INCHES BELOW TOP OF CURB, SIDEWALK, OR PAVEMENT

HATCH LEGEND:

ROOF

PAVEMENT CONCRETE PAVEMENT

ASPHALT PAVEMENT

LANDSCAPE

	DMA 1		DMA 2		DMA 3	
	ACRES	SF	ACRES	SF	ACRES	SF
CONCRETE		12600		1900		1285
PAVEMENT		31450		0		0
ROOF		10600				
TOTAL IMPERVIOUS AREA		54650	78.67%	1900	14.47%	1285	11.28%
LANDSCAPE		14,819		11,233		10,109	
TOTAL PERVIOUS AREA		14819	21.33%	11233	85.53%	10109	88.72%
TOTAL AREA	1.59	69,469	0.30	13,133	0.26	11,394	

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#235
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DRAWING ISSUE RECORD

DATE	DESCRIPTION

REVISION RECORD

NO.	DATE	DESCRIPTION

PROJECT INFORMATION

CIRCLE K
NEC BASELINE RD. & WESTBROOK BLVD.
ROSEVILLE, CA

PROFESSIONAL SEAL

REGISTERED PROFESSIONAL ENGINEER
MATTHEW J. [illegible]
CIVIL
STATE OF CALIFORNIA

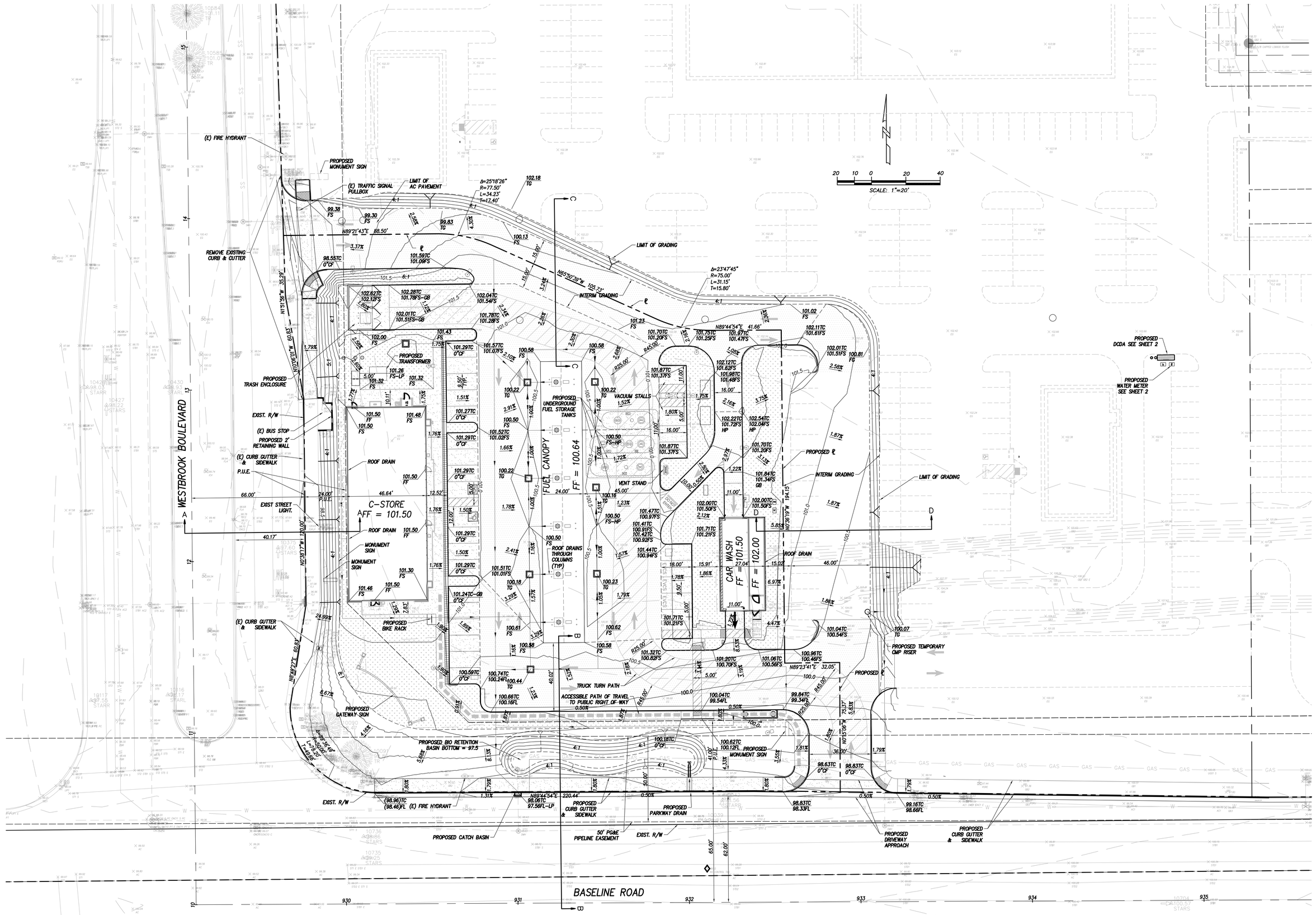
SHEET TITLE

PRELIMINARY WQMP SITE PLAN

SHEET NUMBER

1 of 1

BLUE PEAK JOB #: 0888
DATE: 1/10/2022



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REVISION RECORD

NO.	DATE	DESCRIPTION

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CIRCLE K
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ROSEVILLE, CA

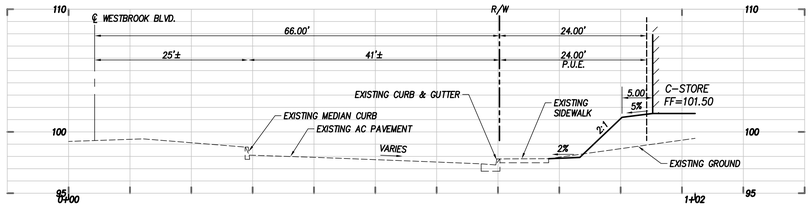
PROFESSIONAL SEAL

REGISTERED PROFESSIONAL ENGINEER
MATTHEW J. HAGEMEISTER
CIVIL
STATE OF CALIFORNIA

SHEET TITLE
PRELIMINARY PRECISE GRADING PLAN

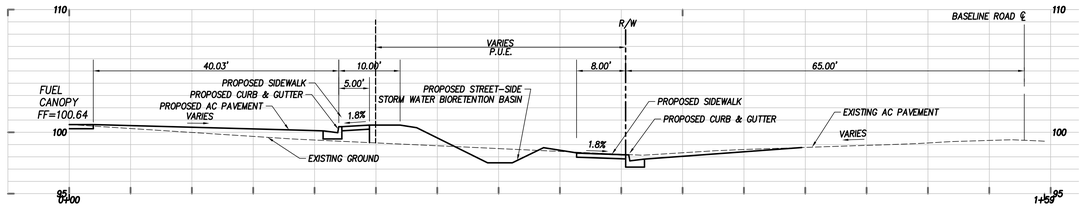
SHEET NUMBER
1 of 3

BLUE PEAK JOB #: 0888
DATE: 1/11/2022



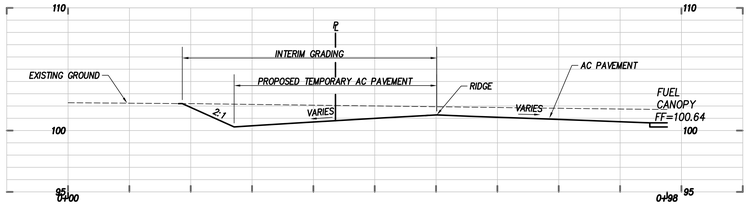
SECTION A–A

SCALE: HORIZ 1"=10' VERT 1"=5'



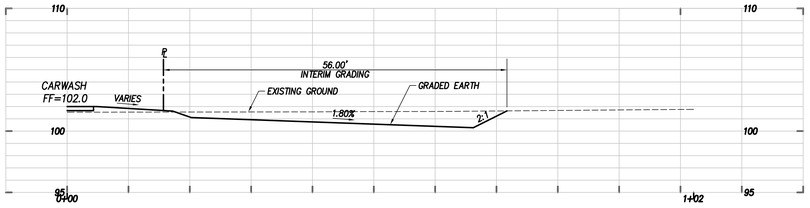
SECTION B–B

SCALE: HORIZ 1"=10' VERT 1"=5'



SECTION C–C

SCALE: HORIZ 1"=10' VERT 1"=5'



SECTION D–D

SCALE: HORIZ 1"=10' VERT 1"=5'

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DRAWING ISSUE RECORD

DATE	DESCRIPTION

REVISION RECORD

NO.	DATE	DESCRIPTION

PROJECT INFORMATION

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PROFESSIONAL SEAL

REGISTERED PROFESSIONAL ENGINEER
TIMOTHY M. TRIPP
No. 84000
CIVIL
STATE OF CALIFORNIA

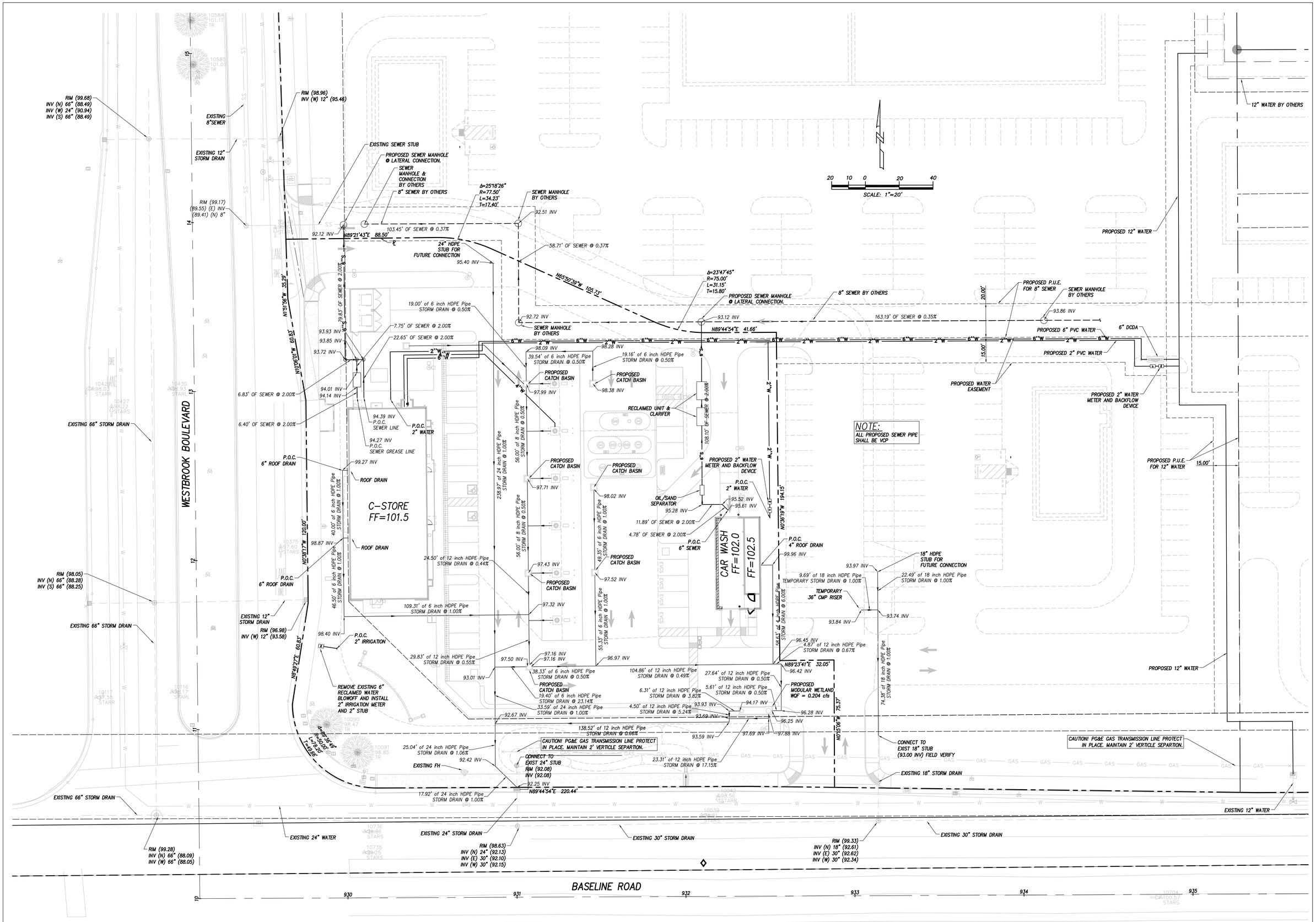
SHEET TITLE

GRADING SECTIONS

SHEET NUMBER

2 of 3

BLUE PEAK JOB #: 0888
DATE: 1/11/2022



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DRAWING ISSUE RECORD

DATE	DESCRIPTION

REVISION RECORD

NO.	DATE	DESCRIPTION

PROJECT INFORMATION

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ROSEVILLE, CA

PROFESSIONAL SEAL

REGISTERED PROFESSIONAL ENGINEER
BRIAN D. BOYCE
No. 76911
CIVIL
STATE OF CALIFORNIA

SHEET TITLE

PRELIMINARY WET UTILITY PLAN

SHEET NUMBER

3 of 3

BLUE PEAK JOB #: 0888
DATE: 1/11/2022

Form 3-1 Site Location and Hydrologic Features

Enter the project specific information to document the site location and elevation to calculate the 85th percentile, 24-hour design storm depth. For reference, the table below provides the 85th percentile, 24-hour design storm depths for three elevation increments within the West Placer region.

85th Percentile, 24-Hour Design Storm Depth
Elevation <500 feet = 0.9 inch
Elevation 500-1,000 feet = 1.0 inch
Elevation 1,000-1,500 feet = 1.1 inch

Identify the ultimate receiving waters and provide a general description of their location and distance in relation to the project site.

If the receiving waters are listed as impaired on the state 303(d) list, identify the pollutant(s) of concern. Refer to SWRCB website for the most current information:

www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/#impaired

For phased projects, the form clarifies requirements for defining DMAs and incorporating storm water control measures as each phase is developed.

This form is also used to define the project's DMAs, as described in Chapter 4. For projects with more than one DMA, a conceptual level schematic should be developed showing the DMAs that have been defined for the project and their hydrologic connections to the site discharge location(s). The conceptual DMA diagram in this form should be referenced when laying out DMAs and conveyances in the project's site plan as required in Form 3-2.

Form 3-2 LID Site Assessment and Layout Documentation

A site assessment must be conducted as early as possible in the project planning process to appropriately plan the site layout for the capture and treatment of storm water runoff. The goal is to develop a site layout that minimizes impacts to site hydrology and other environmental systems, functions, and processes.

The form lists a series of considerations that should be evaluated when developing the site layout. For each item, check the appropriate box to indicate that it has been considered and appropriately incorporated, or that it is not applicable (N/A) and provide a brief explanation (use a separate sheet if necessary). To complete this form, develop and attach a site plan that illustrates the proposed site layout. The site plan may consist of a preliminary or conceptual level design drawing, but it is a key requirement of the Preliminary SWQP described in Section 2.

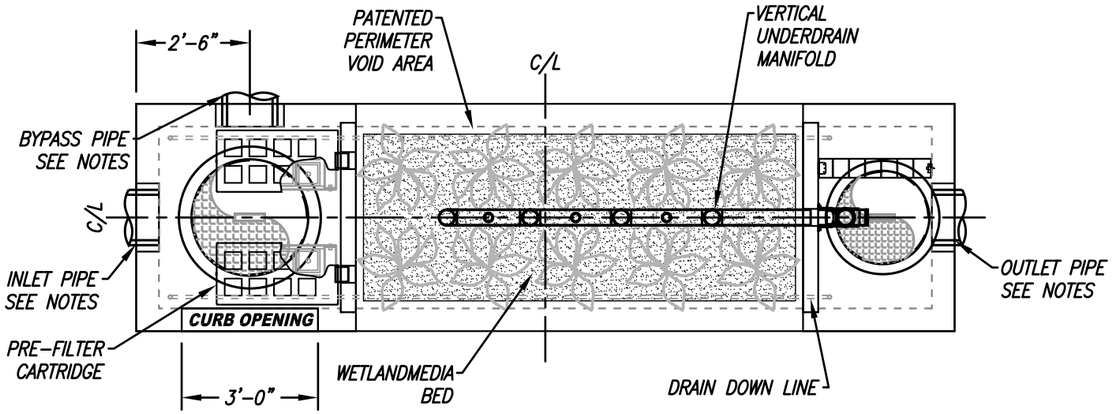
SITE SPECIFIC DATA			
PROJECT NUMBER		14181	
PROJECT NAME		CIRCLE K	
PROJECT LOCATION		ROSEVILLE, CA	
STRUCTURE ID		MWS UNIT	
TREATMENT REQUIRED			
VOLUME BASED (CF)		FLOW BASED (CFS)	
N/A		0.22	
TREATMENT HGL AVAILABLE (FT)			N/K
PEAK BYPASS REQUIRED (CFS) – IF APPLICABLE			2.08
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE	96.25	HDPE	12"
BYPASS PIPE	97.88	HDPE	12"
OUTLET PIPE	94.17	HDPE	12"
	PRETREATMENT	BIOFILTRATION	DISCHARGE
RIM ELEVATION	99.84	99.84	99.84
SURFACE LOAD	PEDESTRIAN	N/A	PEDESTRIAN
FRAME & COVER	ø30"	OPEN PLANTER	ø24"
WETLANDMEDIA VOLUME (CY)			7.27
ORIFICE SIZE (DIA. INCHES)			ø2.08"
NOTES: PRELIMINARY NOT FOR CONSTRUCTION. BYPASS PIPE ELEVATION SLIGHTLY ADJUSTED AND UNIT IS DEEPENED BY AN INCH TO ACCOMMODATE ADDITIONAL LOW FLOWS.			

INSTALLATION NOTES

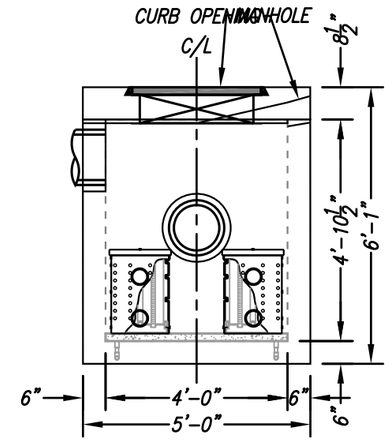
1. CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE SYSTEM AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURERS' SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURER'S CONTRACT.
2. UNIT MUST BE INSTALLED ON LEVEL BASE. MANUFACTURER RECOMMENDS A MINIMUM 6" LEVEL ROCK BASE UNLESS SPECIFIED BY THE PROJECT ENGINEER. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PROJECT ENGINEER'S RECOMMENDED BASE SPECIFICATIONS.
4. CONTRACTOR TO SUPPLY AND INSTALL ALL EXTERNAL CONNECTING PIPES. ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE (PIPES CANNOT INTRUDE BEYOND FLUSH). INVERT OF OUTFLOW PIPE MUST BE FLUSH WITH DISCHARGE CHAMBER FLOOR. ALL PIPES SHALL BE SEALED WATERTIGHT PER MANUFACTURER'S STANDARD CONNECTION DETAIL.
5. CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL PIPES, RISERS, MANHOLES, AND HATCHES. CONTRACTOR TO GROUT ALL MANHOLES AND HATCHES TO MATCH FINISHED SURFACE UNLESS SPECIFIED OTHERWISE.
6. VEGETATION SUPPLIED AND INSTALLED BY OTHERS. ALL UNITS WITH VEGETATION MUST HAVE DRIP OR SPRAY IRRIGATION SUPPLIED AND INSTALLED BY OTHERS.
7. CONTRACTOR RESPONSIBLE FOR CONTACTING BIO CLEAN FOR ACTIVATION OF UNIT. MANUFACTURER'S WARRANTY IS VOID WITHOUT PROPER ACTIVATION BY A BIO CLEAN REPRESENTATIVE.

GENERAL NOTES

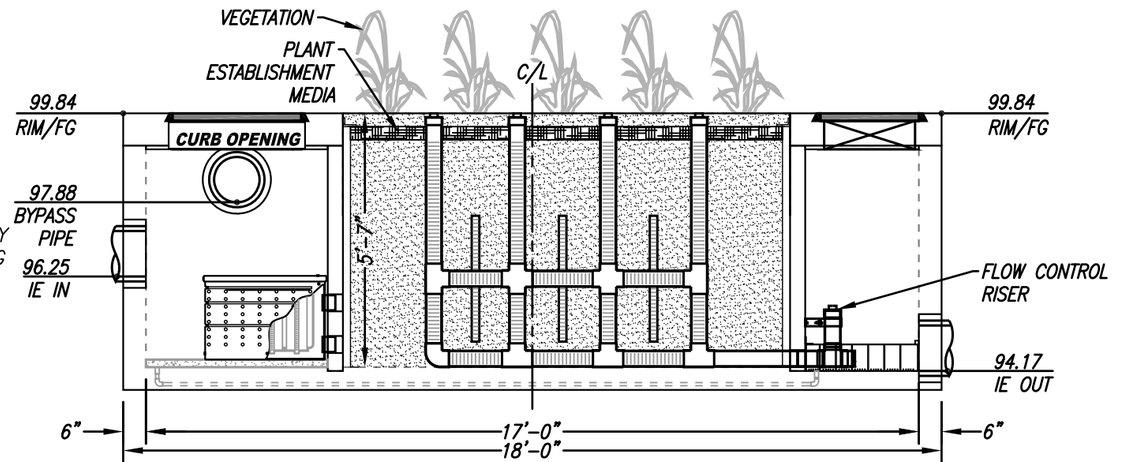
1. MANUFACTURER TO PROVIDE ALL MATERIALS UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS, ELEVATIONS, SPECIFICATIONS AND CAPACITIES ARE SUBJECT TO CHANGE. FOR PROJECT SPECIFIC DRAWINGS DETAILING EXACT DIMENSIONS, WEIGHTS AND ACCESSORIES PLEASE CONTACT BIO CLEAN.



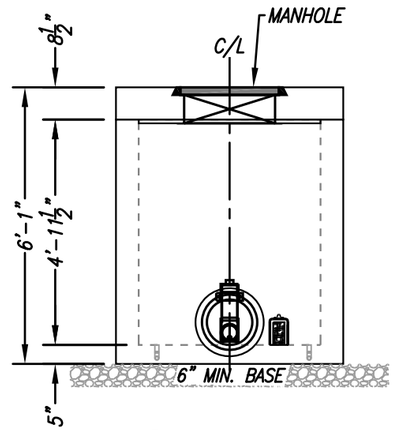
PLAN VIEW



LEFT END VIEW



ELEVATION VIEW



RIGHT END VIEW

INTERNAL BYPASS DISCLOSURE:

THE DESIGN AND CAPACITY OF THE PEAK CONVEYANCE METHOD TO BE REVIEWED AND APPROVED BY THE ENGINEER OF RECORD. HGL(S) AT PEAK FLOW SHALL BE ASSESSED TO ENSURE NO UPSTREAM FLOODING. PEAK HGL AND BYPASS CAPACITY SHOWN ON DRAWING ARE USED FOR GUIDANCE ONLY.

TREATMENT FLOW (CFS)	0.22
OPERATING HEAD (FT)	3.6
PRETREATMENT LOADING RATE (GPM/SF)	1.9
WETLAND MEDIA LOADING RATE (GPM/SF)	1.0

MODULAR WETLANDS
THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING US PATENTS: 7,435,262; 7,470,362; 7,674,378; 8,303,816; RELATED FOREIGN PATENTS OR OTHER PATENTS PENDING

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Bio Clean
A Forterra Company

MWS-L-4-17-5'-7"-C-HC
STORMWATER BIOFILTRATION SYSTEM
STANDARD DETAIL

11/23/21SSINGH

Bio Clean

A Forterra Company

Modular Wetlands® Linear

A Stormwater Biofiltration Solution

OVERVIEW

The Modular Wetlands® Linear (MWS Linear*) represents a pioneering breakthrough in stormwater technology as the only biofiltration system to utilize patented horizontal flow, allowing for a smaller footprint, higher treatment capacity, and a wide range of versatility. While most biofilters use little or no pretreatment, the Modular Wetlands Linear incorporates an advanced pretreatment chamber that includes separation and pre-filter boxes. In this chamber, sediment and hydrocarbons are removed from runoff before entering the biofiltration chamber, reducing maintenance costs and improving performance.

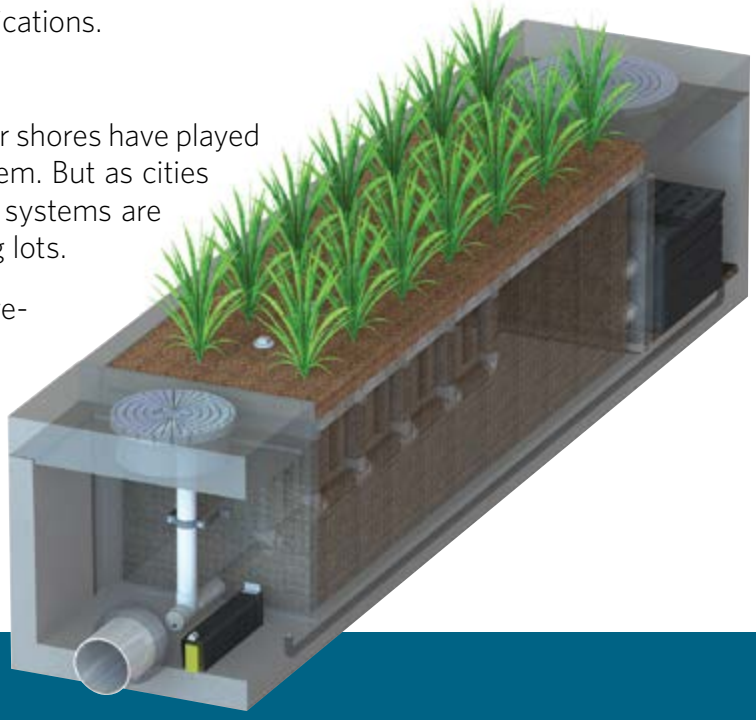
Horizontal flow also gives the system the unique ability to adapt to the environment through a variety of configurations, bypass orientations, and diversion applications.

The Urban Impact

For hundreds of years, natural wetlands surrounding our shores have played an integral role as nature's stormwater treatment system. But as cities grow and develop, our environment's natural filtration systems are blanketed with impervious roads, rooftops, and parking lots.

Bio Clean understands this loss and has spent years re-establishing nature's presence in urban areas, and rejuvenating waterways with the Modular Wetlands Linear.

*Also known as: Modular Wetlands®, Modular Wetlands® System Linear, Modwet™, or MWS Linear™.



PERFORMANCE

The Modular Wetlands® Linear continues to outperform other treatment methods with superior pollutant removal for TSS, heavy metals, nutrients, hydrocarbons, and bacteria. Since 2007 the Modular Wetlands Linear has been field tested on numerous sites across the country and is proven to effectively remove pollutants through a combination of physical, chemical, and biological filtration processes. In fact, the Modular Wetlands Linear harnesses some of the same biological processes found in natural wetlands in order to collect, transform, and remove even the most harmful pollutants.

66% REMOVAL OF DISSOLVED ZINC	**69%** REMOVAL OF TOTAL ZINC	**38%** REMOVAL OF DISSOLVED COPPER	**85%** REMOVAL OF TSS	**100%** REMOVAL OF TRASH
45% REMOVAL OF NITROGEN	**50%** REMOVAL OF TOTAL COPPER	**95%** REMOVAL OF MOTOR OIL	**67%** REMOVAL OF ORTHO PHOSPHORUS	**64%** REMOVAL OF TOTAL PHOSPHORUS

APPROVALS

The Modular Wetlands® Linear has successfully met years of challenging technical reviews and testing from some of the most prestigious and demanding agencies in the nation and perhaps the world.
Here is a list of some of the most high-profile approvals, certifications, and verifications from around the country.

Washington State Department of Ecology TAPE Approved

The Modular Wetlands Linear (MWS-Linear) is approved for General Use Level Designation (GULD) for Basic, Enhanced, and Phosphorus treatment at 1 gpm/ft^2 loading rate. The highest performing BMP on the market for all main pollutant categories.

California Water Resources Control Board, Full Capture Certification

The Modular Wetlands® Linear is the first biofiltration system to receive certification as a full capture trash treatment control device.

Virginia Department of Environmental Quality, Assignment

The Virginia Department of Environmental Quality assigned the Modular Wetlands Linear the highest phosphorus removal rating for manufactured treatment devices to meet the new Virginia Stormwater Management Program (VSMP) regulation technical criteria.

Maryland Department of the Environment, Approved ESD

Granted Environmental Site Design (ESD) status for new construction, redevelopment, and retrofitting when designed in accordance with the design manual.

MASTEP Evaluation

The University of Massachusetts at Amherst – Water Resources Research Center issued a technical evaluation report noting removal rates up to 84% TSS, 70% total phosphorus, 68.5% total zinc, and more.

Rhode Island Department of Environmental Management BMP Approval

Texas Commission on Environmental Quality (TCEQ) Approval

Atlanta Regional Commission Certification

ADVANTAGES

- HORIZONTAL FLOW BIOFILTRATION
- GREATER FILTER SURFACE AREA
- PRETREATMENT CHAMBER
- PATENTED PERIMETER VOID AREA
- FLOW CONTROL
- NO DEPRESSED PLANTER AREA
- AUTO DRAINDOWN MEANS NO MOSQUITO VECTOR

OPERATION

The Modular Wetlands® Linear is the most efficient and versatile biofiltration system on the market, and it is the only system with horizontal flow which:

- Improves performance
- Reduces footprint
- Minimizes maintenance

Figure 1 & Figure 2 illustrate the invaluable benefits of horizontal flow and the multiple treatment stages.

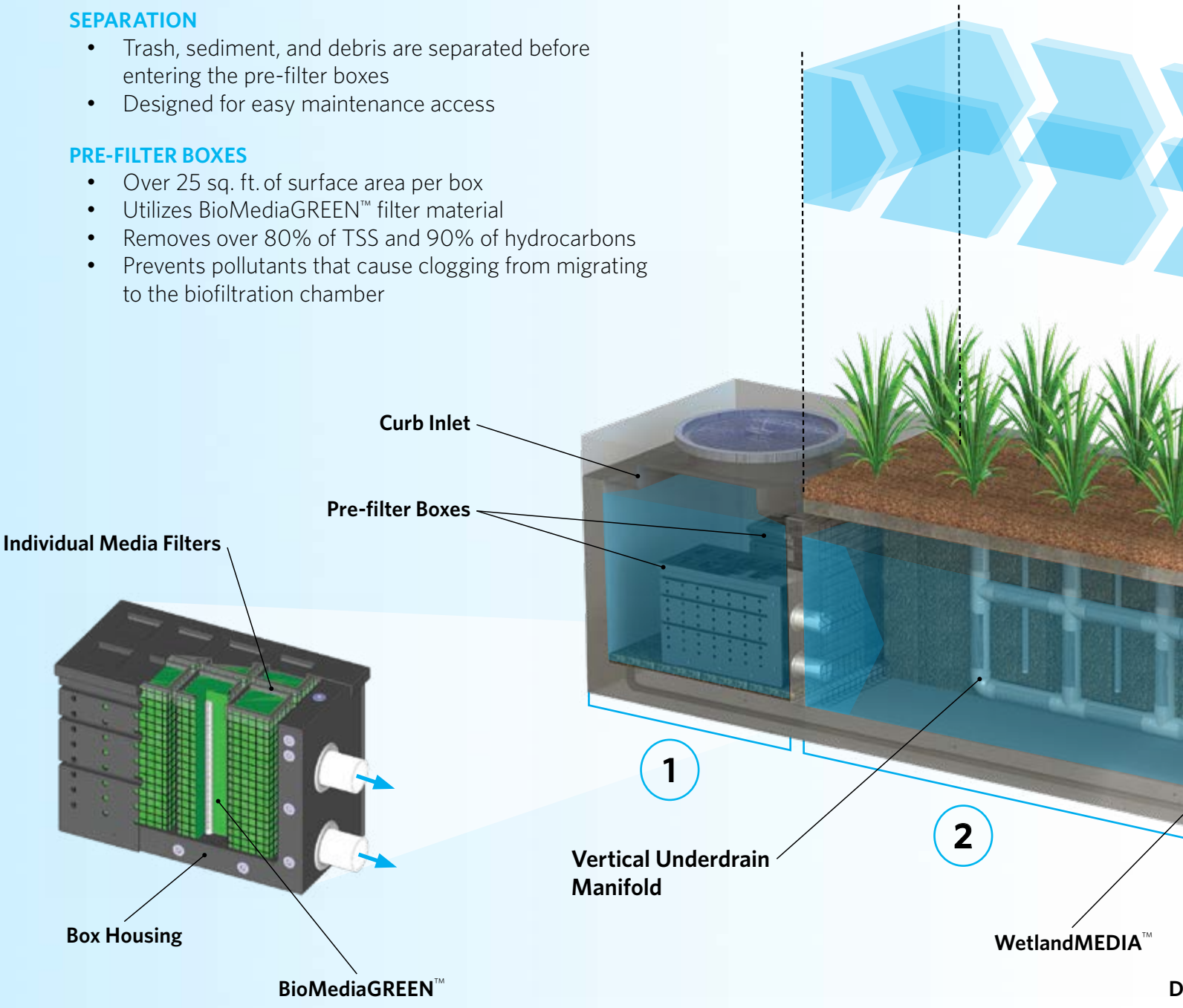
1 PRETREATMENT

SEPARATION

- Trash, sediment, and debris are separated before entering the pre-filter boxes
- Designed for easy maintenance access

PRE-FILTER BOXES

- Over 25 sq. ft. of surface area per box
- Utilizes BioMediaGREEN™ filter material
- Removes over 80% of TSS and 90% of hydrocarbons
- Prevents pollutants that cause clogging from migrating to the biofiltration chamber



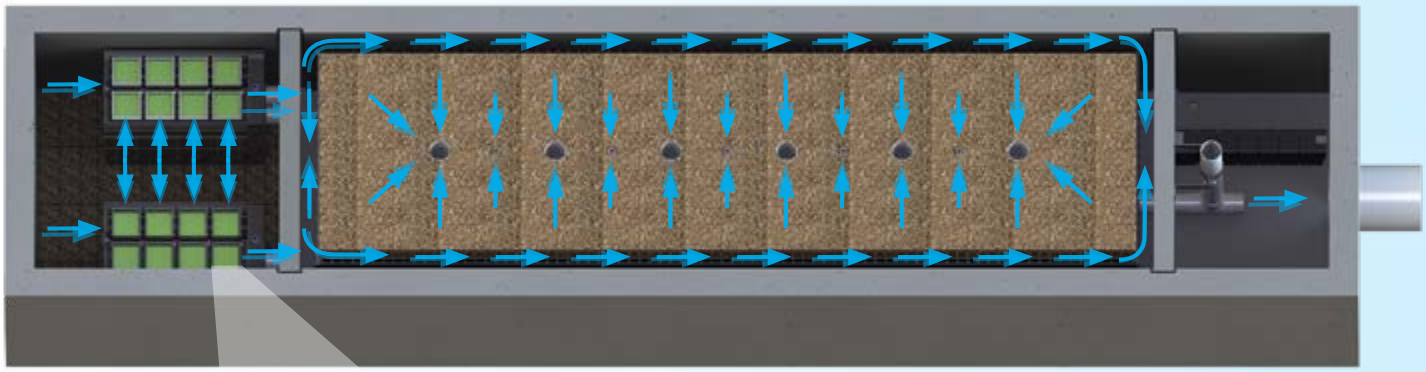


Figure 2,
Top View

2x to 3x more surface area than traditional downward flow bioretention systems.

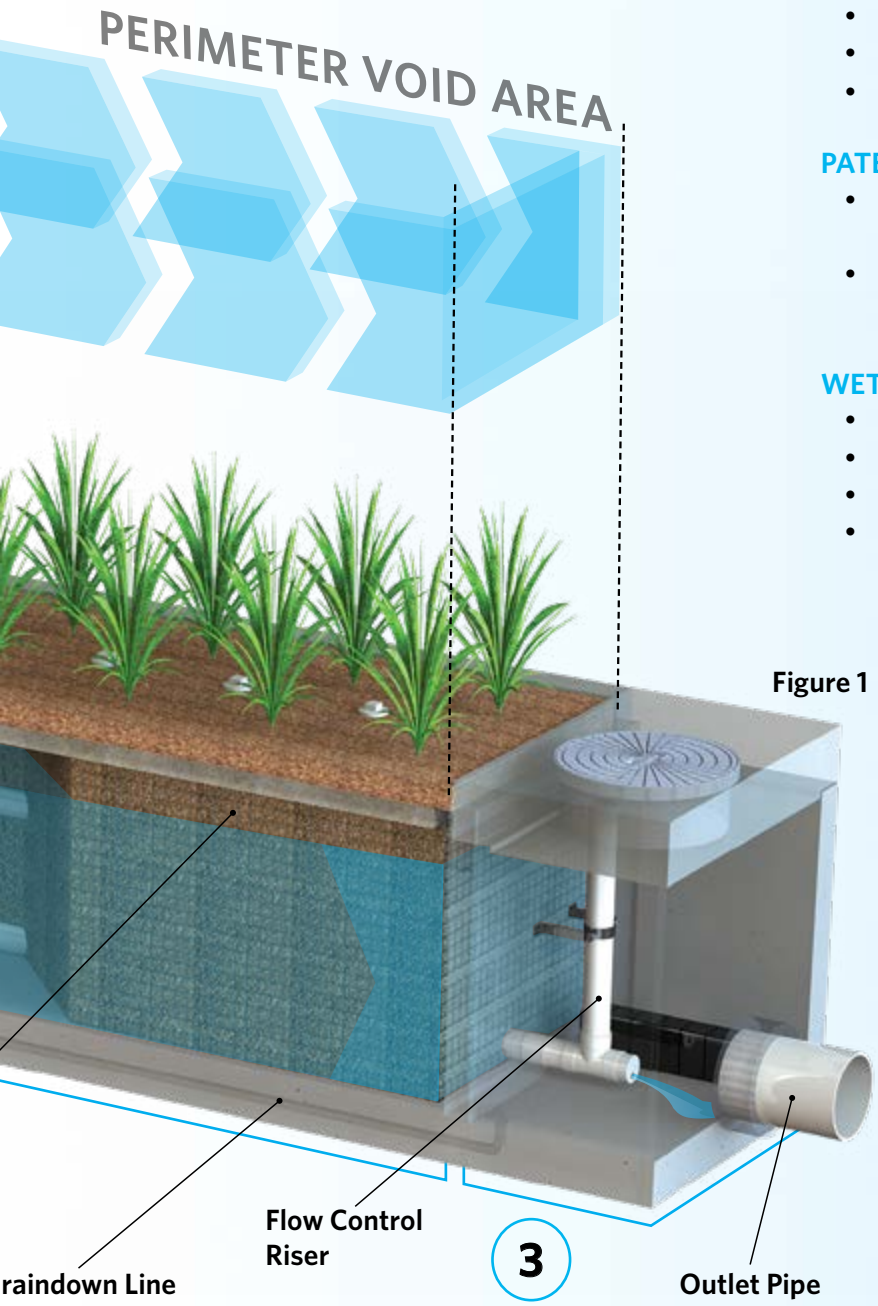


Figure 1

2 BIOFILTRATION

HORIZONTAL FLOW

- Less clogging than downward flow biofilters
- Water flow is subsurface
- Improves biological filtration

PATENTED PERIMETER VOID AREA

- Vertically extends void area between the walls and the WetlandMEDIA™ on all four sides
- Maximizes surface area of the media for higher treatment capacity

WETLANDMEDIA

- Contains no organics and removes phosphorus
- Greater surface area and 48% void space
- Maximum evapotranspiration
- High ion exchange capacity and lightweight

3 DISCHARGE

FLOW CONTROL

- Orifice plate controls flow of water through WetlandMEDIA™ to a level lower than the media's capacity
- Extends the life of the media and improves performance

DRAINDOWN FILTER

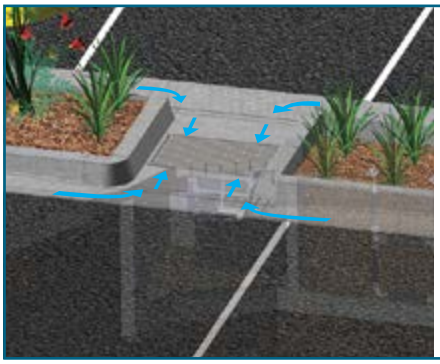
- The draindown is an optional feature that completely drains the pretreatment chamber
- Water that drains from the pretreatment chamber between storm events will be treated

CONFIGURATIONS

The Modular Wetlands® Linear is the preferred biofiltration system of civil engineers across the country due to its versatile design. This highly versatile system has available "pipe-in" options on most models, along with built-in curb or grated inlets for simple integration into your storm drain design.

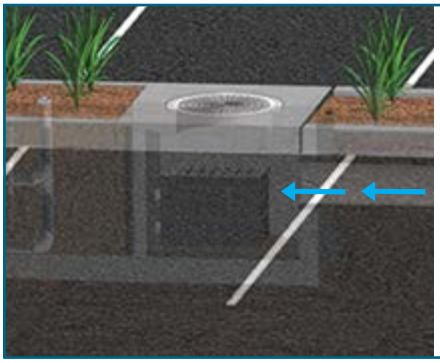
CURB TYPE

The Curb Type configuration accepts sheet flow through a curb opening and is commonly used along roadways and parking lots. It can be used in sump or flow-by conditions. Length of curb opening varies based on model and size.



GRATE TYPE

The Grate Type configuration offers the same features and benefits as the Curb Type but with a grated/drop inlet above the systems pretreatment chamber. It has the added benefit of allowing pedestrian access over the inlet. ADA-compliant grates are available to assure easy and safe access. The Grate Type can also be used in scenarios where runoff needs to be intercepted on both sides of landscape islands.



VAULT TYPE

The system's patented horizontal flow biofilter is able to accept inflow pipes directly into the pretreatment chamber, meaning the Modular Wetlands® can be used in end-of-the-line installations. This greatly improves feasibility over typical decentralized designs that are required with other biofiltration/ bioretention systems. Another benefit of the "pipe-in" design is the ability to install the system downstream of underground detention systems to meet water quality volume requirements.

DOWNSPOUT TYPE

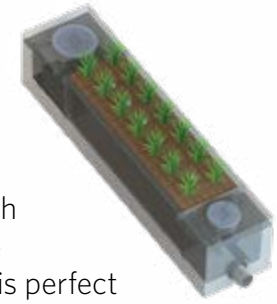
The Downspout Type is a variation of the Vault Type and is designed to accept a vertical downspout pipe from rooftop and podium areas. Some models have the option of utilizing an internal bypass, simplifying the overall design. The system can be installed as a raised planter, and the exterior can be stuccoed or covered with other finishes to match the look of adjacent buildings.

ORIENTATIONS

SIDE-BY-SIDE

The Side-By-Side orientation places the pretreatment and discharge chamber adjacent to one another with the biofiltration chamber running parallel on either side. This minimizes the system length, providing a highly compact footprint. It has been proven useful in situations such as streets with directly adjacent sidewalks, as half of the system can be placed under that sidewalk. This orientation also offers internal bypass options as discussed below.

END-TO-END



The End-To-End orientation places the pretreatment and discharge chambers on opposite ends of the biofiltration chamber, therefore minimizing the width of the system to 5 ft. (outside dimension). This orientation is perfect for linear projects and street retrofits where existing utilities and sidewalks limit the amount of space available for installation. One limitation of this orientation is that bypass must be external.

BYPASS

INTERNAL BYPASS WEIR (SIDE-BY-SIDE ONLY)

The Side-By-Side orientation places the pretreatment and discharge chambers adjacent to one another allowing for integration of internal bypass. The wall between these chambers can act as a bypass weir when flows exceed the system's treatment capacity, thus allowing bypass from the pretreatment chamber directly to the discharge chamber.

EXTERNAL DIVERSION WEIR STRUCTURE

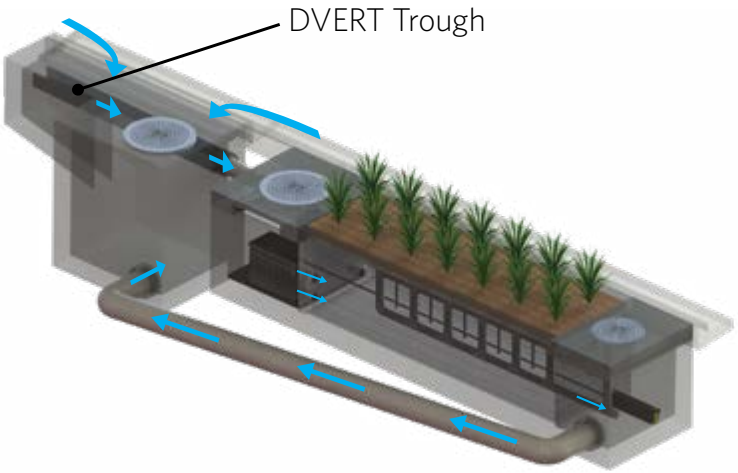
This traditional offline diversion method can be used with the Modular Wetlands® Linear in scenarios where runoff is being piped to the system. These simple and effective structures are generally configured with two outflow pipes. The first is a smaller pipe on the upstream side of the diversion weir - to divert low flows over to the MWS Linear for treatment. The second is the main pipe that receives water once the system has exceeded treatment capacity and water flows over the weir.

FLOW-BY-DESIGN

This method is one in which the system is placed just upstream of a standard curb or grate inlet to intercept the first flush. Higher flows simply pass by the MWS Linear and into the standard inlet downstream.

DVERT LOW-FLOW DIVERSION

This simple yet innovative diversion trough can be installed in existing or new curb and grate inlets to divert the first flush to the Modular Wetlands® Linear via pipe. It works similar to a rain gutter and is installed just below the opening into the inlet. It captures the low flows and channels them over



to a connecting pipe exiting out the wall of the inlet and leading to the MWS Linear. The DVERT is perfect for retrofit and green street applications that allow the system to be installed anywhere space is available.

SPECIFICATIONS

FLOW-BASED DESIGNS

The Modular Wetlands® System Linear can be used in stand-alone applications to meet treatment flow requirements, and since it is the only biofiltration system that can accept inflow pipes several feet below the surface, it can be used not only in decentralized design applications but also as a large central end-of-the-line application for maximum feasibility.

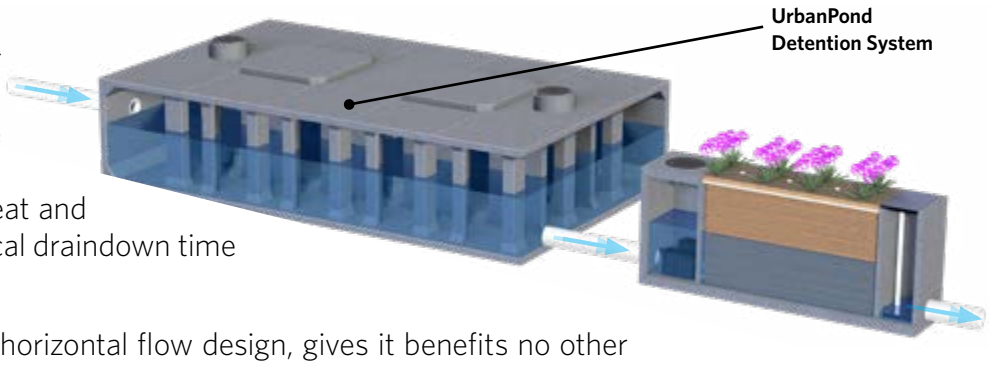
MODEL #	DIMENSIONS	WETLANDMEDIA SURFACE AREA (sq. ft.)	TREATMENT FLOW RATE (cfs)
MWS-L-4-4	4′ x 4′	23	0.052
MWS-L-4-6	4′ x 6′	32	0.073
MWS-L-4-8	4′ x 8′	50	0.115
MWS-L-4-13	4′ x 13′	63	0.144
MWS-L-4-15	4′ x 15′	76	0.175
MWS-L-4-17	4′ x 17′	90	0.206
MWS-L-4-19	4′ x 19′	103	0.237
MWS-L-4-21	4′ x 21′	117	0.268
MWS-L-6-8	6′ x 8′	64	0.147
MWS-L-8-8	8′ x 8′	100	0.230
MWS-L-8-12	8′ x 12′	151	0.346
MWS-L-8-16	8′ x 16′	201	0.462
MWS-L-8-20	8′ x 20′	252	0.577
MWS-L-8-24	8′ x 24′	302	0.693

VOLUME-BASED DESIGNS

HORIZONTAL FLOW BIOFILTRATION ADVANTAGE

URBANPOND™ PRESTORAGE

In the example above, the Modular Wetlands Linear is installed downstream of the UrbanPond storage system. The Modular Wetlands Linear is designed for the water quality volume and will treat and discharge the required volume within local draindown time requirements.



The Modular Wetlands Linear's unique horizontal flow design, gives it benefits no other biofilter has - the ability to be placed downstream of detention ponds, extended dry detention basins, underground storage systems and permeable paver reservoirs. The system's horizontal flow configuration and built-in orifice control allows it to be installed with just 6" of fall between inlet and outlet pipe for a simple connection to projects with shallow downstream tie-in points.

DESIGN SUPPORT

Volume control and hydromodification regulations are expanding the need to decrease the cost and size of your biofiltration system. Bio Clean will help you realize these cost savings with the Modular Wetlands Linear. Bio Clean engineers are aware of state and local regulations, and they are trained to provide you with superior support, so they can optimize a system to maximize feasibility.

ADVANTAGES

- LOWER COST THAN FLOW-BASED DESIGN
- MEETS LID REQUIREMENTS
- BUILT-IN ORIFICE CONTROL STRUCTURE
- WORKS WITH DEEP INSTALLATIONS

APPLICATIONS

The Modular Wetlands® System Linear has been successfully used on numerous new construction and retrofit projects. The system's superior versatility makes it beneficial for a wide range of stormwater and waste water applications - treating rooftops, streetscapes, parking lots, and industrial sites.

INDUSTRIAL

Many states enforce strict regulations for discharges from industrial sites. The Modular Wetlands® has helped various sites meet difficult EPA-mandated effluent limits for dissolved metals and other pollutants.

RESIDENTIAL

Low to high density developments can benefit from the versatile design of the Modular Wetlands®. The system can be used in both decentralized LID design and cost-effective end-of-the-line configurations.

STREETS

Street applications can be challenging due to limited space. The Modular Wetlands® is very adaptable, and it offers the smallest footprint to work around the constraints of existing utilities on retrofit projects.

PARKING LOTS

Parking lots are designed to maximize space and the Modular Wetlands'® 4 ft. standard planter width allows for easy integration into parking lot islands and other landscape medians.

COMMERCIAL

Compared to bioretention systems, the Modular Wetlands® can treat far more area in less space, meeting treatment and volume control requirements.

MIXED USE

The Modular Wetlands® can be installed as a raised planter to treat runoff from rooftops or patios, making it perfect for sustainable "live-work" spaces.

More applications include:

• Agriculture • Reuse • Low Impact Development • Waste Water

PLANT SELECTION

Abundant plants, trees, and grasses bring value and an aesthetic benefit to any urban setting, but those in the Modular Wetlands® System Linear do even more - they increase pollutant removal. What's not seen, but very important, is that below grade, the stormwater runoff/flow is being subjected to nature's secret weapon: a dynamic physical, chemical, and biological process working to break down and remove non-point source pollutants. The flow rate is controlled in the Modular Wetlands®, giving the plants more contact time so that pollutants are more successfully decomposed, volatilized, and incorporated into the biomass of the Modular Wetlands'® micro/macro flora and fauna.

A wide range of plants are suitable for use in the Modular Wetlands®, but selections vary by location and climate. View suitable plants by visiting biocleanenvironmental.com/plants.

INSTALLATION

The Modular Wetlands® is simple, easy to install, and has a space-efficient design that offers lower excavation and installation costs compared to traditional tree-box type systems. The structure of the system resembles precast catch basin or utility vaults and is installed in a similar fashion.

The system is delivered fully assembled for quick installation. Generally, the structure can be unloaded and set in place in 15 minutes. Our experienced team of field technicians is available to supervise installations and provide technical support.

MAINTENANCE

Reduce your maintenance costs, man hours, and materials with the Modular Wetlands®. Unlike other biofiltration systems that provide no pretreatment, the Modular Wetlands® is a self-contained treatment train which incorporates simple and effective pretreatment.

Maintenance requirements for the biofilter itself are almost completely eliminated, as the pretreatment chamber removes and isolates trash, sediments, and hydrocarbons. What's left is the simple maintenance of an easily accessible pretreatment chamber that can be cleaned by hand or with a standard vac truck. Only periodic replacement of low-cost media in the pre-filter cartridges is required for long-term operation, and there is absolutely no need to replace expensive biofiltration media.

Bio Clean
A Forterra Company

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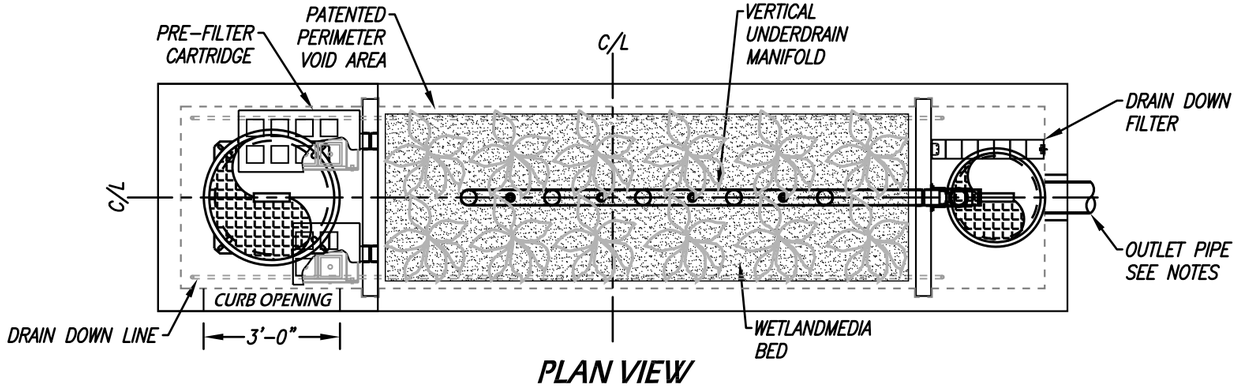
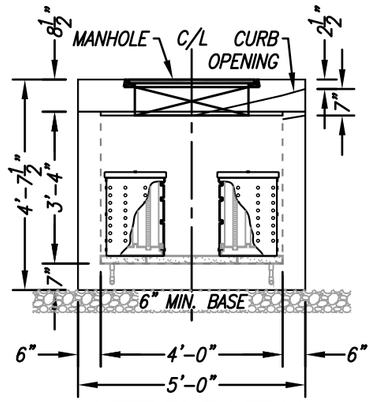
855.566.3938
stormwater@forterrabp.com
biocleanenvironmental.com

0407_2021

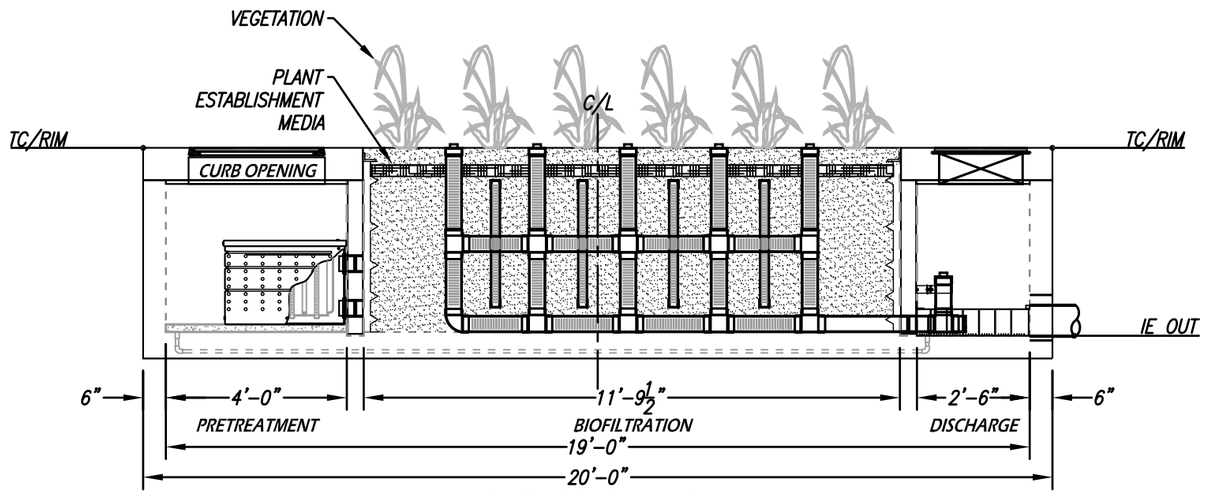
SITE SPECIFIC DATA			
PROJECT NAME			
PROJECT LOCATION			
STRUCTURE ID			
TREATMENT REQUIRED			
VOLUME BASED (CF)		FLOW BASED (CFS)	
TREATMENT HGL AVAILABLE (FT)			
PEAK BYPASS REQUIRED (CFS) – IF APPLICABLE			
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1			
INLET PIPE 2			
OUTLET PIPE			
	PRETREATMENT	BIOFILTRATION	DISCHARGE
RIM ELEVATION			
SURFACE LOAD	PARKWAY	OPEN PLANTER	PARKWAY
FRAME & COVER	ø30"	N/A	ø24"
WETLANDMEDIA VOLUME (CY)			6.52
WETLANDMEDIA DELIVERY METHOD			TBD
ORIFICE SIZE (DIA. INCHES)			ø2.20"
MAXIMUM PICK WEIGHT (LBS)			40000
NOTES:			



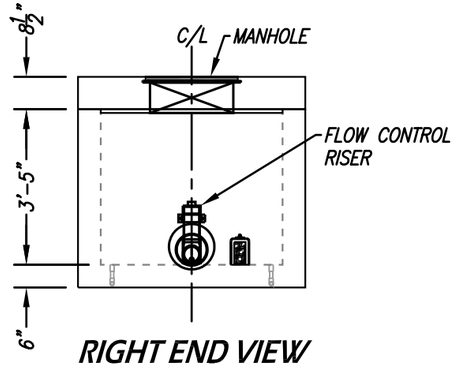
PLAN VIEW



LEFT END VIEW



ELEVATION VIEW



RIGHT END VIEW

INSTALLATION NOTES

1. CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE SYSTEM AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURERS SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURERS CONTRACT.
2. UNIT MUST BE INSTALLED ON LEVEL BASE. MANUFACTURER RECOMMENDS A MINIMUM 6" LEVEL ROCK BASE UNLESS SPECIFIED BY THE PROJECT ENGINEER. CONTRACTOR IS RESPONSIBLE TO VERIFY PROJECT ENGINEERS RECOMMENDED BASE SPECIFICATIONS.
3. ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE. (PIPES CANNOT INTRUDE BEYOND FLUSH). INVERT OF OUTFLOW PIPE MUST BE FLUSH WITH DISCHARGE CHAMBER FLOOR. ALL GAPS AROUND PIPES SHALL BE SEALED WATER TIGHT WITH A NON-SHRINK GROUT PER MANUFACTURERS STANDARD CONNECTION DETAIL AND SHALL MEET OR EXCEED REGIONAL PIPE CONNECTION STANDARDS.
4. CONTRACTOR TO SUPPLY AND INSTALL ALL EXTERNAL CONNECTING PIPES.
5. CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL RISERS, MANHOLES, AND HATCHES. CONTRACTOR TO GROUT ALL MANHOLES AND HATCHES TO MATCH FINISHED SURFACE UNLESS SPECIFIED OTHERWISE.
6. DRIP OR SPRAY IRRIGATION REQUIRED ON ALL UNITS WITH VEGETATION.

GENERAL NOTES

1. MANUFACTURER TO PROVIDE ALL MATERIALS UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS, ELEVATIONS, SPECIFICATIONS AND CAPACITIES ARE SUBJECT TO CHANGE. FOR PROJECT SPECIFIC DRAWINGS DETAILING EXACT DIMENSIONS, WEIGHTS AND ACCESSORIES PLEASE CONTACT MANUFACTURER.

TREATMENT FLOW (CFS)	0.237
OPERATING HEAD (FT)	3.4
PRETREATMENT LOADING RATE (GPM/SF)	TBD
WETLAND MEDIA LOADING RATE (GPM/SF)	1.0

THE PRODUCT DESCRIBED MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING US PATENTS: 7,425,262; 7,470,362; 7,674,378; 8,303,816; RELATED FOREIGN PATENTS OR OTHER PATENTS PENDING

PROPRIETARY AND CONFIDENTIAL:

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MODULAR WETLANDS
www.ModularWetlands.com | (855) 5MOD-WET

MWS-L-4-19-C
STORMWATER BIOFILTRATION SYSTEM STANDARD DETAIL

WASHINGTON STATE DEPARTMENT OF ECOLOGY

July 2017

GENERAL USE LEVEL DESIGNATION FOR BASIC, ENHANCED, AND PHOSPHORUS TREATMENT

For the

MWS-Linear Modular Wetland

Ecology's Decision:

Based on Modular Wetland Systems, Inc. application submissions, including the Technical Evaluation Report, dated April 1, 2014, Ecology hereby issues the following use level designation:

1. General use level designation (GULD) for the MWS-Linear Modular Wetland Stormwater Treatment System for Basic treatment

   - Sized at a hydraulic loading rate of 1 gallon per minute (gpm) per square foot (sq ft) of wetland cell surface area. For moderate pollutant loading rates (low to medium density residential basins), size the Prefilters at 3.0 gpm/sq ft of cartridge surface area. For high loading rates (commercial and industrial basins), size the Prefilters at 2.1 gpm/sq ft of cartridge surface area.

2. General use level designation (GULD) for the MWS-Linear Modular Wetland Stormwater Treatment System for Phosphorus treatment

   - Sized at a hydraulic loading rate of 1 gallon per minute (gpm) per square foot (sq ft) of wetland cell surface area. For moderate pollutant loading rates (low to medium density residential basins), size the Prefilters at 3.0 gpm/sq ft of cartridge surface area. For high loading rates (commercial and industrial basins), size the Prefilters at 2.1 gpm/sq ft of cartridge surface area.

3. General use level designation (GULD) for the MWS-Linear Modular Wetland Stormwater Treatment System for Enhanced treatment

   - Sized at a hydraulic loading rate of 1 gallon per minute (gpm) per square foot (sq ft) of wetland cell surface area. For moderate pollutant loading rates (low to medium density residential basins), size the Prefilters at 3.0 gpm/sq ft of cartridge surface area. For high loading rates (commercial and industrial basins), size the Prefilters at 2.1 gpm/sq ft of cartridge surface area.

4. Ecology approves the MWS - Linear Modular Wetland Stormwater Treatment System units for Basic, Phosphorus, and Enhanced treatment at the hydraulic loading rate listed above. Designers shall calculate the water quality design flow rates using the following procedures:

- Western Washington: For treatment installed upstream of detention or retention, the water quality design flow rate is the peak 15-minute flow rate as calculated using the latest version of the Western Washington Hydrology Model or other Ecology-approved continuous runoff model.
- Eastern Washington: For treatment installed upstream of detention or retention, the water quality design flow rate is the peak 15-minute flow rate as calculated using one of the three methods described in Chapter 2.2.5 of the Stormwater Management Manual for Eastern Washington (SWMMEW) or local manual.
- Entire State: For treatment installed downstream of detention, the water quality design flow rate is the full 2-year release rate of the detention facility.

5. These use level designations have no expiration date but may be revoked or amended by Ecology, and are subject to the conditions specified below.

Ecology's Conditions of Use:

Applicants shall comply with the following conditions:

1. Design, assemble, install, operate, and maintain the MWS – Linear Modular Wetland Stormwater Treatment System units, in accordance with Modular Wetland Systems, Inc. applicable manuals and documents and the Ecology Decision.
2. Each site plan must undergo Modular Wetland Systems, Inc. review and approval before site installation. This ensures that site grading and slope are appropriate for use of a MWS – Linear Modular Wetland Stormwater Treatment System unit.
3. MWS – Linear Modular Wetland Stormwater Treatment System media shall conform to the specifications submitted to, and approved by, Ecology.
4. The applicant tested the MWS – Linear Modular Wetland Stormwater Treatment System with an external bypass weir. This weir limited the depth of water flowing through the media, and therefore the active treatment area, to below the root zone of the plants. This GULD applies to MWS – Linear Modular Wetland Stormwater Treatment Systems whether plants are included in the final product or not.
5. Maintenance: The required maintenance interval for stormwater treatment devices is often dependent upon the degree of pollutant loading from a particular drainage basin. Therefore, Ecology does not endorse or recommend a "one size fits all" maintenance cycle for a particular model/size of manufactured filter treatment device.

- Typically, Modular Wetland Systems, Inc. designs MWS - Linear Modular Wetland systems for a target prefilter media life of 6 to 12 months.
- Indications of the need for maintenance include effluent flow decreasing to below the design flow rate or decrease in treatment below required levels.
- Owners/operators must inspect MWS - Linear Modular Wetland systems for a minimum of twelve months from the start of post-construction operation to determine site-specific

maintenance schedules and requirements. You must conduct inspections monthly during the wet season, and every other month during the dry season. (According to the SWMMWW, the wet season in western Washington is October 1 to April 30. According to SWMMEW, the wet season in eastern Washington is October 1 to June 30). After the first year of operation, owners/operators must conduct inspections based on the findings during the first year of inspections.

- Conduct inspections by qualified personnel, follow manufacturer's guidelines, and use methods capable of determining either a decrease in treated effluent flowrate and/or a decrease in pollutant removal ability.
- When inspections are performed, the following findings typically serve as maintenance triggers:
  - Standing water remains in the vault between rain events, or
  - Bypass occurs during storms smaller than the design storm.
  - If excessive floatables (trash and debris) are present (but no standing water or excessive sedimentation), perform a minor maintenance consisting of gross solids removal, not prefilter media replacement.
  - Additional data collection will be used to create a correlation between pretreatment chamber sediment depth and pre-filter clogging (see *Issues to be Addressed by the Company* section below)

6. Discharges from the MWS - Linear Modular Wetland Stormwater Treatment System units shall not cause or contribute to water quality standards violations in receiving waters.

Applicant:	Modular Wetland Systems, Inc.
Applicant's Address:	*PO. Box 869* *Oceanside, CA 92054*

Application Documents:

- *Original Application for Conditional Use Level Designation*, Modular Wetland System, Linear Stormwater Filtration System Modular Wetland Systems, Inc., January 2011
- *Quality Assurance Project Plan*: Modular Wetland system – Linear Treatment System performance Monitoring Project, draft, January 2011.
- *Revised Application for Conditional Use Level Designation*, Modular Wetland System, Linear Stormwater Filtration System Modular Wetland Systems, Inc., May 2011
- *Memorandum: Modular Wetland System-Linear GULD Application Supplementary Data, April 2014*
- *Technical Evaluation Report: Modular Wetland System Stormwater Treatment System Performance Monitoring, April 2014.*

Applicant's Use Level Request:

General use level designation as a Basic, Enhanced, and Phosphorus treatment device in accordance with Ecology's Guidance for Evaluating Emerging Stormwater Treatment Technologies Technology Assessment Protocol – Ecology (TAPE) January 2011 Revision.

Applicant's Performance Claims:

- The MWS – Linear Modular wetland is capable of removing a minimum of 80-percent of TSS from stormwater with influent concentrations between 100 and 200 mg/l.
- The MWS – Linear Modular wetland is capable of removing a minimum of 50-percent of Total Phosphorus from stormwater with influent concentrations between 0.1 and 0.5 mg/l.
- The MWS – Linear Modular wetland is capable of removing a minimum of 30-percent of dissolved Copper from stormwater with influent concentrations between 0.005 and 0.020 mg/l.
- The MWS – Linear Modular wetland is capable of removing a minimum of 60-percent of dissolved Zinc from stormwater with influent concentrations between 0.02 and 0.30 mg/l.

Ecology Recommendations:

- Modular Wetland Systems, Inc. has shown Ecology, through laboratory and field-testing, that the MWS - Linear Modular Wetland Stormwater Treatment System filter system is capable of attaining Ecology's Basic, Total phosphorus, and Enhanced treatment goals.

Findings of Fact:

Laboratory Testing

The MWS-Linear Modular wetland has the:

- Capability to remove 99 percent of total suspended solids (using Sil-Co-Sil 106) in a quarter-scale model with influent concentrations of 270 mg/L.
- Capability to remove 91 percent of total suspended solids (using Sil-Co-Sil 106) in laboratory conditions with influent concentrations of 84.6 mg/L at a flow rate of 3.0 gpm per square foot of media.
- Capability to remove 93 percent of dissolved Copper in a quarter-scale model with influent concentrations of 0.757 mg/L.
- Capability to remove 79 percent of dissolved Copper in laboratory conditions with influent concentrations of 0.567 mg/L at a flow rate of 3.0 gpm per square foot of media.
- Capability to remove 80.5-percent of dissolved Zinc in a quarter-scale model with influent concentrations of 0.95 mg/L at a flow rate of 3.0 gpm per square foot of media.
- Capability to remove 78-percent of dissolved Zinc in laboratory conditions with influent concentrations of 0.75 mg/L at a flow rate of 3.0 gpm per square foot of media.

Field Testing

- Modular Wetland Systems, Inc. conducted monitoring of an MWS-Linear (Model # MWS-L-4-13) from April 2012 through May 2013, at a transportation maintenance facility in Portland, Oregon. The manufacturer collected flow-weighted composite samples of the system's influent and effluent during 28 separate storm events. The system treated approximately 75 percent of the runoff from 53.5 inches of rainfall during the monitoring period. The applicant sized the system at 1 gpm/sq ft. (wetland media) and 3gpm/sq ft. (prefilter).
- Influent TSS concentrations for qualifying sampled storm events ranged from 20 to 339 mg/L. Average TSS removal for influent concentrations greater than 100 mg/L (n=7) averaged 85 percent. For influent concentrations in the range of 20-100 mg/L (n=18), the upper 95 percent confidence interval about the mean effluent concentration was 12.8 mg/L.
- Total phosphorus removal for 17 events with influent TP concentrations in the range of 0.1 to 0.5 mg/L averaged 65 percent. A bootstrap estimate of the lower 95 percent confidence limit (LCL95) of the mean total phosphorus reduction was 58 percent.
- The lower 95 percent confidence limit of the mean percent removal was 60.5 percent for dissolved zinc for influent concentrations in the range of 0.02 to 0.3 mg/L (n=11). The lower 95 percent confidence limit of the mean percent removal was 32.5 percent for dissolved copper for influent concentrations in the range of 0.005 to 0.02 mg/L (n=14) at flow rates up to 28 gpm (design flow rate 41 gpm). Laboratory test data augmented the data set, showing dissolved copper removal at the design flow rate of 41 gpm (93 percent reduction in influent dissolved copper of 0.757 mg/L).

Issues to be addressed by the Company:

1. Modular Wetland Systems, Inc. should collect maintenance and inspection data for the first year on all installations in the Northwest in order to assess standard maintenance requirements for various land uses in the region. Modular Wetland Systems, Inc. should use these data to establish required maintenance cycles.
2. Modular Wetland Systems, Inc. should collect pre-treatment chamber sediment depth data for the first year of operation for all installations in the Northwest. Modular Wetland Systems, Inc. will use these data to create a correlation between sediment depth and pre-filter clogging.

Technology Description:
Download at http://www.modularwetlands.com/

Contact Information:

Applicant: Zach Kent
BioClean A Forterra Company.
398 Vi9a El Centro
Oceanside, CA 92058
zach.kent@forterrabp.com

Applicant website: http://www.modularwetlands.com/

Ecology web link: http://www.ecy.wa.gov/programs/wg/stormwater/newtech/index.html

Ecology: Douglas C. Howie, P.E.
Department of Ecology
Water Quality Program
(360) 407-6444
douglas.howie@ecy.wa.gov

Revision History

Date	**Revision**
June 2011	Original use-level-designation document
September 2012	Revised dates for TER and expiration
January 2013	Modified Design Storm Description, added Revision Table, added maintenance discussion, modified format in accordance with Ecology standard
December 2013	Updated name of Applicant
April 2014	Approved GULD designation for Basic, Phosphorus, and Enhanced treatment
December 2015	Updated GULD to document the acceptance of MWS-Linear Modular Wetland installations with or without the inclusion of plants
July 2017	Revised Manufacturer Contact Information (name, address, and email)

MOORE TWINING ASSOCIATES, INC.

GEOTECHNICAL ENGINEERING INVESTIGATION

PROPOSED CIRCLE K STORE AND REMAINDER PARCEL

NORTHEAST CORNER OF BASELINE ROAD AND

WESTBROOK BOULEVARD

ROSEVILLE, CALIFORNIA

Project Number: G71523.02

For:

Land Development Consultants
3281 E. Guasti Road, Suite 700
Ontario, CA 91761

March 31, 2021

www.mooretwining.com

PH: 559.268.7021
FX: 559.268.7126
2527 Fresno Street
Fresno, CA 93721

MOORE TWINING ASSOCIATES, INC.

March 31, 2021 G71523.02

Land Development Consultants
3281 E. Guasti Road, Suite 700
Ontario, CA 91761

Attention: Mr. Brett Smirl

Subject: **Geotechnical Engineering Investigation**
Proposed Circle K Store and "Remainder Parcel"
Northeast Corner of Baseline Road and Westbrook Boulevard
Roseville, California

Dear Mr. Smirl:

We are pleased to submit this geotechnical engineering investigation report prepared for the proposed Circle K to be located at the Northeast Corner of Baseline Road and Westbrook Boulevard in Roseville, California.

In addition, this report includes a summary of a limited investigation conducted within the "remainder parcel" that is not currently planned for any specific development.

The contents of this report include the purpose of the investigation, scope of services, background information, investigative procedures, our findings, evaluation, conclusions, and recommendations. It is recommended that those portions of the plans and specifications that pertain to earthwork, pavements, and foundations be reviewed by Moore Twining Associates, Inc. (Moore Twining) to determine if they are consistent with our recommendations. This service is not a part of this current contractual agreement; however, the client should provide these documents for our review prior to their issuance for construction bidding purposes.

In addition, it is recommended that Moore Twining be retained to provide inspection and testing services for the excavation, earthwork, pavement, and foundation phases of construction. These services are necessary to determine if the subsurface conditions are consistent with those used in the analyses and formulation of recommendations for this investigation, and if the construction complies with our recommendations. These services are not, however, part of this current contractual agreement. A representative with our firm will contact you in the near future regarding these services.

PH: 559.268.7021
FX: 559.268.7126
2527 Fresno Street
Fresno, CA 93721

We appreciate the opportunity to be of service to Land Development Consultants. If you have any questions regarding this report, or if we can be of further assistance, please contact us at your convenience.

Sincerely,

MOORE TWINING ASSOCIATES, INC.

Zubair Anwar, PE
Project Engineer
Geotechnical Engineering Division

EXECUTIVE SUMMARY

Moore Twining Associates, Inc. (Moore Twining) prepared this geotechnical engineering investigation for the proposed Circle K store, on a site comprising about 2.178 acres of land at the Northeast Corner of Baseline Road and Westbrook Boulevard in Roseville, California. In addition, the site plan SP-6.1, revision dated February 18, 2020, prepared by Greenberg Farrow, Inc., shows a "Remainder Parcel" with an area of 6.407 acres that extends east and north of the proposed Circle K development.

Based on the referenced site plan, the Circle K development is planned to include a Circle K store building, a carwash, a fuel canopy, and underground storage tanks. The site plan indicates the proposed Circle K store will be about 5,187 square feet in plan area with a fueling canopy area about 6,429 square feet, a car wash building about 1,262 square feet, and underground storage tanks. Appurtenant construction is anticipated to include concrete walkways, asphaltic concrete and Portland cement concrete parking and drive areas, a trash enclosure, underground utilities, and landscaped areas.

At the time of our field exploration, the site area consisted of vacant field. The proposed Circle K parcel area was generally bare ground surface with scattered areas of weeds and grasses. Areas of scattered gravel, erosion control fabric, and small concrete debris fragments were noted on the ground surface.

On August 4 and 5, 2020, eleven (11) test borings (B-1 through B-11) and two percolation test borings (P-1 and P-2) were drilled at the site to depths ranging from about 5 to 31½ feet below site grades (BSG).

The soils encountered generally consisted of undocumented fill soils extending from the ground surface to depths of about 1 to 13½ feet BSG. The fill soils comprised of clayey sands, silty-clayey sand, silty sands and sandy lean clays. Below the fills soils, interbedded layer of native soils comprising silty sands, clayey sands, lean clays, sandy lean clays, silts, sandy silt, and poorly graded sand with silt were encountered to the maximum depth explored, about 31½ feet BSG. Many of the native soil samples in the upper 2 to 30 feet BSG exhibited varying degrees of cementation.

Undocumented fill soils were encountered in six (6) of the soil borings drilled within the Circle K parcel to depths ranging from about 3½ to 6⅓ feet BSG. In order to reduce the potential for excessive static settlement, as a part of site preparation the undocumented fill soils are recommended to be removed and recompacted. The structure are recommended to be supported on engineered fill.

The near surface soils encountered have very low to low expansion potential and fair support characteristics for pavements when compacted as engineered fill.

The results of soil sample analyses indicate that the near-surface soils exhibit an "extremely corrosive" corrosion potential to buried metal objects. In addition, the results of soil sample analyses indicated the soils exhibit a "negligible" potential for sulfate exposure to concrete.

This executive summary should not be used for design or construction and should be reviewed in conjunction with the attached report.

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GEOTECHNICAL ENGINEERING INVESTIGATION

PROPOSED CIRCLE K STORE AND REMAINDER PARCEL

NORTHEAST CORNER OF BASELINE ROAD AND WESTBROOK BOULEVARD

ROSEVILLE, CALIFORNIA

Project Number: G71523.02

1.0 INTRODUCTION

This report presents the results of a geotechnical engineering investigation for a proposed Circle K store to be located at the northeast corner of Baseline Road and Westbrook Boulevard in Roseville, California. Moore Twining Associates, Inc. (Moore Twining) was authorized by Land Development Consultants to perform this geotechnical engineering investigation.

The contents of this report include the purpose of the investigation and the scope of services provided. The site history, previous studies, site description, and anticipated construction are discussed. In addition, a description of the investigative procedures used and the subsequent findings obtained are presented. Finally, the report provides an evaluation of the findings, general conclusions, and related recommendations. The report appendices contain the drawings (Appendix A), the logs of borings (Appendix B), the results of laboratory tests (Appendix C) and the results of percolation tests (Appendix D).

The Geotechnical Engineering Division of Moore Twining, headquartered in Fresno, California, performed the investigation.

2.0 PURPOSE AND SCOPE OF INVESTIGATION

2.1 Purpose: The purpose of the investigation was to conduct a field exploration and a laboratory testing program, evaluate the data collected during the field and laboratory portions of the investigation, and provide the following:

2.1.1 Evaluation of the near surface soils within the zone of influence of the proposed foundations and pavements with regard to the anticipated foundation and traffic loads;

2.1.2 Recommendations for 2019 California Building Code seismic coefficients and earthquake spectral response acceleration values;

2.1.3 Geotechnical parameters for use in design of foundations and slabs-on-grade, (e.g., soil bearing capacity and settlement);

2.1.4 Recommendations for site preparation including placement, moisture conditioning, and compaction of engineered fill soils;

2.1.5 Recommendations for the design and construction of new asphaltic concrete (AC) and Portland cement concrete (PCC) pavements;

2.1.6 Recommendations for temporary excavations and trench backfill.

2.1.7 Conclusions regarding soil corrosion potential; and

2.1.8 A summary of geotechnical engineering conditions and any identified development constraints within the "remainder parcel" area.

This report is provided specifically for the Circle K store referenced in the Anticipated Construction section of this report. This investigation did not include a geologic/seismic hazards evaluation, flood plain investigation, percolation or infiltration tests, compaction tests, environmental investigation, or environmental audit. Details regarding the development planned in the "Remainder Parcel" were not known at the time of this investigation. This report is not intended to provide design recommendations for development in the areas outside of the Circle K improvements. When future development plans are developed for this area, Moore Twining should be contacted to develop a recommendation for the scope of geotechnical studies for proposed future development of the Remainder Parcel.

2.2 Scope: Our proposal, dated July 10, 2020, outlined the scope of our services. The actions undertaken during the investigation are summarized as follows.

2.2.1 The site plans SP-6.1 and SP-6.2, revision dated February 18, 2020, prepared by Greenberg Farrow, Inc., were reviewed.

2.2.2 The ALTA/NSPS Land Title Survey "Topo Sheet" 2 of 3, revision dated August 5, 2020, prepared by Base Consulting Group, Inc, was reviewed.

2.2.3 A report in progress entitled, "Phase I Environmental Site Assessment, Proposed Circle K Store, 5900 Baseline Road, Roseville, California 95747," prepared by the Environmental Division at Moore Twining Associates, Inc., identified by project number G71523.01, was reviewed. Historical aerial photographs from the in progress report were reviewed for the following years for site history information pertinent to this investigation: 1937, 1947, 1952, 1957, 1966, 1972, 1975 1984, 1993, 1998, 2006, 2009, 2012, 2016 and 2019.

2.2.4 Satellite images of the site between the years 1993 and 2019 from online sources, were reviewed.

2.2.5 A visual site reconnaissance and subsurface exploration were conducted.

2.2.6 Laboratory tests were conducted to determine selected physical and engineering properties of the subsurface soils.

2.2.7 Mr. Brett Smirl (Land Development Consultants) was consulted during the investigation.

2.2.8 The data obtained from the investigation were evaluated to develop an understanding of the subsurface soil conditions and the engineering properties of the subsurface soils.

2.2.9 This report was prepared to present the purpose and scope, background information, field exploration procedures, findings, evaluation, conclusions, and recommendations.

3.0 BACKGROUND INFORMATION

The site history, previous studies, existing site features, and the anticipated construction are summarized in the following subsections.

3.1 Site History and Previous Studies: For site history information, historical aerial photographs from Moore Twining's Phase I Environmental Site Assessment (ESA) report were reviewed for the following years: 1937, 1947, 1952, 1957, 1966, 1972, 1975 1984, 1993, 1998, 2006, 2009, 2012, 2016 and 2019. Online satellite images from 1993 to 2019 were also reviewed.

The site appeared as undeveloped vacant land until about August of 2013 where the land appeared to be tilled and plowed. The image from October 2018 showed grading activity, trucks, construction equipment and a water pond on the west side of Westbrook Boulevard (not within the proposed Circle K Store parcel). The image from September of 2019 showed more grading activity and construction of Westbrook Boulevard.

It should be noted that historical aerial photographs for the years of 1947, 1952, 1957, 1966, 1972, 1975 1984, 1993, 1998, 2006, 2009 and 2012, appear to show drainage feature traversing the site area.

No previous geotechnical engineering, geological, compaction reports, or environmental studies conducted for this site were provided for review during this investigation. If available, these reports should be provided for review and consideration for this project.

3.2 Site Description: The proposed Circle K parcel comprises about 2.178 acres of land at the Northeast Corner of Baseline Road and Westbrook Boulevard in Roseville, California. In addition, the site plan SP - 6.1 and SP-6.2, revision dated February 18, 2020, prepared by Greenberg Farrow, Inc., shows a "Remainder Parcel" with an area of 6.407 acres that extends north and east of

the proposed Circle K development. A site location map is presented on Drawing No. 1 in Appendix A. The site is bound to the north by a screen wall and active construction and grading activities beyond; to the east by vacant land; to the south by Baseline Road; and to the west by the newly constructed Westbrook Boulevard.

At the time of our field exploration, the site area was vacant. The proposed Circle K parcel area was generally a bare ground surface with scattered areas of weeds and grasses. Areas of scattered gravel, erosion control fabric, and small fragments of concrete were noted on the ground surface. The remainder parcel area was mostly covered with weeds and grasses with areas of bare ground within the northern portion. In addition, the northern portion of the remainder parcel was being used for concrete pipe storage at the time of our site observations. An underground gas pipeline was noted on the south site boundary.

Site area was noted to be about 1 to 3 feet higher in elevation than Baseline Road and Westbrook Boulevard. The site appeared to have been graded previously and was relatively flat.

Areas of disturbed ground from construction activities associated with the adjoining Baseline Road and Westbrook Boulevard were noted within the west portion of the site. A large soil stockpile was noted near the northeast site boundary and a second large soil stockpile was noted near the southeast site boundary.

3.3 Anticipated Construction: Based on the referenced site plan, the Circle K development is planned to include a Circle K store building, carwash, a fuel canopy, and underground storage tanks. The site plan indicates the proposed Circle K store will be about 5,187 square feet in plan area with a fueling canopy area of about 6,429 square feet, a car wash building of about 1,262 square feet, and underground storage tanks. Appurtenant construction is anticipated to include concrete walkways, asphaltic concrete and Portland cement concrete parking and drive areas, a trash enclosure, underground utilities, and landscaped areas.

It is anticipated that the proposed Circle K structure will consist of a one-story building including concrete masonry unit wall construction with concrete slab-on-grade floors. It is anticipated that the proposed building will be supported on shallow foundation systems. The fuel canopy is anticipated to be supported on a cast-in-drilled-hole foundation. Basements and loading docks are not anticipated as part of the proposed construction. In addition, we understand storm water infiltration systems are being considered as part of the proposed construction.

For the purpose of this report, maximum column loads of about 40 kips and maximum perimeter wall loads of 3 kips per linear foot were assumed. The actual design foundation loads should be provided to Moore Twining when available. In the event that the maximum foundation loads exceed those assumed for design, the recommendations of this report may not be applicable and may need to be revised.

Details regarding the development planned in the "Remainder Parcel" were not known at the time of this investigation.

4.0 INVESTIGATIVE PROCEDURES

The field exploration and laboratory testing programs conducted for this investigation are summarized in the following subsections.

4.1 Field Exploration: The field exploration consisted of a site reconnaissance, drilling test borings, soil sampling and percolation testing. Prior to drilling, a test soil boring permit was obtained from the City of Roseville Environmental Utilities Technical Services department.

4.1.1 Site Reconnaissance: The site reconnaissance consisted of walking the site and noting visible surface features. The reconnaissance was conducted by Mr. Zubair Anwar (Professional Engineer) of Moore Twining on August 4 and 5, 2020. The features noted are described in the background information section of this report.

4.1.2 Drilling Test Borings: Prior to drilling, the site was marked for Underground Service Alert for members to mark out the locations of existing public utilities.

The depths and locations of the test borings were selected based on the client provided criteria, the size of the structures, type of construction, estimated depths of influence of the anticipated foundation loads, and the subsurface soil conditions encountered.

On August 4 and 5, 2020, eleven (11) test borings (B-1 through B-11) and two percolation test borings (P-1 and P-2) were drilled at the site to depths ranging from about 5 to 41½ feet below site grades (BSG). The borings were drilled with a conventional truck-mounted CME-75 drill rig equipped with 6⅝-inch and the percolation tests were drilled using a 8-inch outside diameter (O.D.) hollow-stem augers. The test borings and percolation test borings drilled within the proposed Circle K development and within the remainder parcel are shown on Drawing No. 2 in Appendix A of this report.

During the drilling of the test borings, bulk samples of soil were obtained for laboratory testing. The test borings were drilled under the direction of and logged during drilling by a Moore Twining professional engineer. The field soil classification was in accordance with the Unified Soil Classification System and consisted of particle size, color, and other distinguishing features of the soil.

The presence and elevation of free water, if any, in the borings were noted and recorded during drilling and immediately following completion of the borings.

Test boring locations were determined with reference to existing site features shown on the site plan. The locations of the test borings are described on the boring logs in Appendix B. The test borings were backfilled with neat cement grout and the excess soil cuttings were spread near the boring locations.

4.1.3 Soil Sampling: Standard penetration tests were conducted in the test borings, and both disturbed and relatively undisturbed soil samples were obtained.

The standard penetration resistance, N-value, is defined as the number of blows required to drive a standard split barrel sampler into the soil. The standard split barrel sampler has a 2-inch O.D. and a 1⅜-inch inside diameter (I.D.). The sampler is driven by a 140-pound weight free falling 30 inches. The sampler is lowered to the bottom of the bore hole and set by driving it an initial 6 inches. It is then driven an additional 12 inches and the number of blows required to advance the sampler the additional 12 inches is recorded as the N-value.

Relatively undisturbed soil samples for laboratory tests were obtained by pushing or driving a California modified split barrel ring sampler into the soil. The soil was retained in brass rings, 2.5 inches O.D. and 1-inch in height. The lower 6-inch portion of the samples were placed in close-fitting, plastic, airtight containers which, in turn, were placed in cushioned boxes for transport to the laboratory. Soil samples obtained were taken to Moore Twining's laboratory for classification and testing.

4.1.4 Percolation Tests: Percolation tests were conducted on August 5, 2020. Percolation test borings P-1 and P-2 were drilled to a depth of about 5½ and 9 feet BSG, respectively, on August 4, 2020. Three (3) of the other borings were drilled at the site to depths of 21½ to 31½ feet BSG prior to drilling the percolation test holes within the proposed Circle K store site area to determine if there were any potential favorable soil layers to target for the percolation tests. However, no favorable soil layers were encountered.

The percolation tests for P-1 and P-2 were conducted by adding water to the percolation test holes and measuring the decline in the water level in the holes over time. The test holes were cylindrical with a diameter of about 8 inches. Gravel packing was used to protect the sidewalls of the hole from washout during refilling. A 2-inch diameter perforated PVC pipe was placed over a thin layer of gravel in the borehole and used to transmit poured water to the bottom of the hole. On the day prior to the start of the percolation testing, the percolation test hole was presoaked with 26 inches of water in P-1 and about 20 inches of water in P-2. The presaturation water in the both percolation test holes had completely seeped away by the next morning. Water was added to both percolation test holes on the morning of August 5, 2020 prior to beginning the percolation tests. The percolation tests were conducted for about 2 hours by measuring the drop in water level over time. Measurements of water levels and the time of each reading were recorded on the field percolation test logs. The rate of water level decline near the end of the test period (generally stabilized) was used to estimate the average stabilized percolation rate of the soils tested. The head of the water in the test hole during the percolation test was generally about 12 inches when refilling the water level in percolation test P-1, and about 20 inches in percolation test P-2.

4.2 Laboratory Testing: The laboratory testing was programmed to determine selected physical and engineering properties of the soils sampled during drilling. The tests were conducted on disturbed and relatively undisturbed samples considered representative of the subsurface soils encountered.

The results of laboratory tests are summarized in Appendix C. These data, along with the field observations, were used to prepare the final test boring logs in Appendix B.

5.0 FINDINGS AND RESULTS

The findings and results of the field exploration and laboratory testing are summarized in the following subsections.

5.1 Soil Profile: The soils encountered generally consisted of near surface fill soils extending from the ground surface to depths of about 1 to 13½ feet BSG. The fill soils comprised clayey sands, silty-clayey sand, silty sands and sandy lean clays. Below the fill soils, interbedded layers of native soils comprising silty sands, clayey sands, lean clays, sandy lean clays, silts, sandy silt, and poorly graded sand with silt were encountered to the maximum depth explored, about 31½ feet BSG.

Many of the native soil samples exhibited varying degrees of cementation.

The foregoing is a general summary of the soil conditions encountered in the test borings drilled for this investigation. Detailed descriptions of the soils encountered at each test boring location are presented in the logs of borings in Appendix B. The stratification lines in the logs represent the approximate boundary soil types; the actual in-situ transition may be gradual.

5.2 Soil Engineering Properties: The following is a description of the soil engineering properties as determined from our field exploration and laboratory testing.

FILL - Clayey Sand and Silty, Clayey Sand Fill Soils: The clayey sand and silty, clayey sand fill soils encountered were described as medium dense to very dense, as indicated by standard penetration resistance, N-values, ranging from 13 to 55 blows per foot. The moisture content of the samples tested ranged from about 4 to 14 percent. An Atterberg Limits test conducted on a clayey sand sample indicated a liquid limit of 23 and a plasticity index of 5. An Atterberg Limits test conducted on a silty, clayey sand sample indicated a liquid limit of 27 and a plasticity index of 6. A consolidation test conducted on a sample collected from depths of about 5 to 6.3 feet BSG from boring B-3 indicated low compressibility characteristics (about 4.6 percent consolidation under a load of 16 kips per square foot). Upon inundation, the sample exhibited free swell (0.4 percent swell when wetted under a load of 2 kips per square foot).

FILL - Sandy Lean Clay Fill Soils: The sandy lean clay fill soils encountered were described as stiff to very stiff, as indicated by standard penetration resistance, N-values, ranging from 12 to 23 blows per foot.

FILL - Silty Sand Fill Soils: The silty sand fill soils encountered were described as loose to medium dense, as indicated by standard penetration resistance, N-values, ranging from 7 to 21 blows per foot. The moisture content of a samples tested ranged from about 11 to 26 percent. A relatively undisturbed sample revealed a dry density of 101.6 pounds per cubic foot.

NATIVE - Sandy Lean Clay and Lean Clay Soils: The sandy lean clay and lean clay soils encountered were described as very stiff to hard, as indicated by standard penetration resistance, N-values, ranging from 21 to greater than 80 blows per foot. The moisture content of the samples tested ranged from about 7 to 41 percent. Three (3) relatively undisturbed samples revealed dry densities of 87.8, 111.7 and 116.4 pounds per cubic foot. Two (2) Atterberg Limits test indicated liquid limits of 31 and 25 with corresponding plasticity index values of 12 and 9. A consolidation test conducted on a sample collected from depths of about 6⅓ to 6½ feet BSG from boring B-1 indicated moderate compressibility characteristics (about 5 percent consolidation under a load of 8 kips per square foot). Upon inundation, the sample exhibited 0.8 percent collapse when wetted under a load of 2 kips per square foot.

NATIVE - Silty Sand Soils: The silty sand soils encountered were described as medium dense to very dense, as indicated by standard penetration resistance, N-values, ranging from 15 to greater than 50 blows per foot. The moisture content of the samples tested ranged from about 12 to 19 percent.

NATIVE - Clayey Sand Soils: The clayey sand soils encountered were described as medium dense to dense as indicated by standard penetration resistance, N-values, ranging from 22 to 55 blows per foot. An Atterberg Limits test indicated a liquid limit of 27 and a plasticity index of 6.

NATIVE - Silt and Sandy Silt Soils: The silt and sandy silt soils encountered were described as stiff to hard, as indicated by standard penetration resistance, N-values, ranging from 26 to greater than 80 blows per foot. The moisture content of the samples tested ranged from about 19 to 25 percent. Two (2) relatively undisturbed samples revealed dry densities of 93.5 and 93.9 pounds per cubic foot. Atterberg Limits testing conducted on a sandy silt sample indicated a liquid limit of 35 and a plasticity index of 5. A consolidation test conducted on a sample collected from depths of about 8½ to 10 feet BSG from boring B-5 indicated low compressibility characteristics (about 3.1 percent consolidation under a load of 8 kips per square foot).

NATIVE - Poorly Graded Sand with Silt: The poorly grade sands encountered were described as dense, as indicated by a standard penetration resistance, N-value, of 31 blows per foot.

Expansion Index Tests: Expansion index tests were conducted on samples collected in the upper 3½ feet BSG from borings B-1 and boring B-4 indicated expansion index values of 21 and 1, respectively.

Loss-On-Ignition Test: A loss on ignition test performed on a clayey sand fill soil sample from boring Boring B-3 at a depth of from 5 to 6.3 feet BSG indicated an organic content of 2.3 percent. A loss on ignition test performed on a silty sand fill soil sample from boring Boring B-10 at a depth of from 5 to 5½ feet BSG indicated an organic content of 1.6 percent.

R-value Test: An R-value test conducted on a near surface sandy lean clay sample collected from depths of about 0 to 3½ feet BSG from boring B-6 resulted in an R-value of 31.

Chemical Tests: Chemical tests performed on a near surface soil sample collected from depths of 0 to 3½ feet BSG from boring B-1 resulted in a pH value of 7.1; a minimum resistivity value of 690 ohms-centimeter; 0.00094 percent by weight concentration of sulfate; and less than 0.00060 percent by weight concentration of chloride. Chemical tests performed on a near surface soil sample collected from depths of 0 to 3½ feet BSG from boring B-4 resulted in a pH value of 6.3; a minimum resistivity value of 5,800 ohms-centimeter; less than 0.00060 percent by weight concentration of sulfate; and less than 0.00060 percent by weight concentration of chloride.

5.3 Groundwater Conditions: Groundwater was not encountered in the test borings drilled at the time of our August 4 and 5, 2020 field exploration to the maximum depth explored, about 31½ feet BSG.

Based on our review of the California Department of Water Resources, Water Data Library System, two water level stations northwest and northeast of the subject site indicate that groundwater in the site vicinity has ranged between 131.15 feet and 125. 65 feet BSG between October 1, 2011 and April 15, 2020, respectively.

Due to the presence of cemented soils and zones of fill, seasonal perched water conditions can develop.

It should be recognized, however, that groundwater elevations fluctuate with time, since they are dependent upon seasonal precipitation, irrigation, land use, and climatic conditions as well as other factors. Therefore, water level observations at the time of the field investigation may vary from those encountered both during the construction phase and the design life of the project. The evaluation of such factors was beyond the scope of this investigation and report.

5.4 Results of Percolation Testing: The infiltration rates estimated from the percolation test data are summarized in Table No. 1 below. The percolation test data are included in Appendix D.

Table No. 1
Results of Percolation Testing

Location and Depth	Field (Unfactored) Infiltration Rate (Inches per Hour)[1]	Subgrade Soil Type
P-1 at 5½ feet BSG	0.2	Silty Sand and Lean Clay
P-2 at 9 feet BSG	0	Lean Clay

Notes:
BSG - Below site grade
[1] - Includes no factor of safety

It should be noted that the field tests do not take into account the long term effects of subgrade saturation, silt accumulation, groundwater influence, nor vegetation. In general, the infiltration rate of the soils will decrease when the soils are saturated and the reduction in the infiltration rate increases the longer the soils are saturated. Published studies indicate field infiltration rates can significantly overestimate the saturated permeability. In addition, soil bed consolidation, sediment, suspended soils, etc. in the discharge water can result in clogging of the pore spaces in the soil. This clogging effect can also reduce the long term infiltration rate. Numerous other factors, such as variations in soil type and soil density across the entire area of the system can influence the infiltration rate, both short and long term.

6.0 EVALUATION

The data and methodology used to develop conclusions and recommendations for project design and preparation of construction specifications are summarized in the following subsections. The evaluation was based upon the subsurface soil conditions encountered during this investigation and our understanding of the proposed construction. The conclusions obtained from the results of our evaluations are described in the Conclusions section of this report.

6.1 Existing Surface and Subsurface Conditions: At the time of our field investigation, the proposed Circle K parcel area was generally bare ground surface with scattered areas of weeds and grasses. The remainder parcel area was mostly covered with weeds and grasses with areas of bare ground surface within the northern potion. Some construction materials (concrete pipe) and stockpiles of soil were noted at the site.

As part of site grading, existing vegetation will need to be stripped to the depth required to remove root structures. These materials will not be considered suitable for reuse as engineered fill. Trash (if any) and unsuitable debris (if any) should also be removed from the site and not included with soils to be used as engineered fill.

The undocumented fill soils encountered during this investigation are recommended for support of future structures (see section 6.2 for detailed discussion of undocumented fill soils).

Cemented native soils were encountered in many of the borings at various depths. Where encountered, the cemented material will require additional processing to reduce maximum particle size to no greater than 3 inches and mix the hardpan fragments with the soils. The processed material should be well blended with the on-site materials to achieve a well-graded fill material.

6.2 Undocumented Fill Soils: Undocumented fill soils were encountered in six (6) of the soil borings drilled within the Circle K parcel to depths ranging from about 3½ to 6⅛ feet BSG. In addition, the borings drilled within the remainder parcel encountered fill soils to depths of about 1 to 8 feet BSG, with exception that one (1) of the borings encountered fill soils to a depth of about 13½ feet BSG. The approximate depth of fill encountered in the various borings is depicted on Drawing No. 2 in Appendix A of this report.

Based on our review of the pre-grading topographic survey provided by Mr. Brett Smirl (Land Development Consultants) on September 10, 2020, the site elevations within the Circle K Store parcel range from about 95 feet to 99 feet and 94 feet to 105 feet within areas north and east of the proposed Circle K development. Based on our review of the ALTA/NSPS Land Title Survey "Topo Sheet" 2 of 3, revision dated August 5, 2020, prepared by Base Consulting Group, Inc.; the existing site elevations at the time of our investigation ranged from about 100 feet to 102 feet within the Circle K Store parcel and 102 feet to 104 feet within areas north and east of the proposed Circle K development. The fill depths reported in this report are based on review of site elevations from the topographic maps provided and soil encountered in the test borings drilled at the subject site.

Based on the wide range of the N-values determined from standard penetration testing and the presence of some zones of organics (such as Boring B-3 at a depth of about 5 feet), the fill soils encountered are considered to be undocumented and not recommended for support of future structures. Therefore, as a part of site preparation, the undocumented fill soils will require removal and recompaction to support future structures.

The ground surface conditions visually indicate grading has been performed in the site area to create a relatively flat site for development. Historic topographic maps indicate the natural topography is rolling terrain with some low areas within the site.

The fill soils are generally anticipated to be suitable for reuse as engineered fill on the project; however, some organics were noted in several samples, such as Boring B-3 at a depth of about 5 feet BSG (organic odors and grass) and Borings B-9 and B-10 at depths of about 5 feet BSG (rootlets and grass). Where organics are encountered, these materials should be removed from soils to be used as engineered fill.

6.3 Expansive Soils: In evaluation of the potential for expansive soils at the site, expansion index testing was performed on representative samples of the near surface soils which are anticipated to be within the zone of influence of the planned improvements. In evaluation of the potential for expansive soils at the site, expansion index testing was performed on a representative sample of the near surface soils which are anticipated to be within the zone of influence of the planned improvements. The expansion index testing was performed in accordance with ASTM D4829 and the results are included in Appendix C of this report. The result of expansion index testing indicated that the near surface soils have a very low to low expansion potential based on expansion index values of 1 and 21. Thus, expansive soil concerns within the near surface soils are generally not anticipated. However, due to the extent of grading, there is a potential that zones of expansive soils will be encountered such as in deeper excavations or as part of excavation of undocumented fill soils. Where encountered, expansive soils with an expansion index of 30 or more should not be used as fill in building pad areas. These materials should be segregated and used outside of the building pad areas.

6.4 Static Settlement and Bearing Capacity of Shallow Foundations: The potential for excessive total and differential static settlement of foundations and slabs-on-grade is a geotechnical concern that was evaluated for this project. The increases in effective stress to underlying soils which can occur from new foundations and structures, placement of fill, withdrawal of groundwater, etc. can cause vertical deformation of the soils, which can result in damage to the overlying structures and improvements. The differential component of the settlement is often the most damaging. In addition, the allowable bearing pressures of the soils supporting the foundations were evaluated for shear and punching type failure of the soils resulting from the imposed foundation loads.

In order to limit the total and differential static settlement of foundations to 1 inch total and ½ inch differential in 40 feet, this report recommends removal of undocumented fill soils from past grading activities in order to support new foundations on compacted engineered fill soils. Provided the building pad and foundation areas are prepared in accordance with the recommendations included in this report, a net allowable soil bearing pressure of 2,500 pounds per square foot, for dead-plus-live loads, may be used for design.

The net allowable soil bearing pressure is the additional contact pressure at the base of the foundations caused by the structure. The weight of the soil backfill and weight of the footing may be neglected. The net allowable soil bearing pressure presented was selected using the Terzaghi bearing capacity equations for foundations considering a minimum factor of safety of 3.0 and based on the anticipated static settlements noted in this report.

A structural engineer experienced in foundation and slab-on-grade design should determine the thickness, reinforcement, design details and concrete specifications for the proposed building foundations and slabs-on-grade based on the anticipated settlements estimated in this report.

6.5 Seismic Ground Rupture and Design Parameters: The project site is not located in an Alquist-Priolo Earthquake Fault Zone. Accordingly, the potential for ground rupture at the site is considered low.

It is our understanding that the 2019 CBC will be used for structural design, and that seismic site coefficients are needed for design.

Based on the 2019 CBC, a Site Class D represents the on-site soil conditions with standard penetration resistance, N-values, averaging between 15 and 50 blows per foot in the upper 100 feet below site grade.

A table providing the recommended seismic coefficients and earthquake spectral response acceleration values for the project site is included in the Foundation Recommendations section of this report. A Maximum Considered Earthquake (geometric mean) peak ground acceleration adjusted for site effects (PGA_M) of 0.279g was determined for the site using the Ground Motion Parameter Calculator provided by the Structural Engineers Association of California website (https://seismicmaps.org/).

6.6 Asphaltic Concrete (AC) Pavements: Recommendations for asphaltic concrete pavement structural sections are presented in the "Recommendations" section of this report for proposed asphaltic concrete (AC) pavements. The structural sections were designed using the gravel equivalent method in accordance with the California Department of Transportation Highway Design Manual. The analysis was based on traffic index values ranging from 5.0 to 7.0. The appropriate paving section should be determined by the project civil engineer or applicable design professional based on the actual vehicle loading (traffic index) values. If traffic loading is anticipated to be greater than assumed, the pavement sections should be re-evaluated.

It should be noted that if pavements are constructed prior to the construction of the structures, the additional construction truck traffic should be considered in the selection of the traffic index value. If more frequent or heavier traffic is anticipated and higher Traffic Index values are needed, Moore Twining should be contacted to provide additional pavement section designs.

Based on the results of the testing included in this report, the procedures of the Caltrans Highway Design Manual, an R-value of 25 was used to provide the pavement section thickness recommendations.

6.7 Portland Cement Concrete (PCC) Pavements: Recommendations for Portland cement concrete (PCC) pavement structural sections are presented in the "Recommendations" section of this report. The PCC pavement sections are based upon the amount and type of traffic loads being considered and the characteristics of the subgrade soils which will support the pavement. The measure of the amount and type of traffic loads are based upon an index of equivalent axle loads (EAL) from the loading of heavy trucks called a traffic index (T.I).

The recommendations provided in this report for PCC pavements are based on a trash truck loading and the design procedures contained in the Portland Cement Association "Thickness Design of Highway and Street Pavements."

The pavement sections were prepared based on traffic indexes ranging from 5 to 7. The recommended structural sections were based primarily on the Portland Cement Association "Thickness Design of Highway and Street Pavements." A modulus of subgrade reaction, K-value, for the pavement section, considering a minimum 6-inch layer of aggregate base material (minimum R-value of 78), of 180 psi/in at the top of the aggregate base was used for pavement design.

6.8 Soil Corrosion: The risk of corrosion of construction materials relates to the potential for soil-induced chemical reaction. Corrosion is a naturally occurring process whereby the surface of a metallic structure is oxidized or reduced to a corrosion product such as iron oxide (i.e., rust). The metallic surface is attacked through the migration of ions and loses its original strength by the thinning of the member.

Soils make up a complex environment for potential metallic corrosion. The corrosion potential of a soil depends on numerous factors including soil resistivity, texture, acidity, field moisture and chemical concentrations. In order to evaluate the potential for corrosion of metallic objects in

contact with the onsite soils, chemical testing of soil samples was performed by Moore Twining as part of this report. The test results are included in Appendix C of this report. Conclusions regarding the corrosion potential of the soils tested are included in the Conclusions section of this report based on the National Association of Corrosion Engineers (NACE) corrosion severity ratings listed in the Table No. 2 below.

Table No. 2
Soil Resistivity and Corrosion Potential Ratings

Soil Resistivity (ohm cm)	Corrosion Potential Rating
>20,000	Essentially non-corrosive
10,000 - 20,000	Mildly corrosive
5,000 - 10,000	Moderately corrosive
3,000 - 5,000	Corrosive
1,000 - 3,000	Highly corrosive
<1,000	Extremely corrosive

The results of soil sample analyses indicate that the near-surface soils exhibit "moderately corrosive" to "extremely corrosive" corrosion potential to buried metal objects. Appropriate corrosion protection should be provided for buried improvements based on the "extremely corrosive" corrosion potential. If piping or concrete are placed in contact with imported soils, these soils should be analyzed to evaluate the corrosion potential of these soils.

If the manufacturers or suppliers cannot determine if materials are compatible with the soil corrosion conditions, a professional consultant, i.e., a corrosion engineer, with experience in corrosion protection should be consulted to provide design parameters. Moore Twining does not provide corrosion engineering services.

6.9 Sulfate Attack of Concrete: Degradation of concrete in contact with soils due to sulfate attack involves complex physical and chemical processes. When sulfate attack occurs, these processes can reduce the durability of concrete by altering the chemical and microstructural nature of the cement paste. Sulfate attack is dependent on a variety of conditions including concrete quality, exposure to sulfates in soil/groundwater and environmental factors. The standard practice for geotechnical engineers in evaluation of the soils anticipated to be in contact with concrete is to perform testing to determine the sulfates present in the soils. The test results are then compared with the provisions of ACI 318, section 4.3 to provide guidelines for concrete exposed to sulfate-containing solutions. Common methods used to resist the potential for degradation of concrete due to sulfate attack from soils include, but are not limited to the use of sulfate-resisting cements, air-entrainment and reduced water to cement ratios. The test results are included in Appendix C of this report. Conclusions regarding the sulfate test results are included in the Conclusions section of this report.

The soil corrosion data should be provided to the manufacturers or suppliers of materials that will be in contact with soils (pipes or ferrous metal objects, etc.) to provide assistance in selecting the protection and materials for the proposed products or materials. If the manufacturers or suppliers cannot determine if materials are compatible with the soil corrosion conditions, a professional consultant, i.e., a corrosion engineer, with experience in corrosion protection should be consulted to provide design parameters.

7.0 CONCLUSIONS

Based on the data collected during the field and laboratory investigations, our geotechnical experience in the vicinity of the project site, and our understanding of the anticipated construction, the following general conclusions are presented.

7.1 The site is considered suitable for the proposed construction with regard to support of the proposed improvements, provided the recommendations contained in this report are followed. It should be noted that the recommended design consultation and observation of clearing, and earthwork activities by Moore Twining are integral to this conclusion.

7.2 The soils encountered generally consisted of undocumented fill soils extending from the ground surface to depths of about 1 to 13½ feet BSG. The fill soils consisted of clayey sands, silty-clayey sand, silty sands and sandy lean clays. Below the fill soils, interbedded layers of native soils comprising silty sands, clayey sands, lean clays, sandy lean clays, silts, sandy silt, and poorly graded sand with silt were encountered to the maximum depth explored, about 31½ feet BSG.

7.3 Undocumented fill soils were encountered in six (6) of the soil borings drilled within the Circle K parcel to depths ranging from about 3½ to 6⅓ feet BSG. Undocumented fill soils were encountered to a depth of 3½ feet BSG within the Circle K store building. In addition, the borings drilled within the remainder parcel encountered fill soils to depths of about 1 to 8 feet BSG, with exception that one (1) of the borings encountered fill soils to a depth of about 13½ feet BSG. The approximate depth of fill encountered in the various borings is depicted on Drawing No.2 in Appendix A of this report. Based on the wide range of the N-values determined from standard penetration testing and the presence of some zones of organics (such as Boring B-3 at a depth of about 5 feet), the fill soils encountered are considered to be undocumented and not recommended for support of future structures. Therefore, as a part of site preparation, this report recommends removal and recompaction of the undocumented fill soils in areas where improvements are planned that are sensitive to settlement.

7.4 The near surface soil samples tested exhibited a very low to low expansion potential and fair support characteristics for pavements when compacted as engineered fill.

7.5 Groundwater was not encountered in the test borings drilled at the time of our August 4 and 5, 2020 field exploration to the maximum depth explored, about 31½ feet BSG.

7.6 In order to limit the total and differential static settlement of foundations to 1 inch total and ½ inch differential in 40 feet, this report recommends removal of undocumented fill soils from past grading activities and supporting new foundations on compacted engineered fill soils

7.7 The results of the percolation tests conducted at depths of 5 and 9 indicated infiltration rates of 0.2 and 0 inches per hour, respectively. Due to the low permeability and expansive nature of the near surface soils, infiltration of storm water at the site is not recommended.

7.8 Chemical testing of soil samples indicated the soils exhibit a "moderately corrosive" to "extremely corrosion" corrosion potential.

7.9 Chemical analyses indicated a "negligible" potential for sulfate attack on concrete placed in contact with the near surface soils.

7.10 The project site is not located in an Alquist-Priolo Earthquake Fault Zone. Accordingly, the potential for ground rupture at the site is considered low.

7.11 The "remainder parcel" area outside of the limits of the proposed Circle K parcel encountered similar soil conditions that were encountered in the Circle parcel. Development constraints include removal and recompaction of existing undocumented fill.

8.0 RECOMMENDATIONS

Based on the evaluation of the field and laboratory data and our geotechnical experience in the vicinity of the project, the following recommendations are presented for use in the project design and construction. However, this report should be considered in its entirety. When applying the recommendations for design, the background information, procedures used, findings, evaluation, and conclusions should be considered. The recommended design consultation and construction monitoring by Moore Twining are integral to the proper application of the recommendations. The Contractor is required to comply with the requirements and recommendations presented in this report.

Where the requirements of a governing agency, utility agency or pipe manufacturer differ from the recommendations of this report, the more stringent recommendations should be applied to the project.

8.1 General

8.1.1 Moore Twining should be retained to review the final grading plans and foundation plans before the plans are released for bidding purposes so that any relevant recommendations can be presented.

8.1.2 When the actual foundation loads are known, this information should be provided to Moore Twining for review to confirm the recommendations for site preparation are appropriate. In the event the foundation loads are different than assumed, the recommendations in this report may need to be revised.

8.1.3 A preconstruction meeting including, as a minimum, the owner, general contractor, earthwork contractor, foundation and paving subcontractors, and Moore Twining should be scheduled by the general contractor at least one week prior to the start of clearing and grubbing. The purpose of the meeting should be to discuss critical project requirements and scheduling.

8.1.4 The Contractor(s) bidding on this project should determine if the information included in the construction documents are sufficient for accurate bid purposes. If the data are not sufficient, the Contractor should conduct, or retain a qualified geotechnical engineer to conduct, supplemental studies and collect information as required to prepare accurate bids.

8.1.5 The fill soils encountered in the borings drilled for this investigation are considered to be undocumented and are not recommended for support of future structures. Therefore, as a part of site preparation, the undocumented fill soils will require removal and recompaction to support future structures. In the event documents such as grading plans showing previous site grading or other documentation such as earthwork inspection reports for the site are available, this information should be provided to Moore Twining for review and consideration. In the event no additional information is available regarding the depth and nature of the fill soils, a supplement backhoe pit investigation could be conducted to further evaluate the depth and character of the undocumented fill soils, including the organic materials noted at some of the sample depths.

8.1.6 This report is not intended to provide design recommendations for development of the "Remainder Parcel" outside of the Circle K improvements. When future development plans are developed for this area, Moore Twining should be contacted to develop a recommendation for the scope of geotechnical studies for proposed future development of the Remainder Parcel.

8.1.7 If construction occurs during the wet season, the onsite soils could become unstable. Where wet, unstable soil conditions are experienced, methods such as aeration, mixing wet soils with drier soils, chemical (i.e., cement) treatment of the soil, or over-excavation of an additional depth of 12 inches and placement of a bridge lift of aggregate base and a geotextile stabilization fabric such as Mirafi 600X, may be required to achieve a stable soil condition. The actual method employed to stabilize the bottom of the excavation or pavement subgrade should be selected at the time of construction. All stabilization of wet soils should be conducted in accordance with the project specifications.

8.2 Site Grading and Drainage

8.2.1 Shallow, hard or very dense cemented soils were encountered in some of the borings at the site which will increase the potential for perched water from surface irrigation and stormwater sources that infiltrate the near surface soils. Due to the low permeability of the cemented materials, water may infiltrate and result in a perched condition, ponding and migrating laterally over the top of the hardpan materials. Perched water will reduce the drainage capacity of the soils, increasing the potential for moisture-related problems. Therefore, providing and maintaining positive drainage systems, limiting irrigation use, etc. will be important aspects of design and site development to reduce the potential for moisture-related problems.

8.2.2 It is critical to develop and maintain site grades which will drain surface and roof runoff away from foundations and floor slabs - both during and after construction. Adjacent exterior finished grades should be sloped a minimum of two percent for a distance of at least ten feet away from the structures, or as necessary to preclude ponding of water adjacent to foundations, whichever is more stringent. Adjacent exterior grades which are paved should be sloped at least 1 percent away from the foundations.

8.2.3 It is recommended that landscape planted areas, etc. not be placed adjacent to the building foundations and/or interior slabs-on-grade. Trees should be setback from the proposed structures at least 10 feet or a distance equal to the anticipated drip line radius of the mature tree. For example, if a tree has an anticipated drip-line diameter of 30 feet, the tree should be planted at least 15 feet away (radius) from proposed or existing buildings.

8.2.4 Landscaping after construction should direct rainfall and irrigation runoff away from the structures and should establish positive drainage of water away from the structures. Care should be taken to maintain a leak-free sprinkler system.

8.2.5 Landscape and planter areas should be irrigated using low flow irrigation (such as drip, bubblers or mist type emitters). The use of plants with low water requirements are recommended.

8.2.6 Rain gutters and roof drains should be provided, and connected directly to the site storm drain system. As an alternative, the roof drains should extend a minimum of 5 feet away from the structures and the resulting runoff directed away from the structures on paved surfaces at a minimum of 2 percent.

8.2.7 Due to the low permeability and expansive nature of the near surface soils, infiltration of storm water at the site is not recommended for this site. In the event subsurface storm water collection systems, bioretention systems or similar designs that allow concentrated runoff to wet the soils are planned, the proposed locations and details of these features should be provided to Moore Twining for review and comment. If these types of features are required, sufficient setbacks to existing improvements should be maintained such as a minimum 20 foot setback to planned foundations, unless the systems are fully lined with a waterproof liner. In addition, specific measures such as deepened curbs, perimeter cutoffs, liners, etc. should be incorporated in the designs to reduce the potential for excessive movement of other adjacent improvements due to moisture, concentrated wetting, and freewater migration from storm water disposal systems.

8.3 Site Preparation

8.3.1 Stripping should be conducted in all areas of existing improvements to remove surface vegetation and root systems (if any). The general depth of stripping should be sufficiently deep to remove the root systems and organic topsoils.

8.3.2 After stripping, the building pad area for the Circle K store and carwash and over-build zones should be over-excavated to a minimum of 1 foot below the bottom of footings, to at least 3½ feet below preconstruction site grades and to the depth required to remove all undocumented fill soils (encountered to depths of 3½ to 6⅓ feet BSG), whichever is greater. The horizontal limits of over-excavation should include the footprint of the building, all foundations, all concrete walkways adjacent to the building, and a minimum of 5 feet beyond these features, whichever is greater. Upon review of the Contractor's survey data (documenting the vertical and horizontal limits of the over-excavation) and approval of the over-excavation by Moore Twining, the bottom of the excavation should be scarified to a depth of 8 inches, moisture conditioned, and compacted as engineered fill.

8.3.3 The horizontal limit of over-excavation for the building pad should be depicted on the project plans.

8.3.4 It is recommended that extra care be taken by the contractor to ensure that the horizontal and vertical extent of the over-excavation and compaction conform to the site preparation recommendations presented in this report. Moore Twining is not responsible for measuring and verifying the horizontal and vertical extent of over-excavation and compaction. The contractor should verify in writing to the owner and Moore Twining that the horizontal and vertical over-excavation limits were completed in conformance with the recommendations of this report, the project plans, and the specifications (the most stringent applies). It is recommended that this verification be performed by a licensed surveyor. This verification should be provided prior to requesting pad certification from Moore Twining or excavating for foundations.

8.3.5 Following stripping, areas to receive miscellaneous lightly loaded foundations with a line load of less than 1.5 kips per foot, such as site walls and short retaining walls, should be over-excavated to at least 12 inches below the bottom of foundations, to at least 2 feet below preconstruction site grades and to the depth necessary to remove undocumented fill soils (encountered to depths of 3½ to 6⅓ feet BSG) and to at least 12 inches below subsurface improvements (structures, utilities, etc.) to be removed (if any), whichever is greater. The over-excavation for retaining walls/screen walls should extend to at least 3 feet beyond the edges of the foundations. The bottom of the over-excavation should be scarified to a depth of 8 inches, moisture conditioned and compacted as engineered fill.

8.3.6 Following stripping, removal of surface and subsurface improvements, areas to receive new pavements, exterior slabs on grade outside the building pad preparation limits and areas to receive fill outside the building pad preparation limits should be over-excavated to remove undocumented fill/disturbed soils from previous grading activities at the site (encountered to depths of 3½ to 6⅓ feet BSG). The bottom of over-excavation should be scarified to a depth of 12 inches below site grades and scarified soils should be moisture conditioned to between one (1) and two (2) percent above optimum moisture content and compacted as engineered fill. The limits of scarification for pavement areas and exterior slabs should extend at least 3 feet beyond the edge of these improvements. The upper 12 inches of the subgrade soils beneath the pavement areas should be compacted to at least 95 percent of the maximum dry density as determined by ASTM Test Method D1557. As an alternative to removing all existing undocumented fills in pavement and site work areas, existing fill soils outside the building pad may remain in-place if an increased risk of damage and higher maintenance and

repair due to settlement of this fill is accepted by Circle K. The magnitude of settlement cannot be estimated since undocumented fills can be highly variable. If this option is selected by Circle K, Contractors should be notified in writing prior to bid.

8.3.7 In the event that the "remainder parcel" is required to be rough graded during preparation of the Circle K parcel, the "remainder parcel"should be stripped to remove surface vegetation and organics followed by scarification to a depth of at least 8 inches and compaction of the scarified soils as engineered fill. This is a general recommendation for preparing a rough graded area only and is not intended for support of any specific improvement. In the event settlement sensitive improvements are planned in the remainder parcel, details of the locations and types of proposed improvements should be provided to Moore Twining to develop recommendations. A design level geotechnical engineering investigation would be required to provide specific site preparation recommendations for development on the "remainder parcel". In general, settlement sensitive improvements should be prepared by removing and recompaction all undocumented fill soils (encountered to depths ranging from 1 to 13½ feet BSG .

8.3.8 All fill required to bring the site to final grades should be placed as engineered fill. In addition, all native soils over-excavated should be compacted as engineered fill.

8.3.9 The contractor should locate all on-site water wells (if any). All wells scheduled for demolition should be abandoned per state and local requirements. The contractor should obtain an abandonment permit from the local environmental health department, and issue certificates of destruction to the owner and Moore Twining upon completion. At a minimum, wells in building areas (and within 5 feet of building perimeters) should have their casings removed to a depth of at least 8 feet below preconstruction site grades or finished pad grades, whichever is deeper. In parking lot or landscape areas, the casings should be removed to a depth of at least 5 feet below site grades or finished grades. The wells should be capped with concrete and the resulting excavations should be backfilled as engineered fill.

8.3.10 The moisture content and density of the compacted soils should be maintained until the placement of concrete. If soft or unstable soils are encountered during excavation or compaction operations, our firm should be notified so the soils conditions can be examined and additional recommendations provided to address the pliant areas.

8.3.11 Final grading shall produce a building pad which is smooth, planar, and resistant to rutting. The finished pad subgrade (before aggregate base is placed) shall not depress more than one-half (½) inch under the wheels of a fully loaded water truck, or equivalent loading. If depressions more than one-half (½) inch occur, the contractor shall perform remedial grading to achieve this requirement at no cost to the owner.

8.3.12 The Contractor should be responsible for the disposal of concrete, asphaltic concrete, soil, spoils, etc. (if any) that must be exported from the site. Individuals, facilities, agencies, etc. may require analytical testing and other assessments of these materials to determine if these materials are acceptable. The Contractor should be responsible to perform the tests, assessments, etc. to determine the appropriate method of disposal.

8.4 Engineered Fill

8.4.1 The on-site near surface soils encountered within the Circle K parcel are predominantly sandy lean clays and clayey sands with an expansion index less than 30. The on-site soils with an expansion index of less than 30 will be suitable for use as engineered fill below the recommended aggregate base section, provided they are free of debris, organics (less than 3 percent by weight and no roots larger than ¼ inch in diameter), irreducible material greater than 3 inches, and the moisture content of the soil is within one (1) to four (4) percent above optimum moisture content at the time of placement. The on-site soils are not suitable for use as backfill behind retaining walls. Cemented soils should be processed to reduce the maximum particle size to no greater than 3 inches and the excavated materials should be blended with the soils to generate a well-graded material prior to use as engineered fill. This report recommends that interior and exterior slabs-on-grade be underlain by at least 6 inches of aggregate base over engineered fill soils recommended in this report. If soils other than those considered in this report are encountered, Moore Twining should be notified to provide alternate recommendations.

The fill soils are generally anticipated to be suitable for reuse as engineered fill on the project; however, some organics were noted in several samples, such as Boring B-3 at a depth of about 5 feet BSG (organic odors and grass) and Borings B-9 and B-10 at depths of about 5 feet BSG (rootlets and grass). These may occur at the contact between the fill and native soils. Where organics are encountered, these materials should be removed from soils to be used as engineered fill.

8.4.2 The compactability of the native soils is dependent upon the moisture contents, subgrade conditions, degree of mixing, type of equipment, as well as other factors. The evaluation of such factors was beyond the scope of this report; therefore, it is recommended that they be evaluated by the contractor during preparation of bids and construction of the project.

8.4.3 Import fill soil (if any) should be non-recycled, non-expansive and granular in nature with the following acceptance criteria recommended.

Percent Passing 3-Inch Sieve	100
Percent Passing No. 4 Sieve	85 - 100
Percent Passing No. 200 Sieve	15 - 40
Expansion Index (ASTM D4829)	Less than 20
Organics	Less than 3 percent by weight
R-Value	Minimum 30*
Sulfates	< 0.05 percent by weight
Min. Resistivity	> 3,000 ohm-cm

* for pavement areas only

Prior to being transported to the site, the import material shall be certified by the Contractor and the supplier (to the satisfaction of the Owner) that the soils do not contain any environmental contaminates regulated by local, state or federal agencies having jurisdiction. In addition, Moore Twining should be requested to sample and test the material to determine compliance with the above geotechnical criteria. Contractors should provide a minimum of 7 working days to complete the testing.

8.4.4 Native engineered fill soil should be placed in loose lifts approximately 8 inches thick, moisture-conditioned to between one (1) and four (4) percent above optimum moisture content, and compacted to a dry density of at least 90 percent of the maximum dry density as determined by ASTM Test Method D1557. Additional lifts should not be placed if the previous lift did not meet the required dry density or if soil conditions are not stable. The upper 12 inches of fill and subgrade compacted in pavement areas as well as all fill soils below a depth of 10 feet below finished grade should be compacted to a minimum of 95 percent of the maximum dry density as determined by ASTM Test Method D1557.

8.4.5 Imported, granular, non-expansive engineered fill soil should be placed in loose lifts approximately 8 inches thick, moisture-conditioned to between optimum and three (3) percent above optimum moisture content, and compacted to a dry density of at least 92 percent of the maximum dry density as determined by ASTM Test Method D1557. Additional lifts should not be placed if the previous lift did not meet the required dry density or if soil

conditions are not stable. The upper 12 inches of fill and subgrade compacted in pavement areas as well as all fill soils below a depth of 10 feet below finished grade should be compacted to a minimum of 95 percent of the maximum dry density as determined by ASTM Test Method D1557.

8.4.6 In-place density testing should be conducted in accordance with ASTM D 6938 (nuclear methods) at a frequency of at least:

Table No. 3

Area	Minimum Test Frequency
Building Pad	1 test per 5,000 square feet per compacted lift, but not less than two tests per building pad per lift
Pavement Subgrade and Mass Grading Outside Building Pads	1 test per 5,000 square feet per compacted lift
Sidewalks	1 test per 50 lineal feet per lift
Utility Lines	1 test per 150 feet per lift

8.4.7 Open graded gravel and rock material such as ¾-inch crushed rock or ½-inch crushed rock should not be used as backfill including trench backfill. In the event gravel or rock is required by a regulatory agency for use as backfill (Contractor to obtain a letter from the agency stating the requirement for rock and/or gravel as backfill), all open graded materials shall be fully encased in a geotextile filter fabric, such as Mirafi 140N, to prevent migration of fine grained soils into the porous material. Gravel and rock cannot be used without the written approval of Moore Twining. If the contractor elects to use crushed rock (and if approved by Moore Twining), the contractor will be responsible for slurry cut off walls at the locations directed by Moore Twining. Crushed rock should be placed in thin (less than 8 inch) lifts and densified with a minimum of three (3) passes using a vibratory compactor.

8.4.8 Aggregate base below the interior building slab on grade shall be non-recycled and comply with Class 2 aggregate base (AB) per Caltrans Standard Specifications. Aggregate base used for pavement construction should comply with Class 2 aggregate base in accordance Caltrans Standard Specifications and may include recycled materials. Aggregate base shall be compacted to a minimum relative compaction of 95 percent in accordance with ASTM D1557 standards.

8.5 Conventional Shallow Spread Foundations

8.5.1 A structural engineer experienced in foundation design should recommend the thickness, design details and concrete specifications for the foundations based on the estimated settlements. The following static settlements should be anticipated for design: 1) a total settlement of 1 inch; and 2) a differential settlement of ½-inch in 40 feet.

8.5.2 Foundations supported on subgrade soils prepared as recommended in the Site Preparation section of this report may be designed for a maximum net allowable soil bearing pressure of 2,500 pounds per square foot for dead-plus-live loads. This value may be increased by one-third for short duration wind or seismic loads.

8.5.3 Perimeter foundations should have a minimum depth of 24 inches below the top of the slab or 24 inches below the lowest adjacent finished exterior ground surface, whichever is greater. Interior footings for the Circle K store should have a minimum depth of at least 24 inches below the bottom of the slab-on-grade. All footings should have a minimum width of 15 inches, regardless of load.

8.5.4 The foundations should be continuous around the perimeter of the proposed building to reduce moisture migration beneath the structures. Continuous perimeter foundations should be extended through doorways and/or openings that are not needed for support of loads.

8.5.5 The following seismic factors were developed using online data obtained from the Ground Motion Parameter Calculator provided by the Structural Engineers Association of California website (https://seismicmaps.org/) based upon a latitude of 38.752286 degrees and a longitude of -121.382895 degrees and a Site Class D - stiff soils. The data provided in Table No. 4 are based upon the procedures of Sections 1613.2.1 through 1613.2.4 of the 2019 California Building Code and were not determined based upon a ground motion hazard analysis. The structural engineer should review the values in Table No. 4 and determine whether a ground motion hazard analysis is required for the project considering the seismic design category, structural details, and requirements of ASCE 7-16 (Section 11.4.8 and other applicable sections). If required, Moore Twining should be notified and requested to conduct the additional analysis, develop updated seismic factors for the project, and update the following values.

Table No. 4

Seismic Factor	2019 CBC Value
Site Class	D
Maximum Considered Earthquake (geometric mean) peak ground acceleration adjusted for site effects (PGA_M)	0.279g
Mapped Maximum Considered Earthquake (geometric mean) peak ground acceleration (PGA)	0.199g
Spectral Response At Short Period (0.2 Second), S_s	0.471
Spectral Response At 1-Second Period, S_1	0.230
Site Coefficient (based on Spectral Response At Short Period), F_a	1.423
Site Coefficient (based on spectral response at 1-second period) F_v	See Note
Maximum considered earthquake spectral response acceleration for short period, S_{MS}	0.67
Maximum considered earthquake spectral response acceleration at 1 second, S_{M1}	See Note
Five percent damped design spectral response accelerations for short period, S_{DS}	0.447
Five percent damped design spectral response accelerations at 1-second period, S_{D1}	See Note

Note: Requires ground motion hazard analysis per ASCE Section 21.2 (ASCE 7-16, Section 11.4.8), unless an Exception of Section 11.4.8 of ASCE 7-16 is applicable for the project design.

8.5.6 Foundation excavations should be observed by Moore Twining prior to the placement of steel reinforcement and concrete to verify conformance with the intent of the recommendations of this report. The Contractor is responsible for proper notification to Moore Twining and receipt of written confirmation of this observation prior to placement of steel reinforcement.

8.5.7 Structural loads for lightly loaded (less than 1.5 kips per lineal foot) miscellaneous foundations (such as screen walls for the proposed trash enclosures) may be supported on engineered fills prepared in accordance with the recommendations included in the Site Preparation section of this report. The lightly loaded foundations should extend to a minimum depth of 18 inches below the lowest adjacent grade with a minimum width of 15 inches, regardless of load. Footings for miscellaneous lightly loaded foundations may be designed for a maximum net allowable soil bearing pressure of 1,500 pounds per square foot for dead-plus-live loads. These values may be increased by one-third for short duration wind or seismic loads.

8.5.8 Sight lighting and pylon signs (if any) may be supported on a drilled-cast-in-hole reinforced concrete foundation (pier). An allowable skin friction of 150 pounds per square foot may be used to resist axial loads. Lateral load resistance may be estimated using the 2019 CBC non-constrained procedure (Section 1807.3.2.1). The allowable passive resistance of the native soils may be assumed to be equal to the pressure developed by a fluid with a density of 250 pounds per cubic foot to a maximum of 2,500 pounds per square foot. The passive pressure may be applied over twice the pier diameter. The upper 12 inches of subgrade soils in landscaped areas should be neglected in determining the total passive resistance.

8.5.9 The bottom surface area of concrete footings or concrete slabs in direct contact with engineered fill can be used to resist lateral loads. An allowable coefficient of friction of 0.30 can be used for design. In areas where slabs are underlain by a synthetic moisture barrier, an allowable coefficient of friction of 0.10 can be used for design.

8.5.10 The allowable passive resistance of the native soils and engineered fill may be assumed to be equal to the pressure developed by a fluid with a density of 250 pounds per cubic foot. The upper 6 inches of subgrade in landscaped areas should be neglected in determining the total passive resistance.

8.6 Fuel Canopy Foundations Supported on Cast-in-Drilled-Hole (CIDH) Pile Foundations

8.6.1 A structural engineer registered in the state of California should prepare structural details for the fuel canopy foundations to resist shear, moment, and axial (tension and compression) loads.

8.6.2 Skin friction in the upper portion of the piles within the undocumented fill soils, to a depth of 6½ inches should be neglected for design. The allowable vertical downward load capacity of the CIDH pile foundations below a depth of 6½ feet below site grade may be designed based on an allowable skin friction value of 350 pounds per square foot, which assumes a minimum

embedment depth of 12 feet BSG below finished grade. The above stated values assume that the cast-in-drilled-hole foundations are placed into the existing undisturbed native soils. These values may be increased ⅓ for short duration loading. The project plans should identify the minimum embedment depth required into native soils below the existing fill.

8.6.3 The allowable uplift resistance of the pile foundations may be assumed to be half of the skin friction value used for design.

8.6.4 Piles should be placed no closer to each other than three pile diameters, center-to-center. For alternate spacing, the capacity of piles in groups should be reduced using appropriate group reduction formulas.

8.6.5 A structural engineer experienced in foundation design should recommend the thickness, design details and concrete specifications for the foundations based on a total static settlement of 1 inch and a differential static settlement of ½ inch between foundations.

8.6.6 Passive resistance in the upper portion of the piles, to a depth of 1 foot should be neglected for design. The allowable passive resistance of the soils below a depth of 1 foot below site grade may be assumed to be equal to the pressure developed by a fluid with a density of 250 pounds per cubic foot to a maximum of 2,500 pounds per square foot. These values may be increased by one-third for short duration wind or seismic loads. The passive pressure for drilled pile foundations spaced at three (3) pile diameters may be applied over a width equal to 2 pile diameters.

8.6.7 Piles should be placed no closer than three pile diameters, center-to-center. For alternate spacing, the capacity of piles in groups should be reduced using appropriate group reduction formulas.

8.7 Cast-In-Drilled-Hole Pile Construction

8.7.1 It is assumed the project structural engineer will prepare a specification for the construction of the deep foundations as part of the construction documents. The specifications should be consistent with the recommendations included in this report.

8.7.2 Concrete should be placed in the drilled shaft as soon as possible following drilling.

8.7.3 If required, temporary casing should be used for temporary support of the excavations during construction. The casing should be slowly removed from the shaft excavation during placement of concrete to ensure the casing is not raised above the level of the concrete during shaft construction, to prevent sidewall soils from sloughing into the shaft excavation. As an alternative, it

may be possible to utilize a drilling slurry for temporary support of the foundation excavations if unstable sidewalls occur. The Contractor will be required to provide temporary excavation support of the drilled pile excavations as necessary to construct the foundations.

8.7.4 Casing (if used) should be able to withstand the external pressures of the caving soils. The outside diameter of the casing should not be less than the diameter of the cast-in-drilled hole concrete pile.

8.7.5 The cemented soils encountered in the proposed fuel canopy area at depths between about 5 and 20 feet BSG will increase the resistance to foundation drilling for cast-in-drilled-hole pile foundations. Drilled holes for pile foundations should be drilled within 2 degrees of vertical. The rebar cage should be suspended within 2 degrees of vertical in the center of the excavation. This condition should be verified and documented during construction. Minimum concrete cover, as specified by the project design engineer, should be maintained throughout the length of the excavation.

8.7.6 Groundwater is not anticipated to be encountered during pile construction. However, in the event freewater seepage is encountered during excavation, the concrete should be placed from the bottom of the excavation by extending the tremie pipe or pump pipe to the bottom of the excavation and maintaining the outlet of the pipe below the wet concrete to prevent entrapment of freewater or slurry in the concrete. The concrete should be placed in a continuous manner to provide a seamless deep foundation element.

8.7.7 Casing should be lifted slowly as the concrete is deposited, while the bottom of the casing is kept at least two feet below the top of the concrete.

8.7.8 Moore Twining should inspect the drilling of the shafts to verify that the materials encountered are consistent with those evaluated during our geotechnical engineering investigation. This inspection should be conducted during drilling and prior to placement of reinforcing steel and concrete.

8.7.9 Loose soils should be removed from the drilled shaft excavation prior to placement of reinforcing steel and concrete.

8.8 Interior Slabs-on-Grade

8.8.1 Interior slabs-on-grade and all concrete walkways attached to the buildings should be constructed over 6 inches of non-recycled aggregate base over engineered fill extending to the depth recommended below foundations in the Site Preparation section of this report.

8.8.2 The recommendations provided herein are intended only for the design of interior concrete slabs-on-grade and their proposed uses, which do not include construction traffic (i.e., cranes, cement mixers, and rock trucks, etc.). The building contractor should assess the slab section and determine its adequacy to support any proposed construction traffic.

8.8.3 The slabs and underlying subgrade should be constructed in accordance with current American Concrete Institute (ACI) standards.

8.8.4 ACI recommends that the interior slab-on-grade should be placed directly on a vapor retarder when the potential exists that the underlying subgrade or sand layer could be wet or saturated prior to placement of the slab-on-grade. It is recommended that Stegowrap 15 should be used where floor coverings, such as carpet and tile, are anticipated or where moisture could permeate into the interior and create problems. The vapor retarder should overlay the compacted 6 inch layer of aggregate base. It should be noted that placing the PCC slab directly on the vapor barrier will increase the potential for cracking and curling; however, ACI recommends the placement of the vapor retarding membrane directly below the slab to reduce the amount vapor emission through the slab-on-grade. Based on discussions with Stego Industries, L.L.C. (telephone 949-493-5460), the Stegowrap can be placed directly on the aggregate base and the concrete can be placed directly on the Stegowrap. It is recommended that the design professional obtain written confirmation from Stego Industries that this product is suitable for the specific project application. It is recommended that the slab be moist cured for a minimum of 7 days to reduce the potential for excessive cracking. The underslab membrane should have a high puncture resistance (minimum of approximately 2,400 grams of puncture resistance), high abrasion resistance, rot resistant, and mildew resistant. It is recommended that the membrane be selected in accordance with the current ASTM C 755, Standard Practice For Selection of Vapor Retarder For Thermal Insulation and conform to the current ASTM E 154 Standard Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs, on Waters, or as Ground Cover. It is recommended that the vapor barrier selection and installation conform to the current ACI Manual of Concrete Practice, Guide for Concrete Floor and Slab Construction (302.1R), Addendum, Vapor Retarder Location and current ASTM E 1643, Standard Practice for Installation of Water Vapor Retarders Used In Contact with Earth or Granular Fill Under Concrete Slabs. In addition, it is recommended that the manufacturer of the floor covering and floor covering adhesive be consulted to determine if the manufacturers have additional recommendations regarding the design and construction of the slab-on-grade, testing of the slab-on-grade, slab preparation, application of the adhesive, installation of the floor covering and maintenance requirements.

It should be noted that the recommendations presented in this report are not intended to achieve a specific vapor emission rate.

8.8.5 The membrane should be installed so that there are no holes or uncovered areas. All seams should be overlapped and sealed with the manufacturer approved tape continuous at the laps so they are vapor tight. All perimeter edges of the membrane, such as pipe penetrations, interior and exterior footings, joints, etc., should be caulked per manufacturer's recommendations.

8.8.6 Tears or punctures that may occur in the membrane should be repaired prior to placement of concrete per manufacturer's recommendations. Once repaired, the membrane should be inspected by the contractor and the owner to verify adequate compliance with manufacture's recommendations.

8.8.7 The moisture retarding membrane is not required beneath exposed concrete floors, such as warehouses and garages, provided that moisture intrusion into the structures are permissible for the design life of the structures.

8.8.8 Additional measures to reduce moisture migration should be implemented for floors that will receive moisture sensitive coverings. These include: 1) constructing a less pervious concrete floor slab by maintaining a water-cement ratio of 0.52 or less in the concrete for slabs-on-grade, 2) ensuring that all seams and utility protrusions are sealed with tape to create a "water tight" moisture barrier, 3) placing concrete walkways or pavements adjacent to the structures, 4) providing adequate drainage away from the structures, 5) moist cure the slabs for at least 7 days, and 6) locating lawns, irrigated landscape areas, and flower beds away from the structures.

8.8.9 The Contractor shall test the moisture vapor transmission through the slab, the pH, internal relative humidity, etc., at a frequency and method as specified by the flooring manufacturer or as required by the plans and specifications, whichever is most stringent. The results of vapor transmission tests, pH tests, internal relative humidity tests, ambient building conditions, etc. should be within floor manufacturer's and adhesive manufacturer's specifications at the time the floor is placed. It is recommended that the floor manufacturer and subcontractor review and approve the test data prior to floor covering installation.

8.8.10 To reduce the potential for damaging slabs during construction the following recommendations are presented: 1) design for a differential slab movement of ½ inch relative to interior columns; and 2) the construction equipment which will operate on slabs or pavements should be evaluated by the contractor prior to loading the slab.

8.8.11 Backfill the zone above the top of footings at interior column locations, building perimeters, and below the bottom of slabs with an approved backfill as recommended herein for the area below interior slabs-on-grade. This procedure should provide more uniform support for the slabs which may reduce the potential for cracking.

8.9 Exterior Slabs-On-Grade

The recommendations for exterior slabs provided below are not intended for use for slabs subjected to vehicular traffic, rather lightly loaded sidewalks, curbs, and planters, etc.

8.9.1 Exterior improvements that subject the subgrade soils to a sustained load greater than 150 pounds per square foot should be prepared in accordance with recommendations presented in this report for interior slabs-on-grade. Moore Twining can provide alternative design recommendations for exterior slabs, if requested.

8.9.2 Exterior concrete slabs-on-grade (such as sidewalks, etc.)should be supported on a minimum of 6 inches of aggregate base over engineered fill prepared as recommended in the Site Preparation section of this report.

8.9.3 The moisture content of the subgrade soils should be verified to be slightly above optimum moisture content within 48 hours of placement of the slab-on-grade. If necessary to achieve the recommended moisture content, the subgrade could be over-excavated, moisture conditioned as necessary and compacted as engineered fill.

8.9.4 The exterior slabs-on-grade adjacent to landscape areas should be designed with thickened edges which extend to the bottom of the aggregate base. This should reduce the potential for infiltration of water into the aggregate base below exterior slabs.

8.9.5 Since exterior sidewalks, curbs, etc. are typically constructed at the end of the construction process, the moisture conditioning conducted during earthwork can revert to natural dry conditions. Placing concrete walks and finish work over dry or slightly moist subgrade should be avoided. It is recommended that the general contractor notify Moore Twining to conduct in-place moisture and density tests prior to placing concrete flatwork. Written test results indicating passing density and moisture tests should be in the general contractor's possession prior to placing concrete for exterior flatwork.

8.10 Asphaltic Concrete (AC) Pavements

8.10.1 The subgrade soils for asphaltic concrete pavements should be over-excavated and compacted as recommended in the "Site Preparation" section of the recommendations in this report. As part of the final preparation, the upper 12 inches of the subgrade soils should be moisture conditioned and compacted to a minimum of 95 percent of the maximum dry density determined in accordance with ASTM D 1557.

8.10.2 The following pavement sections are based on an R-value of 25, traffic index values ranging from 5.0 to 7.0 and a minimum of 3 inches of asphalt concrete. It should be noted that if pavements are constructed prior to construction of the buildings, the traffic index value should account for construction traffic. The actual traffic index values applicable to the site should be determined by the project civil engineer.

Table No. 5
Two-Layer Asphaltic Concrete Pavements

Traffic Index	AC thickness, inches	AB thickness, inches	Compacted Subgrade, inches
5.0	3.0	6.0	12
5.5	3.0	8.0	12
6.0	3.0	9.5	12
6.5	3.5	10.0	12
7.0	4.0	10.5	12

AC - Asphaltic Concrete compacted as recommended in this report
AB - Class II Aggregate Base with minimum R-value of 78 and compacted to at least 95 percent relative compaction (ASTM D1557)
Subgrade - Subgrade soils compacted to at least 95 percent relative compaction (ASTM D1557)

8.10.3 The curbs where pavements meet irrigated landscape areas or uncovered open areas should extend at least to the bottom of the aggregate base section. This should reduce subgrade moisture from irrigation and runoff from migrating into the base section and reducing the life of the pavements.

8.10.4 If actual pavement subgrade materials are significantly different from those tested for this study due to unanticipated grading or soil importing, the pavement sections should be re-evaluated for the changed subgrade conditions.

8.10.5 If the paved areas are to be used during construction, or if the type and frequency of traffic are greater than assumed in design, the pavement sections should be re-evaluated for the anticipated traffic.

8.10.6 Pavement section design assumes that proper maintenance, such as sealing and repair of localized distress, will be performed on an as needed basis for longevity and safety.

8.10.7 Pavement materials and construction method should conform to the State of California Standard Specifications.

8.10.8 It is recommended that the base 2 inch thick course of asphaltic concrete consist of a ¾ inch maximum medium gradation. The top course or wear course should consist of a ½ inch maximum medium gradation.

8.10.9 The asphaltic concrete, including the joint density, should be compacted to an average relative compaction of 93 percent, with no single test value being below a relative compaction of 91 percent and no single test value being above a relative compaction of 97 percent of the referenced laboratory density according to ASTM D2041.

8.10.10 The asphalt concrete should comply with the requirements for a Type A asphalt concrete in accordance with the current State of California Department of Transportation (Caltrans) Standard Specification, or the requirements of the governing agency, whichever is more stringent.

8.11 Portland Cement Concrete (PCC) Pavements

Recommendations for Portland Cement Concrete pavement structural sections are presented in the following subsections. The PCC pavement design assumes a minimum modulus of rupture of 500 psi. The design professional should specify where Portland cement concrete pavements are used based on the anticipated type and frequency of traffic.

8.11.1 The subgrade soils for Portland cement concrete pavements should be over-excavated and compacted as recommended in the "Site Preparation" section of the recommendations in this report. As part of the final preparation, the upper 12 inches of the subgrade soils should be moisture conditioned and compacted to a minimum of 95 percent of the maximum dry density determined in accordance with ASTM D 1557.

8.11.2 The following preliminary Portland cement concrete pavement sections have been prepared for Traffic Indices Ranging from 5 to 7. The design pavement sections should be selected by the civil engineer based on the anticipated traffic loading. If the paved areas are to be used during construction, or if the type and frequency of traffic are greater than assumed in design, the pavement section should be re-evaluated for the anticipated traffic. The design thicknesses were prepared based on the procedures outlined in the Portland Cement Association (PCA) document, "Thickness Design for Concrete Highway and Street Pavements," assuming the following: 1) minimum modulus of rupture of 500 psi for the concrete, 2) a design life of 20 years, 3) load transfer by aggregate interlock or dowels, 4) concrete shoulder, 5) a load safety factor of 1.1, 6) truck loading consisting of 1 single axle load of 18 kips, and 5) a maximum single axle weight of 12,000 pounds, and a maximum tandem axle weight of 36,000 pounds.

Table No. 6
Portland Cement Concrete Pavements

Traffic Index	ADTT	PCC Thickness (inches)	Aggregate Base (inches)	Compacted Subgrade (inches)
5.0	0.42	5.5	6	12
6.0	1.94	6.0	6	12
7.0	7.08	6.0	6	12

ADTT - Average Daily Truck Traffic based on a loaded garbage/dumpster truck
PCC - Portland Cement Concrete (minimum Modulus of Rupture=500 psi)
Subgrade - Subgrade soils compacted to at least 95 percent relative compaction (ASTM D-1557)

8.11.3 Jointing is one of the most critical aspects of the PCC pavement design and construction. Joint spacing, joint type and load transfer devices have significant impacts on the pavement design and performance. Thus, the detailing of joints needs to be considered carefully and applied with clear details on the project plans by the pavement designer/detailer. Positive load transfer devices such as dowels are commonly used at contraction joints whenever the designer cannot be assured aggregate interlock will be maintained.

8.11.4 Specifications for the concrete mixtures used in the PCC pavement to reduce the effects of excessive shrinkage (such as curling and excessive shrinkage at joints), including maximum water requirements for the concrete mix, allowable shrinkage limits, curing methods, etc. should be provided by the designer/detailer of the PCC slabs. In addition, as noted in Section 8.11.3,

contraction joint requirements should be detailed by the designer/detailer of the PCC pavement to maintain stability. The minimum PCC thickness noted in this report assumes aggregate interlock occurs at contraction joints. However, curling and excessive shrinkage can disengage aggregate interlock and allow greater pavement deflection at free edges.

8.11.5 Concrete used for PCC pavements shall possess a minimum flexural strength (modulus of rupture) of 500 pounds per square inch. A minimum compressive strength of 3,500 pounds per square inch, or greater as required by the pavement designer, is recommended. Specifications for the concrete to reduce the effects of excessive shrinkage, such as maximum water requirements for the concrete mix, allowable shrinkage limits, contraction joint construction requirements, etc. should be provided by the designer of the PCC slabs.

8.11.6 The pavement section thickness design provided above assumes the design and construction will include sufficient load transfer at construction joints. Coated dowels or load transfer devices are recommended for construction joints to transfer loads. The joint details should be detailed by the pavement design engineer and provided on the plans.

8.11.7 Contraction and construction joints should include a joint filler/sealer to prevent migration of water into the subgrade soils. The type of joint filler should be specified by the pavement designer. The joint sealer and filler material should be maintained throughout the life of the pavement.

8.11.8 Contraction joints should have a depth of at least one-fourth the slab thickness, e.g., 1.5-inch for a 6-inch slab. Specifications for contraction joint spacing, timing and depth of sawcuts should be included in the plans and specifications.

8.11.9 Stresses are anticipated to be greater at the edges and construction joints of the pavement section. A thickened edge is recommended on the outside of slabs subjected to wheel loads.

8.11.10 Joint spacing in feet should not exceed twice the slab thickness in inches, e.g., 12 feet by 12 feet for a 6-inch slab thickness. Regardless of slab thickness, joint spacing should not exceed 15 feet.

8.11.11 Lay out joints to form square panels. When this is not practical, rectangular panels can be used if the long dimension is no more than 1.5 times the short.

8.11.12 Isolation (expansion) joints should extend the full depth and should be used only to isolate fixed objects abutting or within paved areas.

8.11.13 Pavement section design assumes that proper maintenance such as sealing and repair of localized distress will be performed on a periodic basis.

8.12 Underground Fuel Storage Tanks

It is our understanding underground fuel storage tanks are planned as part of a gasoline fueling station.

8.12.1 Excavations resistance may be encountered due to cemented soils.

8.12.2 The excavation limits, type of backfill, and the compaction requirements for the storage tanks should be specified by the applicable design professional and should be in compliance with the manufacturer's requirements and the requirements of the governing agency, whichever is more stringent.

8.12.3 If open graded gravel or rock material such as pea gravel or crushed rock is required by a regulatory agency or designer for use as backfill, the material should be placed in thin lifts and compacted using a vibratory compactor or other appropriate methods to a non-yielding condition as determined by Moore Twining. The backfill should be conducted in accordance with this report and the tank manufacturer's requirements, whichever is the most stringent. Each lift must be approved by Moore Twining prior to placing the next lift. All open graded materials should be fully encased in a geotextile filter fabric to reduce the potential for fines to migrate into the rock section. It should be noted that the use of open graded rock as backfill increases the potential for settlement, migration of water, etc.

8.12.4 Unless open-graded rock is used for backfill, the tank area backfill should be compacted to a minimum of 95 percent of the maximum dry density in accordance with ASTM D1557.

8.13 Slopes, Shoring and Temporary Excavations

8.13.1 It is the responsibility of the contractor to provide safe working conditions with respect to excavation slope stability. The contractor is responsible for site slope safety, classification of materials for excavation purposes, and maintaining slopes in a safe manner during construction. The grades, classification and height recommendations presented for temporary slopes are for consideration in preparing budget estimates and evaluating construction procedures.

8.13.2 Temporary excavations should be constructed in accordance with CAL OSHA requirements. Temporary cut slopes should not be steeper than 1.5:1, horizontal to vertical, and flatter if possible. If excavations cannot meet these criteria, the temporary excavations should be shored.

8.13.3 In no case should excavations extend below a 2H to 1V zone below existing utilities, foundations and/or floor slabs which are to remain after construction. Excavations which are required to be advanced below the 2H to 1V envelope should be shored to support the soils, foundations, and slabs.

8.13.4 All soils disturbed as part of the shoring removal shall be over-excavated and compacted as engineered fill. In addition, all cavities and void space resulting from the shoring removal activity shall be backfilled with engineered fill or a controlled density fill material to backfill the voids created by removal of the shoring. All voids resulting from removal of shoring shall be backfilled and all soils disturbed from the shoring removal shall be over-excavated and compacted as engineered fill.

8.13.5 Excavation stability should be monitored by the contractor. Slope gradient estimates provided in this report do not relieve the contractor of the responsibility for excavation safety. In the event that tension cracks or distress to the structure occurs, during or after excavation, the owner should be notified immediately and the contractor should take appropriate actions to minimize further damage or injury.

8.14 Utility Trenches

8.14.1 The utility trench subgrade should be prepared by excavation of a neat trench without disturbance to the bottom of the trench. If sidewalls are unstable, the Contractor shall either slope the excavation to create a stable sidewall or shore the excavation. All trench subgrade soils disturbed during excavation, such as by accidental over-excavation of the trench bottom, or by excavation equipment with cutting teeth, should be compacted to a minimum of 92 percent relative compaction prior to placement of bedding material. The Contractor is responsible for notifying Moore Twining when these conditions occur and arrange for Moore Twining to observe and test these areas prior to placement of pipe bedding. The Contractor shall use such equipment as necessary to achieve a smooth undisturbed native soil surface at the bottom of the trench with no loose material at the bottom of the trench. The Contractor shall either remove all loose soils or compact the loose soils as engineered fill prior to placement of bedding, pipe and backfill of the trench.

8.14.2 The trench width, type of pipe bedding, the type of initial backfill, and the compaction requirements of bedding and initial backfill material for utility trenches (storm drainage, sewer, water, electrical, gas, cable, phone, irrigation, etc.) should be specified by the project Civil Engineer or applicable design professional in compliance with the manufacturer's requirements, governing agency requirements and this report, whichever is more stringent. The contractor is responsible for contacting the governing agency to

determine the requirements for pipe bedding, pipe zone and final backfill. The contractor is responsible for notifying the Owner and Moore Twining if the requirements of the agency and this report conflict, the most stringent applies. For flexible polyvinylchloride (PVC) pipes, these requirements should be in accordance with the manufacturer's requirements or ASTM D-2321, whichever is more stringent, assuming a hydraulic gradient exists (gravel, rock, crushed gravel, etc. cannot be used as backfill on the project). The width of the trench should provide a minimum clearance of 8 inches between the sidewalls of the pipe and the trench, or as necessary to provide a trench width that is 12 inches greater than 1.25 times the outside diameter of the pipe, whichever is greater. As a minimum, the pipe bedding should consist of 4 inches of compacted (92 percent relative compaction) select sand with a minimum sand equivalent of 30 and meeting the following requirements: 100 percent passing the 1/4 inch sieve, a minimum of 90 percent passing the No. 4 sieve and not more than 10 percent passing the No. 200 sieve. The haunches and initial backfill (12 inches above the top of pipe) should consist of a select sand meeting these sand equivalent and gradation requirements that is placed in maximum 6-inch thick lifts and compacted to a minimum relative compaction of 92 percent using hand equipment. The final fill (12 inches above the pipe to the surface) should be on-site or imported, non-expansive materials moisture conditioned and compacted per sections 8.4.4 and 8.4.5 of this report. The project civil engineer should take measures to control migration of moisture in the trenches such as slurry collars, etc.

8.14.3 If ribbed or corrugated HDPE or metal pipes are used on the project, then the backfill should consist of select sand with a minimum sand equivalent of 30, 100 percent passing the 1/4 inch sieve, a minimum of 90 percent passing the No. 4 sieve and not more than 10 percent passing the No. 200 sieve. The sand shall be placed in maximum 6-inch thick lifts, extending to at least 1 foot above the top of pipe, and compacted to a minimum relative compaction of 92 percent using hand equipment. Prior to placement of the pipe, as a minimum, the pipe bedding should consist of 4 inches of compacted (92 percent relative compaction) sand meeting the above sand equivalent and gradation requirements for select sand bedding. The width of the trench should meet the requirements of ASTM D2321 listed in table below (minimum manufacturer requirements), or as necessary to provide sufficient space to achieve the required compaction, whichever is greater. As an alternative to the trench width recommended above and the use of the select sand bedding, a lesser trench width for HDPE pipes may be used if the trench is backfilled with a 2-sack sand-cement slurry from the bottom of the trench to 1 foot above the top of the pipe.

Table No. 7
Minimum Trench Widths for HDPE Pipe with
Sand Bedding Initial Backfill

Inside Diameter of HDPE Pipe (inches)	Outside Diameter of HDPE Pipe (inches)	Minimum Trench Width (inches) per ASTM D2321
12	14.2	30
18	21.5	39
24	28.4	48
36	41.4	64
48	55	80

8.14.4 Open graded gravel and rock material such as ¾-inch crushed rock or ½-inch crushed rock should not be used as backfill including trench backfill. In the event gravel or rock is required by a regulatory agency for use as backfill (Contractor to obtain a letter from the agency stating the requirement for rock and/or gravel as backfill), all open graded materials shall be fully encased in a geotextile filter fabric, such as Mirafi 140N, to prevent migration of fine grained soils into the porous material. Gravel and rock cannot be used without the written approval of Moore Twining. If the contractor elects to use crushed rock (and if approved by Moore Twining), the contractor will be responsible for slurry cut off walls at the locations directed by Moore Twining. Crushed rock should be placed in thin (less than 8 inch) lifts and densified with a minimum of three (3) passes using a vibratory compactor.

8.14.5 Utility trench backfill placed in or adjacent to building areas, exterior slabs or pavements should be placed in 8 inch lifts, moisture conditioned and compacted per the recommendations of section 8.4.4 and 8.4.5 of this report. Lift thickness can be increased if the contractor can demonstrate the minimum compaction requirements can be achieved. The contractor should use appropriate equipment and methods to avoid damage to utilities and/or structures during placement and compaction of the backfill materials.

8.14.6 On-site soils and approved imported engineered fill may be used as final backfill (12 inches above the pipe to the ground surface) in trenches.

8.14.7 Jetting of trench backfill is not allowed to compact the backfill soils.

8.14.8 Where utility trenches extend from the exterior to the interior limits of a building, lean concrete should be used as backfill material for a minimum distance of 2 feet laterally on each side of the exterior building line to prevent the trench from acting as a conduit to exterior surface water.

8.14.9 Storm drains and/or utility lines should be designed to be "watertight." If encountered, leaks should be immediately repaired. Leaking storm drain and/or utility lines could result in trench failure, sloughing and/or soil movement causing damage to surface and subsurface structures, pavements, flatwork, etc. In addition, landscaping irrigation systems should be monitored for leaks. The Contractor is required to video inspect or pressure test the wet utilities prior to placement of foundations, slabs-on-grade or pavements to verify that the pipelines are constructed properly and are "watertight." The Contractor shall provide the Owner a copy of the results of the testing. The Contractor is required to repair all noted deficiencies at no cost to the owner.

8.14.10 The plans should note that all utility trenches, including electrical lines, irrigation lines, etc. should be compacted per the recommendations of section 8.4.4 and 8.4.5 of this report except for the upper 12 inches below pavements which should be compacted to at least 95 percent relative compaction.

8.14.11 Utility trenches should not be constructed within a zone defined by a line that extends at an inclination of 2 horizontal to 1 vertical downward from the bottom of building foundations.

8.15 Corrosion Protection

8.15.1 Based on the resistivity values and the National Association of Corrosion Engineers (NACE) corrosion severity ratings listed in the Table No. 2 of section 6.8 of this report, the analytical results of sample analyses indicate the samples had resistivity values of 690 and 5,800 ohms-centimeter, with pH values of 6.3 and 7.1. Based on the resistivity values, the soils exhibit an "moderately corrosive" to "extremely corrosive" corrosion potential. Therefore, buried metal objects should be protected in accordance with the manufacturer's recommendations based on an "extremely corrosive" corrosion potential. The evaluation was limited to the effects of soils to metal objects; corrosion due to other potential sources, such as stray currents and groundwater, was not evaluated. If piping or concrete are placed in contact with deeper soils or engineered fill, these soils should be analyzed to evaluate the corrosion potential of these soils.

8.15.2 Corrosion of concrete due to sulfate attack is not anticipated based on the concentration of sulfates determined for the near-surface soils (0.00094 and less than 0.00060 percent by dry weight concentrations of sulfate).

According to provisions of ACI 318, section 4.3 , the sulfate concentration falls in the negligible classification (0.00 to 0.10 percent by weight) for concrete. Therefore, no restrictions are required regarding the type, water-to-cement ratio, or strength of the concrete used for foundation and slabs due to the sulfate content. However, a low water to cement ratio is recommended for slabs on grade as recommended in the "Interior Slab on Grade" section of this report.

8.15.3 These soil corrosion data should be provided to the manufacturers or suppliers of materials that will be in contact with soils (pipes or ferrous metal objects, etc.) to provide assistance in selecting the protection and materials for the proposed products or materials. If the manufacturers or suppliers cannot determine if materials are compatible with the soil corrosion conditions, a professional consultant, i.e., a corrosion engineer, with experience in corrosion protection should be consulted to design parameters. Moore Twining is not a corrosion engineer; thus, cannot provide recommendations for mitigation of corrosive soil conditions. It is recommended that a corrosion engineer be consulted for the site specific conditions.

9.0 DESIGN CONSULTATION

9.1 Moore Twining should be retained to review those portions of the contract drawings and specifications that pertain to earthwork operations and foundations prior to finalization to determine whether they are consistent with our recommendations. This service is not part of this current contractual agreement.

9.2 It is the client's responsibility to provide plans and specification documents for our review prior to their issuance for construction bidding purposes.

9.3 If Moore Twining is not retained for review, we assume no liability for the misinterpretation of our conclusions and recommendations. This review is documented by a formal plan/specification review report provided by Moore Twining.

10.0 CONSTRUCTION MONITORING

10.1 It is recommended that Moore Twining be retained to observe the excavation, earthwork, and foundation phases of work to determine that the subsurface conditions are compatible with those used in the analysis and design.

10.2 Moore Twining can conduct the necessary observation and field testing to provide results so that action necessary to remedy indicated deficiencies can be taken in accordance with the plans and specifications. Upon completion of the work, a

written summary of our observations, field testing and conclusions will be provided regarding the conformance of the completed work to the intent of the plans and specifications. This service is not, however, part of this current contractual agreement.

10.3 In the event that the earthwork operations for this project are conducted such that the construction sequence is not continuous, (or if construction operations disturb the surface soils) it is recommended that the exposed subgrade that will receive floor slabs be tested to verify adequate compaction and/or moisture conditioning. If adequate compaction or moisture contents are not verified, the fill soils should be over-excavated, scarified, moisture conditioned and compacted are recommended in the Recommendations of this report.

10.4 The construction monitoring is an integral part of this investigation. This phase of the work provides Moore Twining the opportunity to verify the subsurface conditions interpolated from the soil borings and make alternative recommendations if the conditions differ from those anticipated.

10.5 If Moore Twining is not afforded the opportunity to provide engineering observation and field-testing services during construction activities related to earthwork, foundations, pavements and trenches; then, Moore Twining will not be responsible for compliance of any aspect of the construction with our recommendations or performance of the structures or improvements if the recommendations of this report are not followed. It is recommended that if a firm other than Moore Twining is selected to conduct these services that they provide evidence of professional liability insurance of at least $3,000,000 and review this report. After their review, the firm should, in writing, state that they understand the conclusions and recommendations of this report and agree to conduct sufficient observations and testing to ensure the construction complies with this report's recommendations. Moore Twining should be notified, in writing, if another firm is selected to conduct observations and field-testing services prior to construction.

10.6 Upon the completion of work, a final report should be prepared by Moore Twining. This report is essential to ensure that the recommendations presented are incorporated into the project construction, and to note any deviations from the project plans and specifications. The client should notify Moore Twining upon the completion of work to prepare a final report summarizing the observations during site preparation activities relative to the recommendations of this report. This service is not, however, part of this current contractual agreement.

11.0 NOTIFICATION AND LIMITATIONS

11.1 The conclusions and recommendations presented in this report are based on the information provided regarding the proposed construction, and the results of the field and laboratory investigation, combined with interpolation of the subsurface conditions between boring locations. The nature and extent of subsurface variations between borings may not become evident until construction.

11.2 If variations or undesirable conditions are encountered during construction, Moore Twining should be notified promptly so that these conditions can be reviewed and our recommendations reconsidered where necessary. It should be noted that unexpected conditions frequently require additional expenditures for proper construction of the project.

11.3 If the proposed construction is relocated or redesigned, or if there is a substantial lapse of time between the submission of our report and the start of work (over 12 months) at the site, or if conditions have changed due to natural cause or construction operations at or adjacent to the site, the conclusions and recommendations contained in this report should be considered invalid unless the changes are reviewed and our conclusions and recommendations modified or approved in writing.

11.4 Changed site conditions, or relocation of proposed structures, may require additional field and laboratory investigations to determine if our conclusions and recommendations are applicable considering the changed conditions or time lapse.

11.5 The conclusions and recommendations contained in this report are valid only for the project discussed in Section 3.3, Anticipated Construction. The use of the information and recommendations contained in this report for structures on this site not discussed herein or for structures on other sites not discussed in this report is not recommended. The entity or entities that use or cause to use this report or any portion thereof for other structures or site not covered by this report shall hold Moore Twining, its officers and employees harmless from any and all claims and provide Moore Twining's defense in the event of a claim.

11.6 This report is issued with the understanding that it is the responsibility of the client to transmit the information and recommendations of this report to developers, owners, buyers, architects, engineers, designers, contractors, subcontractors, and other parties having interest in the project so that the steps necessary to carry out these recommendations in the design, construction and maintenance of the project are taken by the appropriate party.

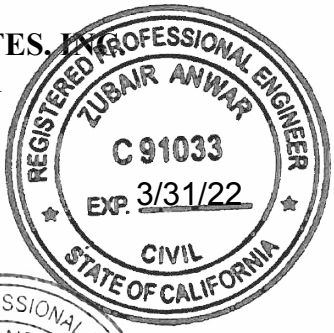
11.7 This report presents the results of a geotechnical engineering investigation only and should not be construed as an environmental audit or study.

11.8 Our professional services were performed, our findings obtained, and our recommendations prepared in accordance with generally-accepted engineering principles and practices. This warranty is in lieu of all other warranties either expressed or implied.

11.9 Reliance on this report by a third party (i.e., that is not a party to our written agreement) is at the party's sole risk. If the project and/or site are purchased by another party, the purchaser must obtain written authorization and sign an agreement with Moore Twining in order to rely upon the information provided in this report for design or construction of the project.

We appreciate the opportunity to be of service to Land Development Consultants. If you have any questions regarding this report, or if we can be of further assistance, please contact us at your convenience.

Sincerely,
MOORE TWINING ASSOCIATES, INC.
Geotechnical Engineering Division



Zubair Anwar, PE
Project Engineer

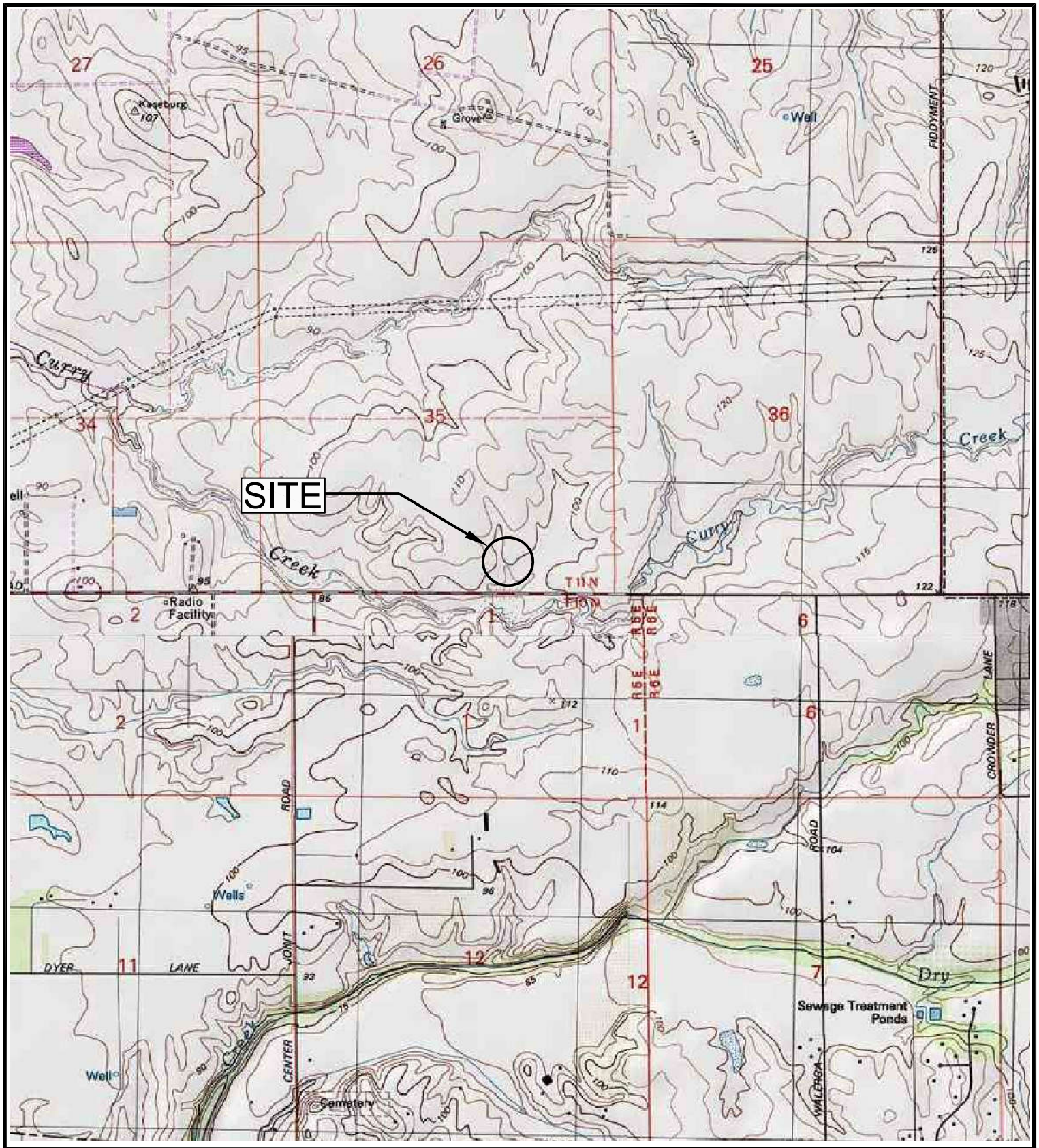
Read L. Andersen, RGE
Manager

APPENDIX A

DRAWINGS

Drawing No. 1 - Site Location Map

Drawing No. 2 - Test Boring and Percolation Test Location Map



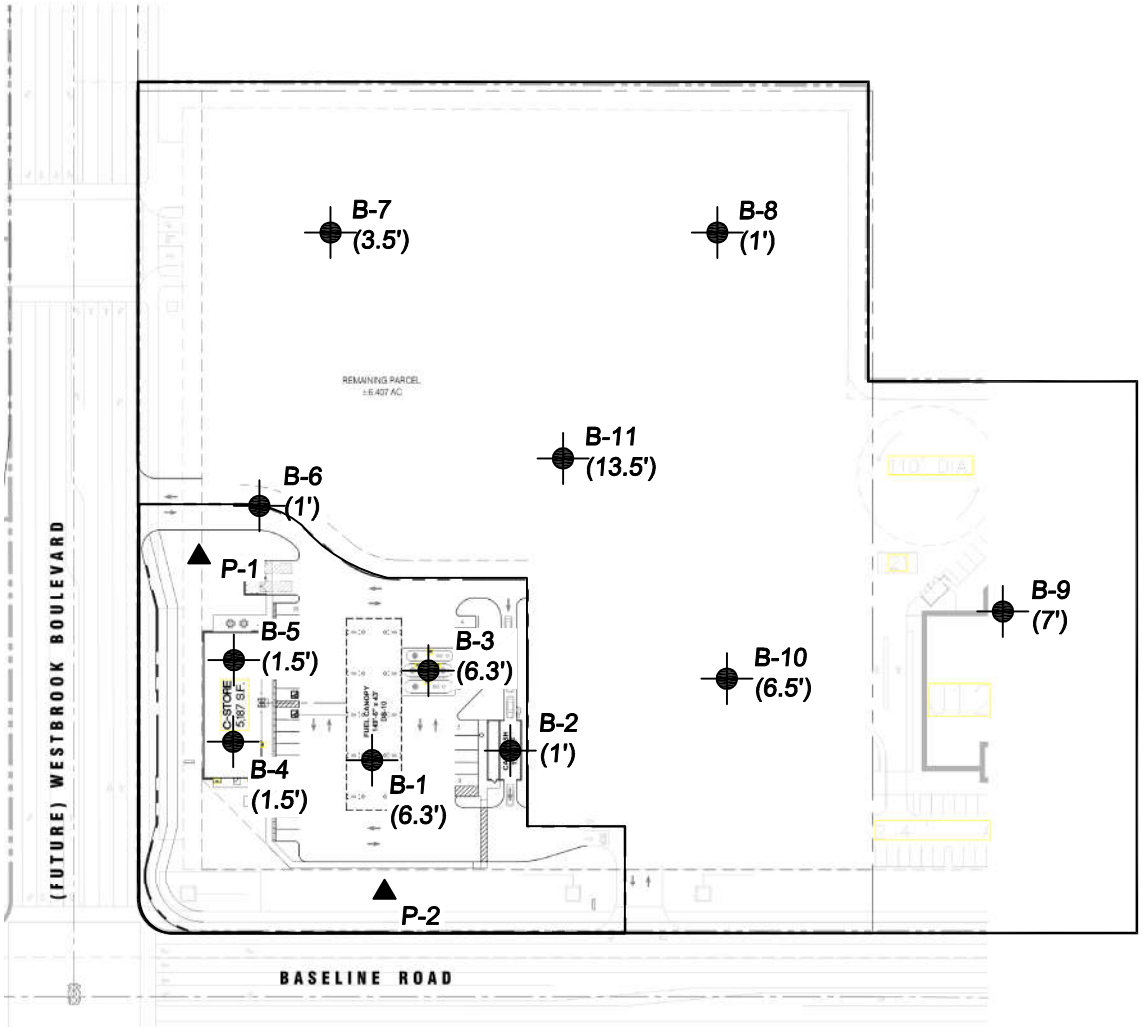
SOURCE: U.S.G.S. TOPOGRAPHIC MAP, 7 ½ MINUTE SERIES
PLEASANT GROVE, CALIFORNIA QUADRANGLE 1981

0 2000
APPROXIMATE SCALE
IN FEET

SITE LOCATION MAP
PROPOSED CIRCLE K STORE AND REMAINDER PARCEL
NEC BASELINE ROAD AND WESTBROOK BOULEVARD
ROSEVILLE, CALIFORNIA

FILE NO.: 71523-01-01	DATE: 08/28/20
DRAWN BY: RM	APPROVED BY:
PROJECT NO. G71523.01	DRAWING NO. 1

MOORE TWINING ASSOCIATES, INC.



APPROXIMATE TEST BORING LOCATION

(6.3') APPROXIMATE DEPTH OF UNDOCUMENTED FILLS

APPROXIMATE PERCOLATION TEST LOCATION

N

0 150

APPROXIMATE SCALE
IN FEET

TEST BORING AND PERCOLATION TEST LOCATION MAP
PROPOSED CIRCLE K STORE AND "REMAINDER PARCEL"
NEC BASELINE ROAD AND WESTBROOK BOULEVARD
ROSEVILLE, CALIFORNIA

FILE NO. 71523-02-02	DATE DRAWN: 03/31/20
DRAWN BY: RM	APPROVED BY:
PROJECT NO. G71523.02	DRAWING NO. 2

MOORE TWINING ASSOCIATES, INC.

APPENDIX B

LOGS OF BORINGS

This appendix contains the final logs of borings. These logs represent our interpretation of the contents of the field logs and the results of the field and laboratory tests.

The logs and related information depict subsurface conditions only at these locations and at the particular time designated on the logs. Soil conditions at other locations may differ from conditions occurring at these test boring locations. Also, the passage of time may result in changes in the soil conditions at these test boring locations.

In addition, an explanation of the abbreviations used in the preparation of the logs and a description of the Unified Soil Classification System are provided at the end of Appendix B.

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-1

Project: Proposed Circle K Store in Roseville, CA

Project Number: G71523.02

Drilled By: A.B.

Drill Type: CME 75

Auger Type: 6-5/8" Hollow Stem Augers

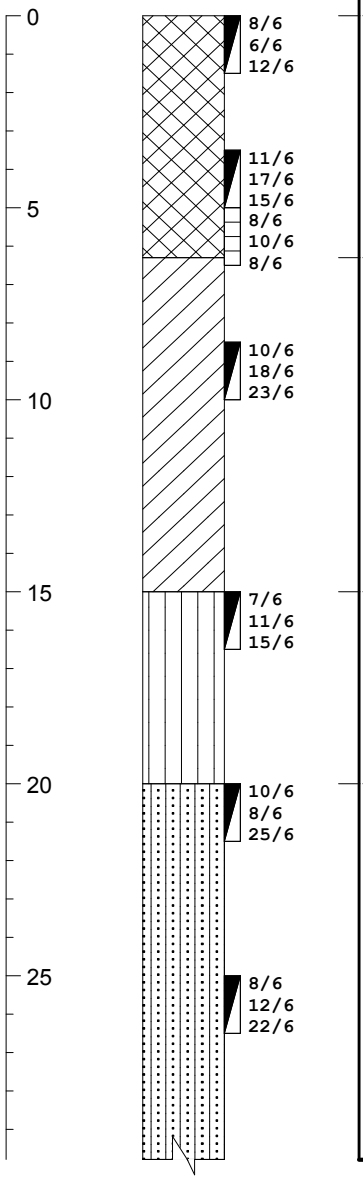
Hammer Type: 140 LB Auto Trip Hammer

Logged By: Z.A.

Date: August 4, 2020

Elevation: N/A

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
		FILL	FILL - CLAYEY SAND; medium dense, damp, fine to medium grained, light-brown, intermixed clumps of clay	LL=23 PI=5 EI=21	18	
			Dense		32	14.4
			Medium dense, light-gray, increase in silt content, strong organic odor	Low Recovery DD=111.7 pcf	18	10.3
		CL	LEAN CLAY; stiff, moist, medium plasticity, dark-brown, trace fine gravel			
			SANDY LEAN CLAY; hard, moist, low plasticity, brown to red-brown		41	29.6
		ML	SILT; very stiff, moist, non plastic, light-gray, with seams of clay up to to 3 inches thick		26	
		SM	SILTY SAND; dense, damp, fine to medium grained, gray-brown, increase in sand content with depth		23	
			With clay, fine to coarse grained		34	

Notes:

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-1

Project: Proposed Circle K Store in Roseville, CA

Project Number: G71523.02

Drilled By: A.B.

Drill Type: CME 75

Auger Type: 6-5/8" Hollow Stem Augers

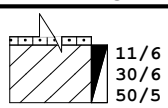
Hammer Type: 140 LB Auto Trip Hammer

Logged By: Z.A.

Date: August 4, 2020

Elevation: N/A

Depth to Groundwater First Encountered During Drilling: N/E

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
30	 11/6 30/6 50/5	CL	SANDY LEAN CLAY; hard, moist, low plasticity, brown		>80	
			Bottom of boring B-1 at 31.5 feet BSG			
35						
40						
45						
50						
55						

Notes:

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-2

Project: Proposed Circle K Store in Roseville, CA

Project Number: G71523.02

Drilled By: A.B.

Drill Type: CME 75

Auger Type: 6-5/8" Hollow Stem Augers

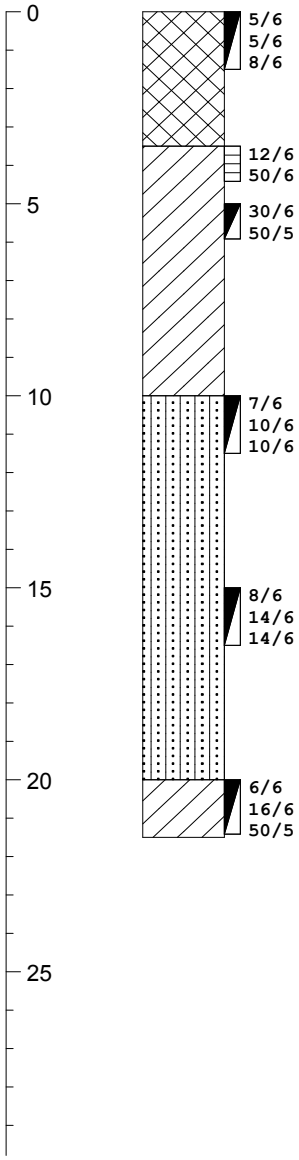
Hammer Type: 140 LB Auto Trip Hammer

Logged By: Z.A.

Date: August 4, 2020

Elevation: N/A

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
		FILL	SANDY LEAN CLAY; stiff, damp, low plasticity, red-brown, weak cementation		13	
		CL	SANDY LEAN CLAY; hard, damp, low plasticity, red-brown, moderate cementation	DD=116.4 pcf	>50	14.0
			Increase in clay content	Sand=31.9% -#200=68.1% LL=25 PI=9	>50	7.3
		SM	SILTY SAND; medium dense, moist, fine to medium grained, brown		20	
			Fine to coarse grained		28	
		CL	LEAN CLAY; hard, damp, low plasticity, brown		>65	
			Bottom of boring B-2 at 21.5 feet BSG			

Notes:

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-3

Project: Proposed Circle K Store in Roseville, CA

Project Number: G71523.02

Drilled By: A.B.

Drill Type: CME 75

Auger Type: 6-5/8" Hollow Stem Augers

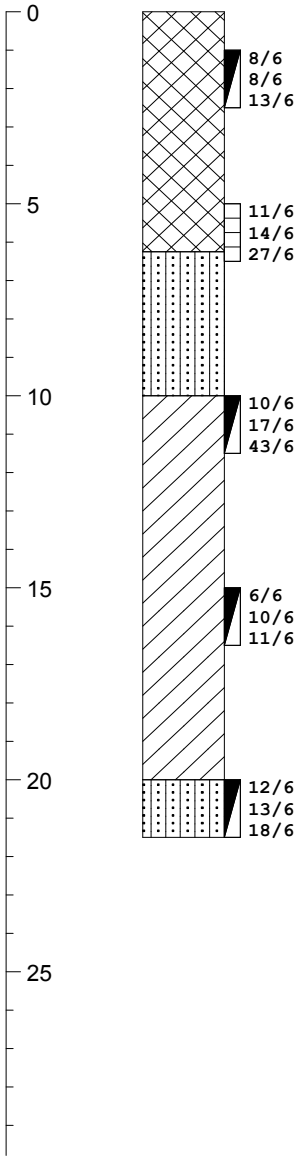
Hammer Type: 140 LB Auto Trip Hammer

Logged By: Z.A.

Date: August 4, 2020

Elevation: N/A

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
		FILL	FILL - CLAYEY SAND; medium dense, damp, fine to medium grained, brown, blended soil matrix		21	12.9
		SM	Moist, dark-brown, with trace intermixed, dry grass, strong organic odor	LOI=2.3%	41	11.8
			SILTY SAND; hard, non-plastic, light-brown, moderate to strong cementation	Sand=54.3% -#200=45.7%		19.2
		CL	LEAN CLAY; hard, damp, low plasticity, light-brown		60	25.3
			Very stiff		21	11.6
		SM	SILTY SAND; dense, most, fine to medium grained, brown		31	
			Bottom of boring B-3 at 21.5 feet BSG			

Notes:

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-4

Project: Proposed Circle K Store in Roseville, CA

Project Number: G71523.02

Drilled By: A.B.

Drill Type: CME 75

Auger Type: 6-5/8" Hollow Stem Augers

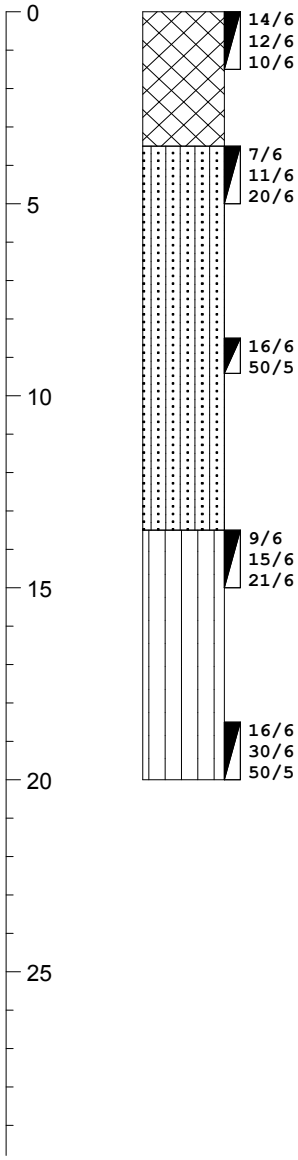
Hammer Type: 140 LB Auto Trip Hammer

Logged By: Z.A.

Date: August 4, 2020

Elevation: N/A

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
		FILL	CLAYEY SAND; medium dense, damp, fine to medium grained, light-brown Brown	EI=1	22	
		SM	SILTY SAND; dense, damp, fine to medium grained, brown		31	
			Very dense, increase in fines content		>50	
		ML	SANDY SIIT; hard, damp, medium plasticity, light-brown		36	
			Increase in sand content		>80	
			Bottom of boring B-4 at 20 feet BSG			

Notes:

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-5

Project: Proposed Circle K Store in Roseville, CA

Project Number: G71523.02

Drilled By: A.B.

Drill Type: CME 75

Auger Type: 6-5/8" Hollow Stem Augers

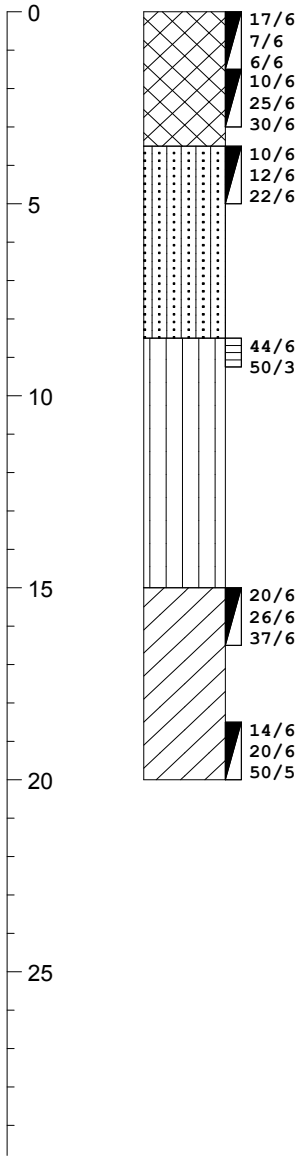
Hammer Type: 140 LB Auto Trip Hammer

Logged By: Z.A.

Date: August 4, 2020

Elevation: N/A

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
		FILL	CLAYEY SAND; medium dense, damp, fine to medium grained, light-brown, weak cementation		13	4.0
		FILL	SILTY, CLAYEY SAND; very dense, damp fine to medium grained, light-brown, weak to moderate cementation	Sand=55.2% -#200=44.8% LL=27 PI=6	55	12.2
		SM	SILTY SAND; dense, moist, fine to medium grained, brown		34	14.4
		ML	SANDY SILT; hard, damp, low plasticity, light-brown, weak to moderate cementation	DD=93.5 pcf	>50	18.7
		CL	LEAN CLAY; hard, moist, low plasticity, light-brown		63	
					>70	
			Bottom of boring B-5 at 20 feet BSG			

Notes:

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-6

Project: Proposed Circle K Store in Roseville, CA

Project Number: G71523.02

Drilled By: A.B.

Drill Type: CME 75

Auger Type: 6-5/8" Hollow Stem Augers

Hammer Type: 140 LB Auto Trip Hammer

Logged By: Z.A.

Date: August 4, 2020

Elevation: N/A

Depth to Groundwater First Encountered During Drilling: N/E

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
0	16/6 10/6 13/6	FILL	LEAN CLAY; very stiff, moist, low plasticity, brown		23	
		FILL	SANDY LEAN CLAY; very stiff, moist, low plasticity, brown	LL=31 PI=12		
	12/6 23/6 23/6	ML	SANDY SILT; hard, damp, non-plastic, light-brown		46	
5			Bottom of boring B-6 at 5 feet BSG			
10						
15						
20						
25						

Notes:

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-7

Project: Proposed Circle K Store in Roseville, CA

Project Number: G71523.02

Drilled By: A.B.

Drill Type: CME 75

Auger Type: 6-5/8" Hollow Stem Augers

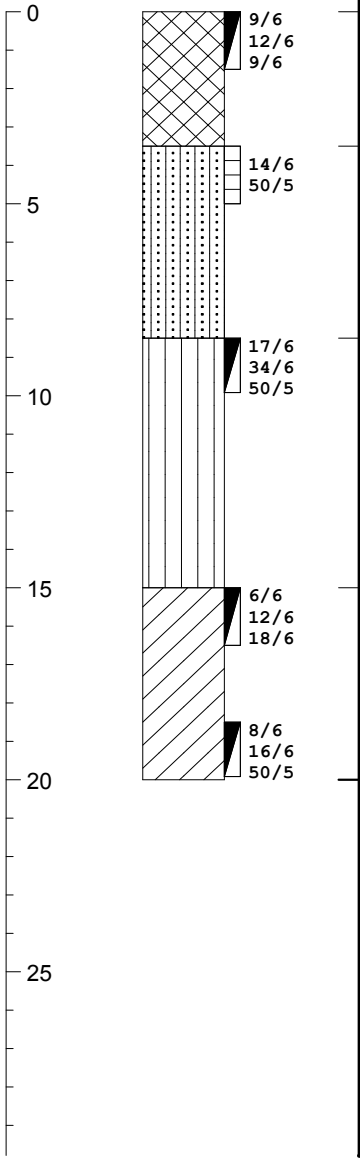
Hammer Type: 140 LB Auto Trip Hammer

Logged By: Z.A.

Date: August 4, 2020

Elevation: N/A

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
0	9/6 12/6 9/6	FILL	FILL - SILTY SAND; medium dense, fine to medium grained, brown to dark-brown		21	10.6
5	14/6 50/5	SM	SILTY SAND; very dense, damp, fine to medium grained, olive	DD=93.9 pcf Sand=37.8% -#200=62.2%	>50	25.0
10	17/6 34/6 50/5	ML	SANDY SILT; moist, non-plastic, light-brown	LL=35 PI=5	>84	22.4
15	6/6 12/6 18/6	CL	LEAN CLAY; very stiff, damp, low plasticity, light-brown		30	41.0
20	8/6 16/6 50/5		Hard		>66	
			Bottom of boring B-7 at 20 feet BSG			
25						

Notes:

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-8

Project: Proposed Circle K Store in Roseville, CA

Project Number: G71523.02

Drilled By: A.B.

Drill Type: CME 75

Auger Type: 6-5/8" Hollow Stem Augers

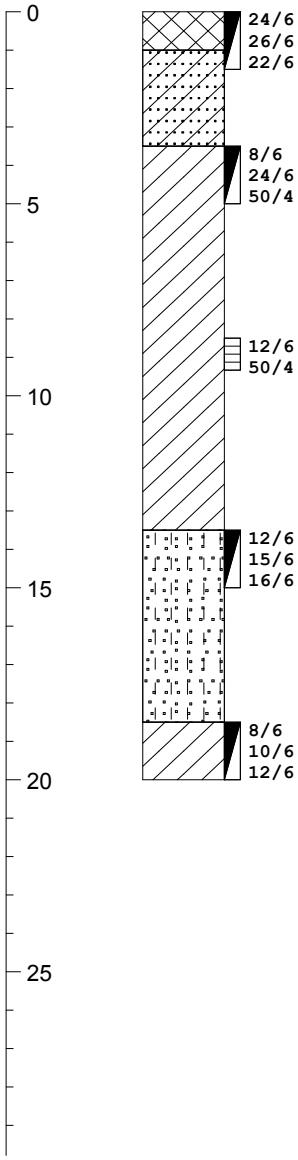
Hammer Type: 140 LB Auto Trip Hammer

Logged By: Z.A.

Date: August 4, 2020

Elevation: N/A

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
		FILL	CLAYEY SAND; dense, damp, fine to medium grained, light- brown		48	
		SC	CLAYEY SAND; dense, damp, fine to medium grained, brown			
		CL	LEAN CLAY; hard, dry, low plasticity, brown, weak cementation		>74	33.8
			Moderate cementation	DD=87.8 pcf	>50	30.0
		SP-SM	POORLY GRADED SAND with SILT; dense, damp, fine to medium grained, gray-brown		31	
		CL	LEAN CLAY; very stiff, moist, low plasticity, olive-green		22	
			Bottom of boring B-8 at 20 feet BSG			

Notes:

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-9

Project: Proposed Circle K Store in Roseville, CA

Project Number: G71523.02

Drilled By: A.B.

Drill Type: CME 75

Auger Type: 6-5/8" Hollow Stem Augers

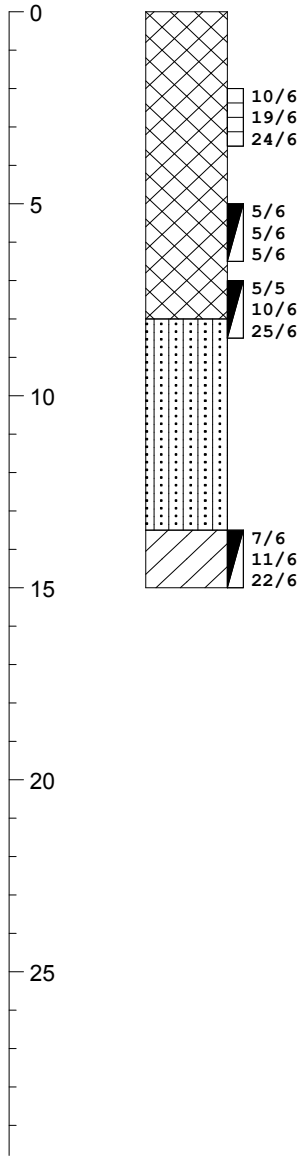
Hammer Type: 140 LB Auto Trip Hammer

Logged By: Z.A.

Date: August 4, 2020

Elevation: N/A

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
		FILL	FILL - CLAYEY SAND; dense, damp, fine to medium grained, red-brown			
			Medium dense	DD=101.6 pcf Gravel=7.8% Sand=58.2% -#200=34.0%	43	18.2
		FILL	SILTY SAND; loose, moist, fine to medium, dark-brown, trace fine rootlets		10	11.7
		FILL	SANDY LEAN CLAY; hard, damp, low plasticity, red-brown		35	12.3
		SM	SILTY SAND; dense, damp, fine to medium grained, red-brown			
		CL	LEAN CLAY; hard, moist, low plasticity, olive		33	
			Bottom of boring B-9 at 15 feet BSG			

Notes:

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-10

Project: Proposed Circle K Store in Roseville, CA

Project Number: G71523.02

Drilled By: A.B.

Drill Type: CME 75

Auger Type: 6-5/8" Hollow Stem Augers

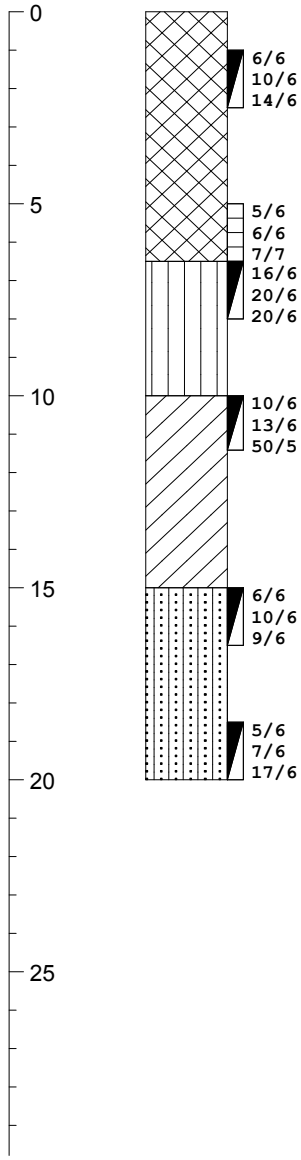
Hammer Type: 140 LB Auto Trip Hammer

Logged By: Z.A.

Date: August 4, 2020

Elevation: N/A

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
		FILL	FILL - CLAYEY SAND; medium dense, damp, fine to medium grained, red-brown		24	
		FILL	SILTY SAND; loose, fine to medium grained, dark brown, trace fine rootlets and grass	LOI=1.6%	13	10.2
		FILL			40	14.6
		ML	LEAN CLAY; stiff, moist, medium plasticity, dark-brown			14.1
			SILT; hard, moist, low plasticity, light-brown		>63	
		CL	LEAN CLAY; hard, damp, low plasticity, light red-brown			
		SM	SILTY SAND; medium dense, damp, fine to medium grained, light-brown		19	
					24	
			Bottom of boring B-10 at 20 feet BSG			

Notes:

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: B-11

Project: Proposed Circle K Store in Roseville, CA

Project Number: G71523.02

Drilled By: A.B.

Drill Type: CME 75

Auger Type: 6-5/8" Hollow Stem Augers

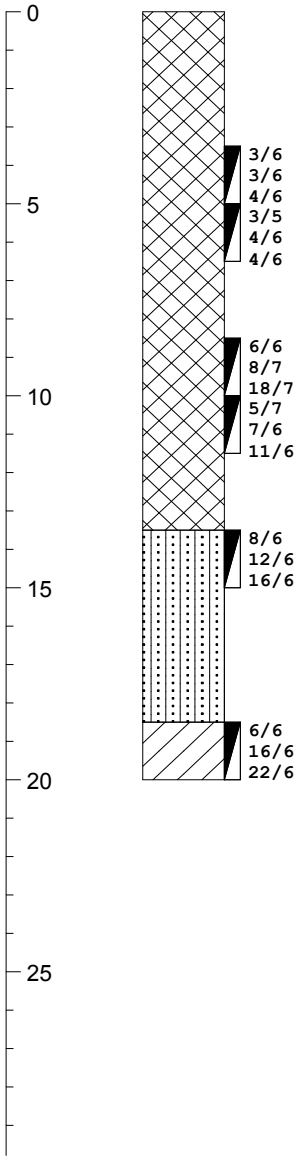
Hammer Type: 140 LB Auto Trip Hammer

Logged By: Z.A.

Date: August 4, 2020

Elevation: N/A

Depth to Groundwater First Encountered During Drilling: N/E



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
		FILL	FILL - SILTY SAND; dense, dry, fine to coarse grained, light-brown			10.0
			Loose, very moist, brown	Sand=83.1% -#200=16.9%	7	20.0
					8	19.0
			Medium dense (Native?)		26	19.4
			Native?		18	
		SM	Silty Sand; medium dense, moist, fine to medium, brown		28	
		CL	LEAN CLAY; hard, moist, low plasticity, light-brown		38	
			Bottom of boring B-11 at 20 feet BSG			

Notes:

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: P-1

Project: Proposed Circle K Store in Roseville, CA

Project Number: G71523.02

Drilled By: A.B.

Drill Type: CME 75

Auger Type: 6-5/8" Hollow Stem Augers

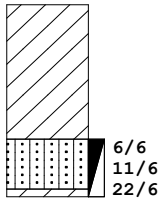
Hammer Type: 140 LB Auto Trip Hammer

Logged By: Z.A.

Date: August 4, 2020

Elevation: N/A

Depth to Groundwater First Encountered During Drilling: N/E

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
0	 6/6 11/6 22/6	CL	LEAN CLAY; damp, low plasticity, brown			
		SM	SILTY SAND; dense, damp, fine to medium grained, olive-brown		33	
5		CL	LEAN CLAY; hard, damp, low plasticity, light-brown			
			Bottom of boring P-1 at 5 feet BSG			
10						
15						
20						
25						

Notes:

Figure Number

MOORE TWINING ASSOCIATES, INC.

Test Boring: P-2

Project: Proposed Circle K Store in Roseville, CA

Project Number: G71523.02

Drilled By: A.B.

Drill Type: CME 75

Auger Type: 6-5/8" Hollow Stem Augers

Hammer Type: 140 LB Auto Trip Hammer

Logged By: Z.A.

Date: August 4, 2020

Elevation: N/A

Depth to Groundwater First Encountered During Drilling: N/E

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
0		CL	LEAN CLAY; damp, low plasticity, brown			
5	9/6 17/6 26/6		Hard		43	
10			Bottom of boring P-2 at 9.2 feet BSG			
15						
20						
25						

Notes:

Figure Number

KEY TO SYMBOLS

Symbol	Description
Strata symbols	
	Fill
	Lean clay
	Silt
	Silty sand
	Clayey sand
	Poorly graded sand with silt

Symbol	Description
Misc. Symbols	
	Boring continues
Soil Samplers	
	Standard penetration test
	California Modified split barrel ring sampler

Notes:

1. Exploratory borings were drilled on 8/4/20 and 8/5/20 using a CME 75 drill rig equipped with 6-5/8" and 8" outside diameter hollow stem augers.

2. Groundwater was not encountered in any of the borings.

3. Boring locations were measured or paced from existing features.

4. These logs are subject to the limitations, conclusions, and recommendations in this report.

5. The "N-value" reported for the California Modified Split Barrel Sampler is the uncorrected field blow count. This value should not be interpreted as an SPT equivalent N-value.

6. Results of tests conducted on samples recovered are reported on the logs.

DD =	Natural dry density (pcf)	LL =	Liquid Limit (%)
+4 =	Percent retained on the No. 4 sieve(%)	PI =	Plasticity Index (%)
-200 =	Percent passing the No. 200 sieve (%)	EI =	Expansion Index
Sand =	Percent passing the No. 4 sieve and retained on No. 200 sieve (%)	Gravel =	Percent passing 3-inch & retained on No. 4 sieves(%)
pH =	Soil pH	SR =	Soil resistivity (ohms-cm)
SS =	Soluble sulfates (%)	Cl =	Soluble chlorides (%)
ø =	Internal Angle of Friction (degrees)	c =	Cohesion (psf)
pcf =	Pounds per cubic foot	psf =	Pounds per square foot
O.D. =	Outside diameter	AMSL =	Above mean sea level
N/A =	Not applicable	N/E =	Not encountered

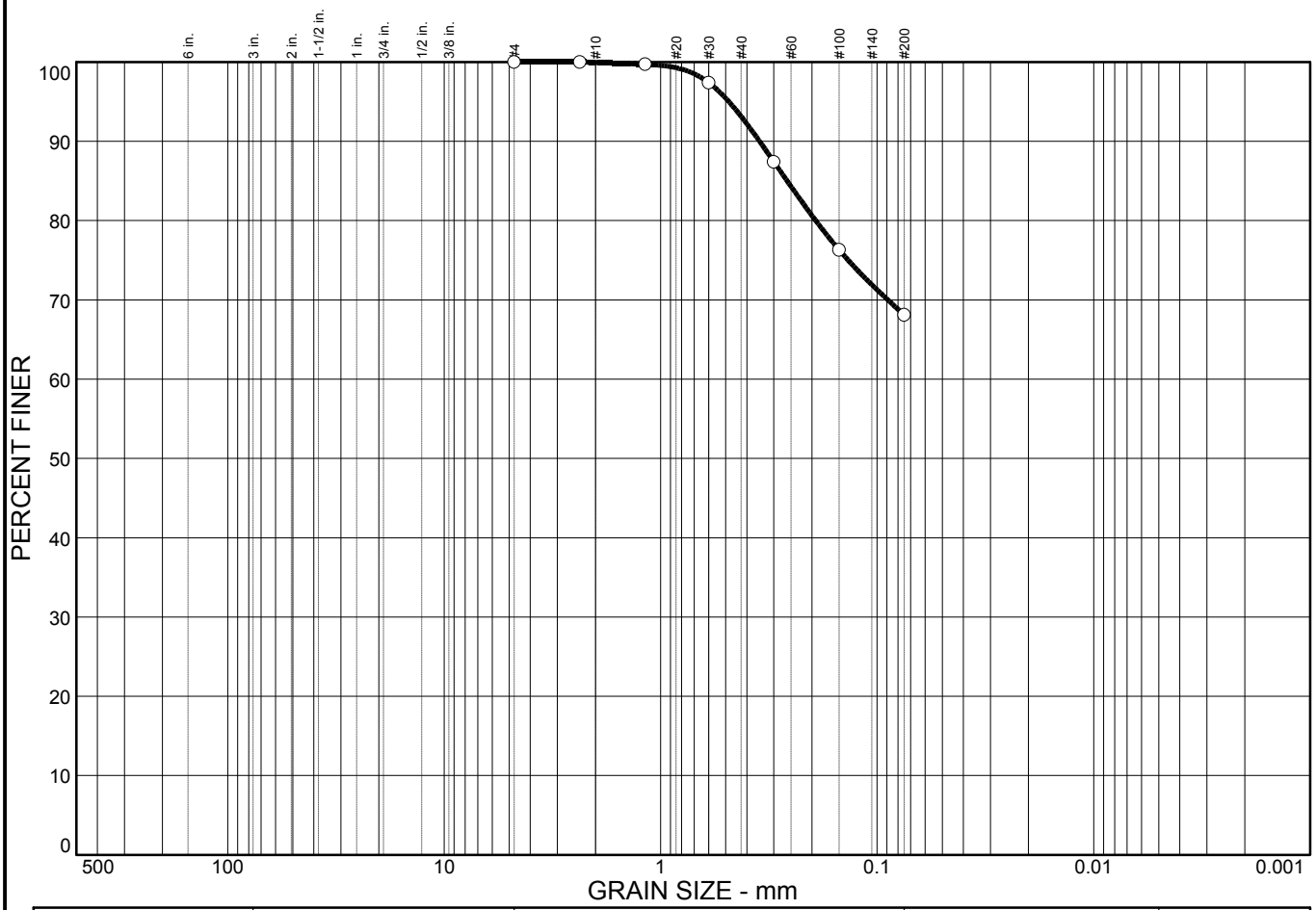
APPENDIX C

RESULTS OF LABORATORY TESTS

This appendix contains the individual results of the following tests. The results of the moisture content and dry density tests are included on the test boring logs in Appendix B. These data, along with the field observations, were used to prepare the final test boring logs in Appendix B.

These Included:	**To Determine:**
Moisture Content (ASTM D2216)	Moisture contents representative of field conditions at the time the sample was taken.
Dry Density (ASTM D2937)	Dry unit weight of sample representative of in-situ or in-place undisturbed condition.
Grain-Size Distribution (ASTM D422)	Size and distribution of soil particles, i.e., sand, gravel and fines (silt and clay).
Atterberg Limits (ASTM D4318)	Determines the moisture content where the soil behaves as a viscous material (liquid limit) and the moisture content at which the soil reaches a plastic state
Consolidation (ASTM 2435)	The amount and rate at which a soil sample compresses when loaded, and the influence of saturation on its behavior.
Expansion Index (ASTM D4829)	Swell potential of soil with increases in moisture content.
R-Value (ASTM 2844)	The capacity of a subgrade or subbase to support a pavement section designed to carry a specified traffic load.
Sulfate Content (ASTM D4327)	Percentage of water-soluble sulfate as (SO4) in soil samples. Used as an indication of the relative degree of sulfate attack on concrete and for selecting the cement type.
Chloride Content (ASTM D4327)	Percentage of soluble chloride in soil. Used to evaluate the potential attack on encased reinforcing steel.
Resistivity (ASTM G187)	The potential of the soil to corrode metal.
pH (ASTM D4972)	The acidity or alkalinity of subgrade material.

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	31.9	68.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#8	100.0		
#16	99.7		
#30	97.4		
#50	87.4		
#100	76.3		
#200	68.1		

* (no specification provided)

Material Description

Sandy lean clay

Atterberg Limits

PL= 16 LL= 25 PI= 9

Coefficients

D_{85}= 0.261 D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= CL AASHTO=

Remarks

Sample No.: B-2 **Source of Sample:** **Date:** 8/4/20
Location: **Elev./Depth:** 5-6.5'

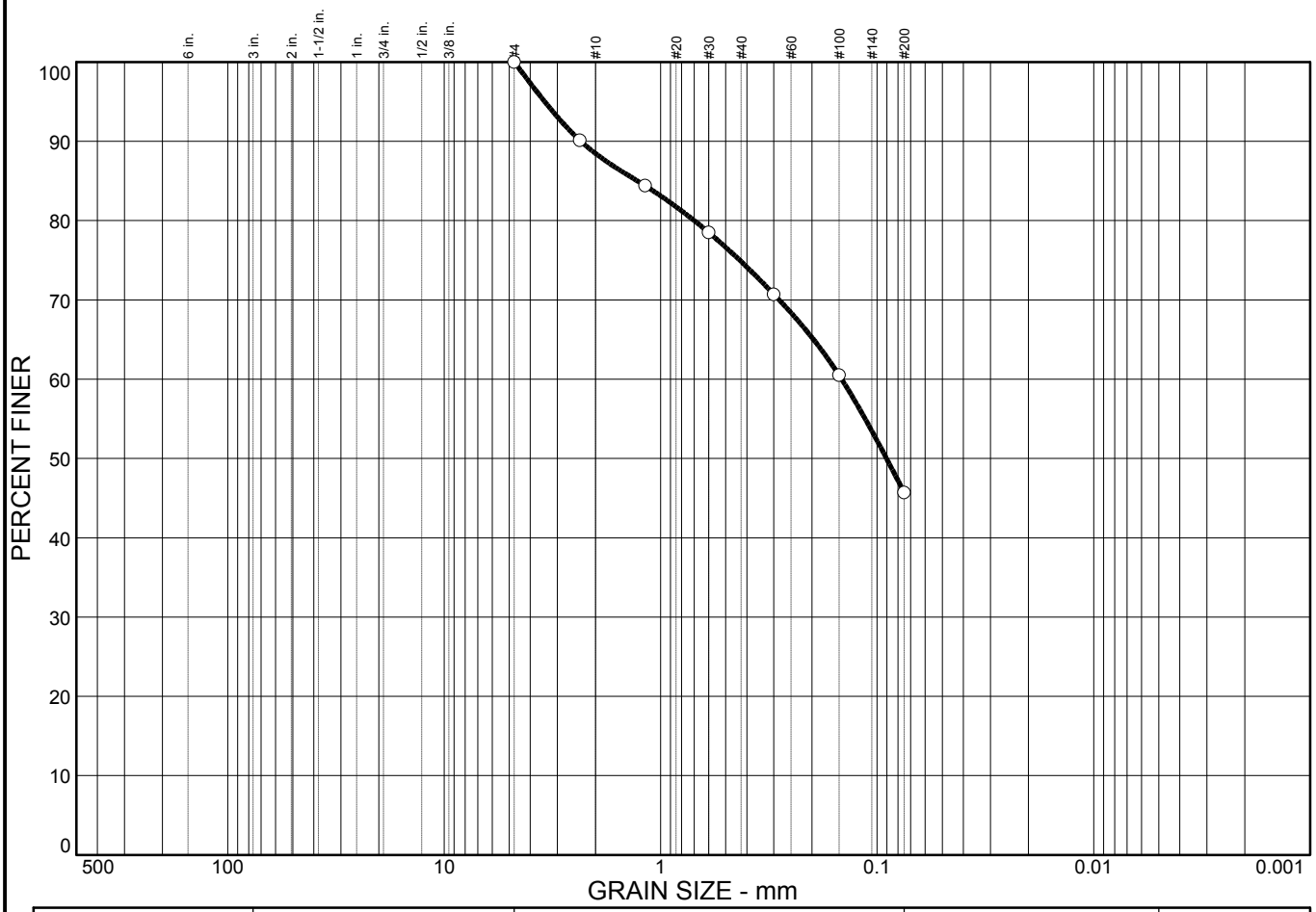
Moore Twining Associates, Inc.

Fresno, CA

Client:
Project: Proposed Circle K

Project No: G71523.02 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	54.3	45.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#8	90.1		
#16	84.4		
#30	78.5		
#50	70.7		
#100	60.5		
#200	45.7		

* (no specification provided)

Material Description

Silty sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 1.28 D_{60}= 0.146 D_{50}= 0.0906
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= SM AASHTO=

Remarks

Sample No.: B-3 **Source of Sample:** **Date:** 8/4/20
Location: **Elev./Depth:** 6.25-6.50'

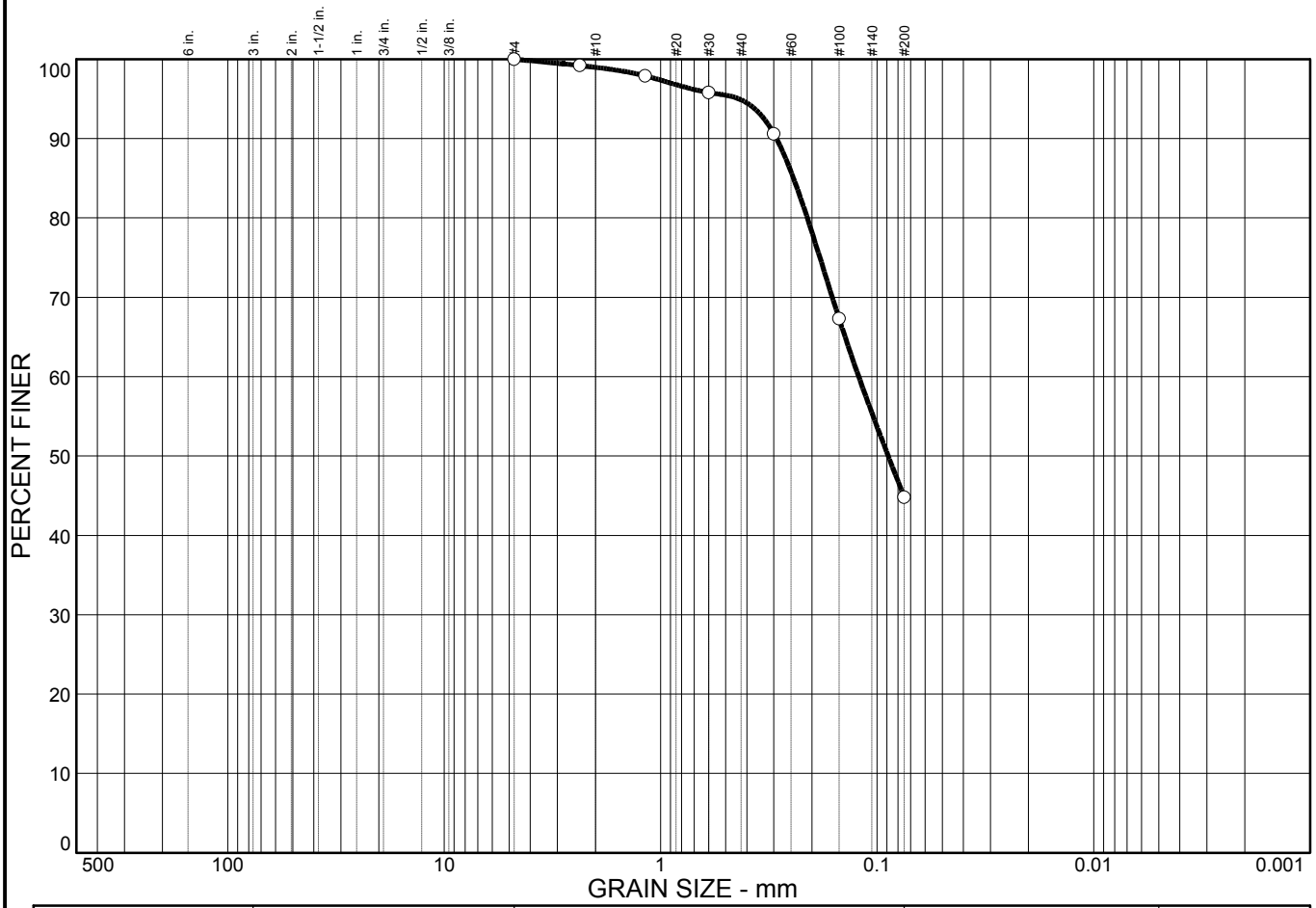
Moore Twining Associates, Inc.

Fresno, CA

Client:
Project: Proposed Circle K

Project No: G71523.02 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	55.2	44.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#8	99.2		
#16	97.9		
#30	95.8		
#50	90.6		
#100	67.3		
#200	44.8		

* (no specification provided)

Material Description

Silty, clayey sand

Atterberg Limits

PL= 21 LL= 27 PI= 6

Coefficients

D_{85}= 0.244 D_{60}= 0.122 D_{50}= 0.0890
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= SC-SM AASHTO=

Remarks

Sample No.: B-5 **Source of Sample:** **Date:** 8/4/20
Location: **Elev./Depth:** 1.5-3'

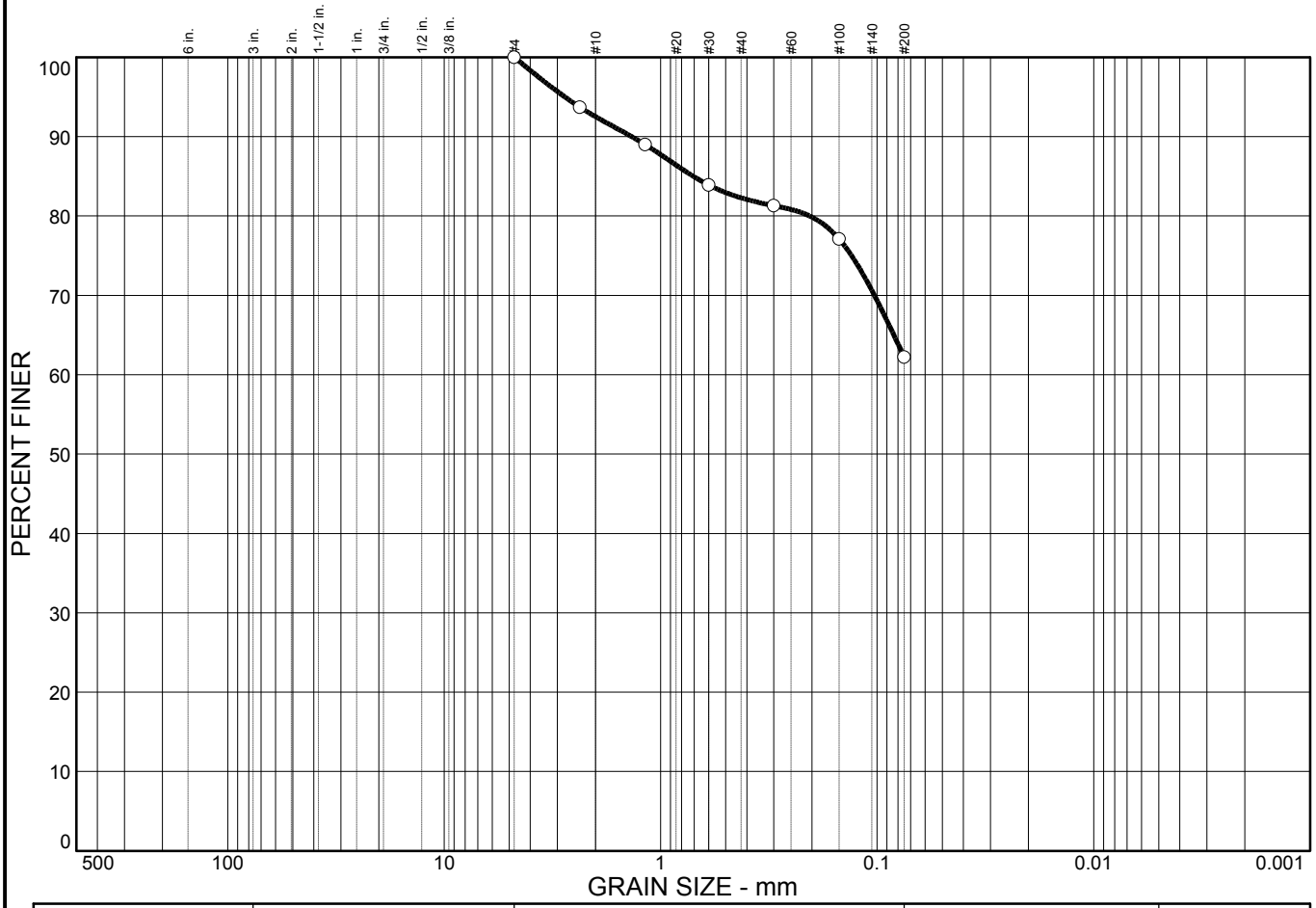
Moore Twining Associates, Inc.

Fresno, CA

Client:
Project: Proposed Circle K

Project No: G71523.02 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	37.8	62.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#8	93.7		
#16	89.0		
#30	83.9		
#50	81.3		
#100	77.1		
#200	62.2		

* (no specification provided)

Material Description

Sandy silt

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.707 D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= ML AASHTO=

Remarks

Sample No.: B-7 **Source of Sample:** **Date:** 8/4/20
Location: **Elev./Depth:** 3.5-5'

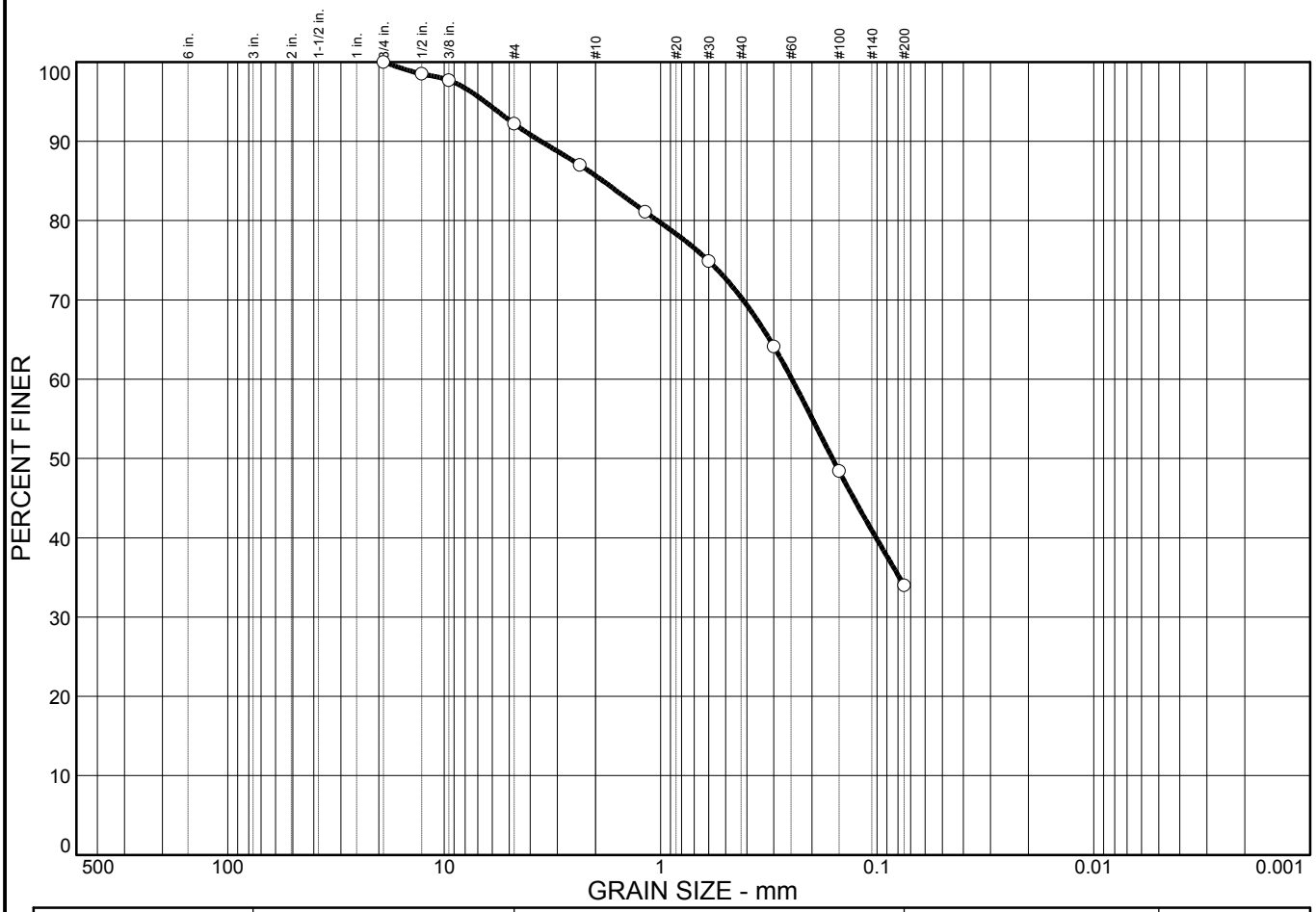
Moore Twining Associates, Inc.

Fresno, CA

Client:
Project: Proposed Circle K

Project No: G71523.02 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	7.8	58.2	34.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	100.0		
1/2 in.	98.5		
3/8 in.	97.7		
#4	92.2		
#8	87.0		
#16	81.1		
#30	74.9		
#50	64.1		
#100	48.4		
#200	34.0		

* (no specification provided)

Material Description

Silty sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 1.85 D_{60}= 0.248 D_{50}= 0.161
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= SM AASHTO=

Remarks

Sample No.: B-9 **Source of Sample:** **Date:** 8/4/20
Location: **Elev./Depth:** 2-3.5'

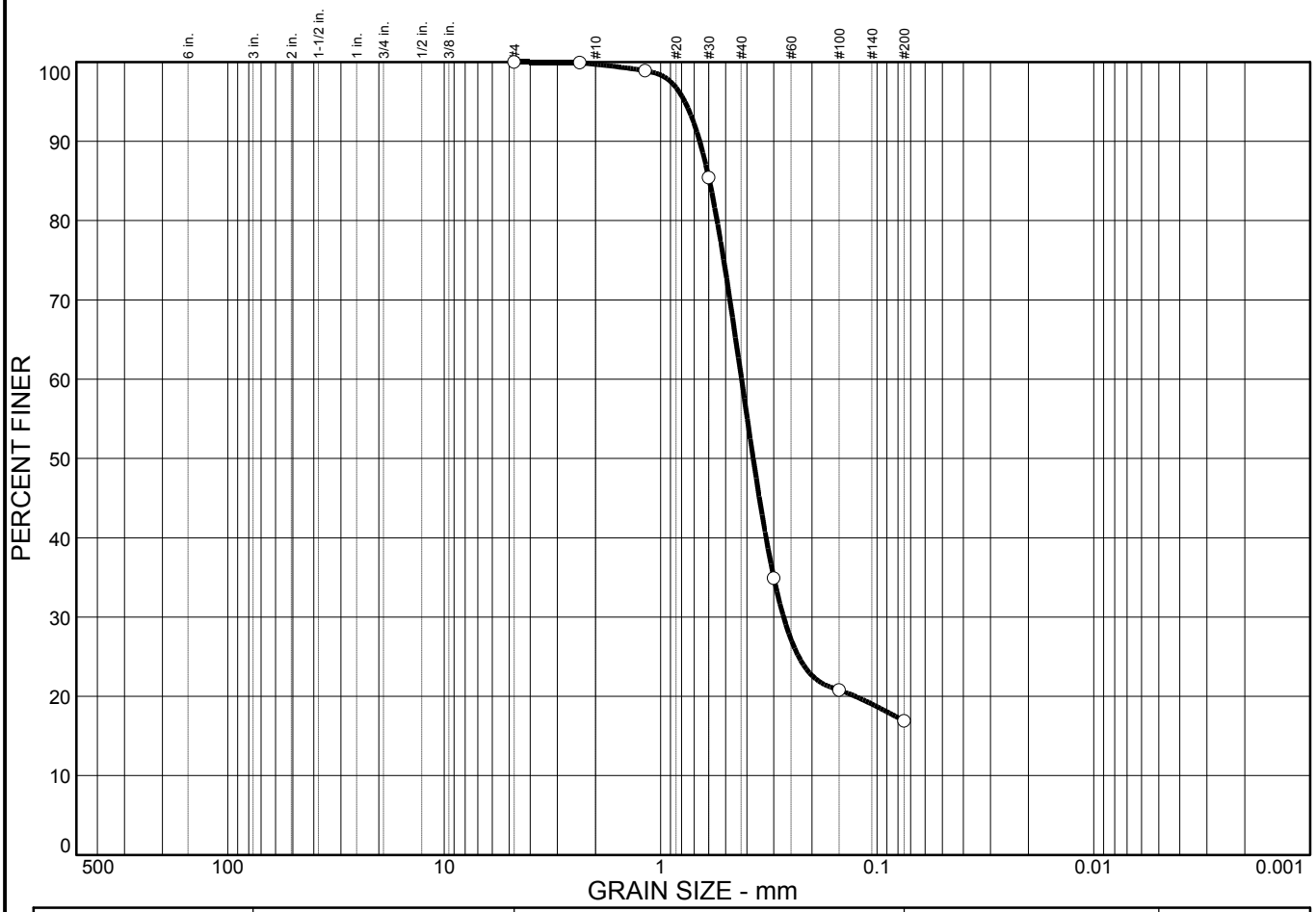
Moore Twining Associates, Inc.

Fresno, CA

Client:
Project: Proposed Circle K

Project No: G71523.02 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	83.1	16.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#8	99.9		
#16	98.9		
#30	85.4		
#50	34.9		
#100	20.8		
#200	16.9		

* (no specification provided)

Material Description

Silty sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.596 D_{60}= 0.423 D_{50}= 0.374
D_{30}= 0.271 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= SM AASHTO=

Remarks

Sample No.: B-11 **Source of Sample:** **Date:** 8/4/20
Location: **Elev./Depth:** 3.5-5'

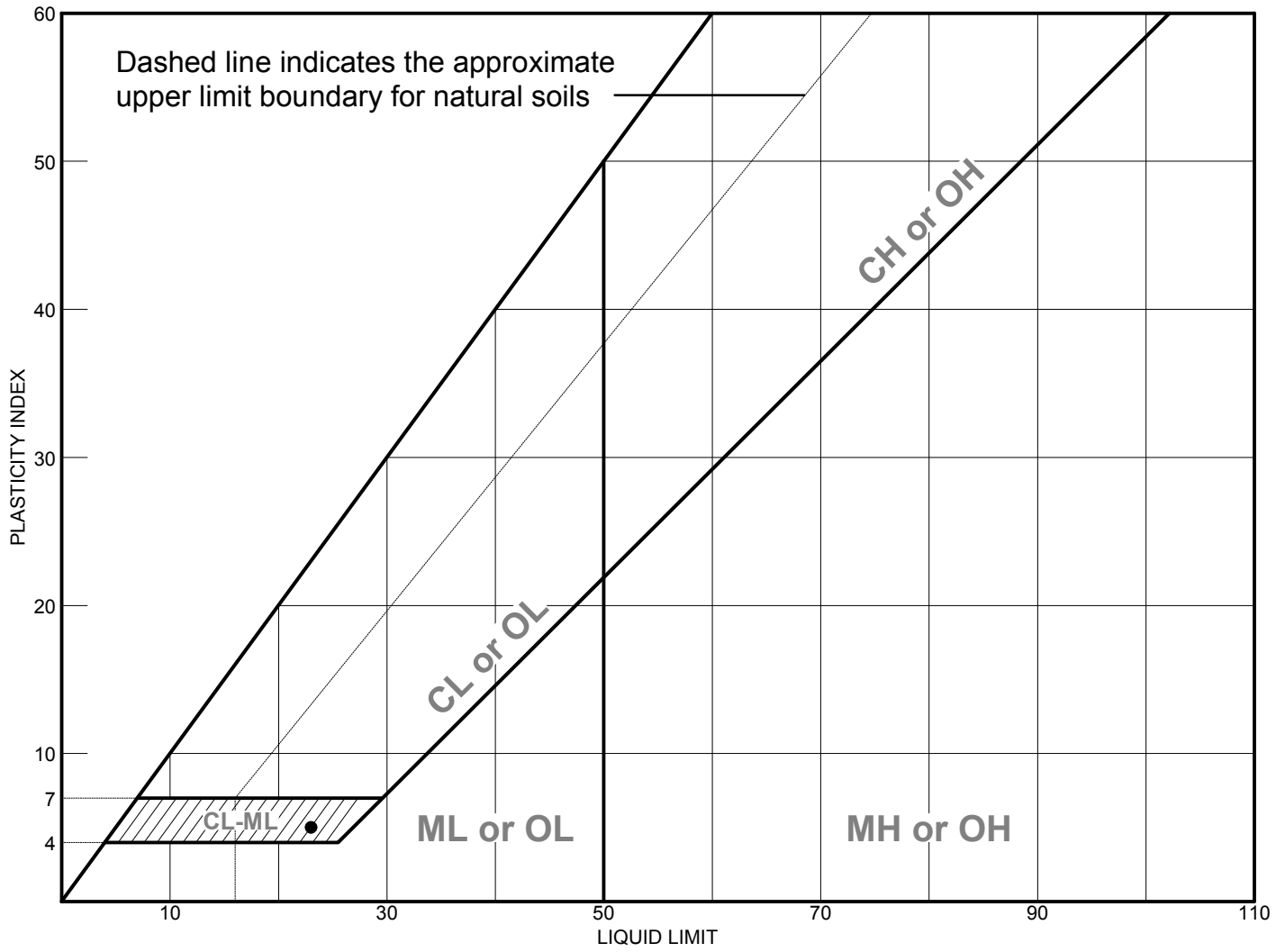
Moore Twining Associates, Inc.

Fresno, CA

Client:
Project: Proposed Circle K

Project No: G71523.02 **Figure**

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Clayey sand	23	18	5			SC

Project No. G71523.02 **Client:**

Project: Proposed Circle K

● **Source:** **Sample No.:** B-1 **Elev./Depth:** 0-1.5'

Remarks:

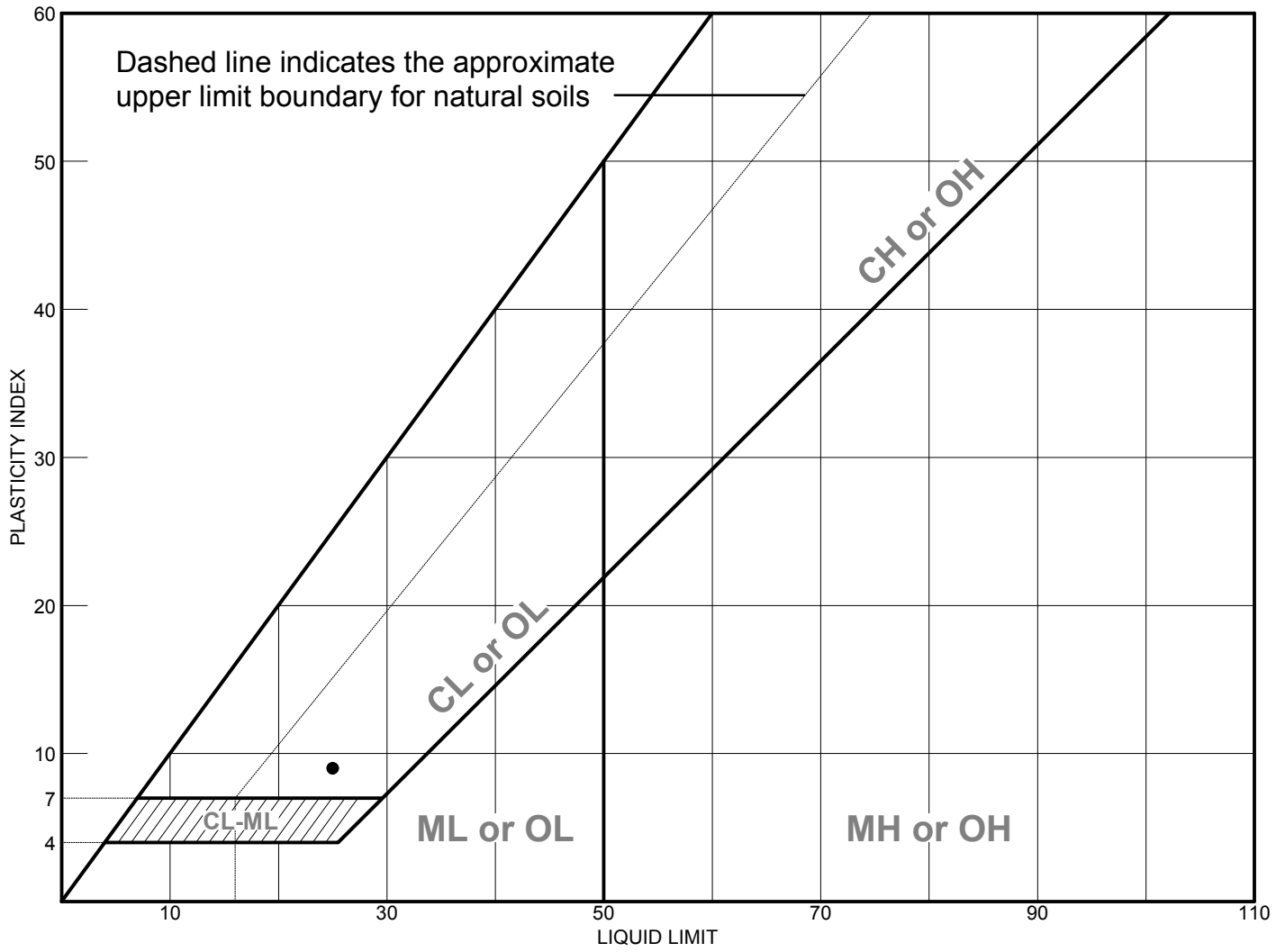
●

Moore Twining Associates, Inc.

Fresno, CA

Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Sandy lean clay	25	16	9	93.1	68.1	CL

Project No. G71523.02 **Client:**

Project: Proposed Circle K

● **Source:** **Sample No.:** B-2 **Elev./Depth:** 5-6.5'

Remarks:

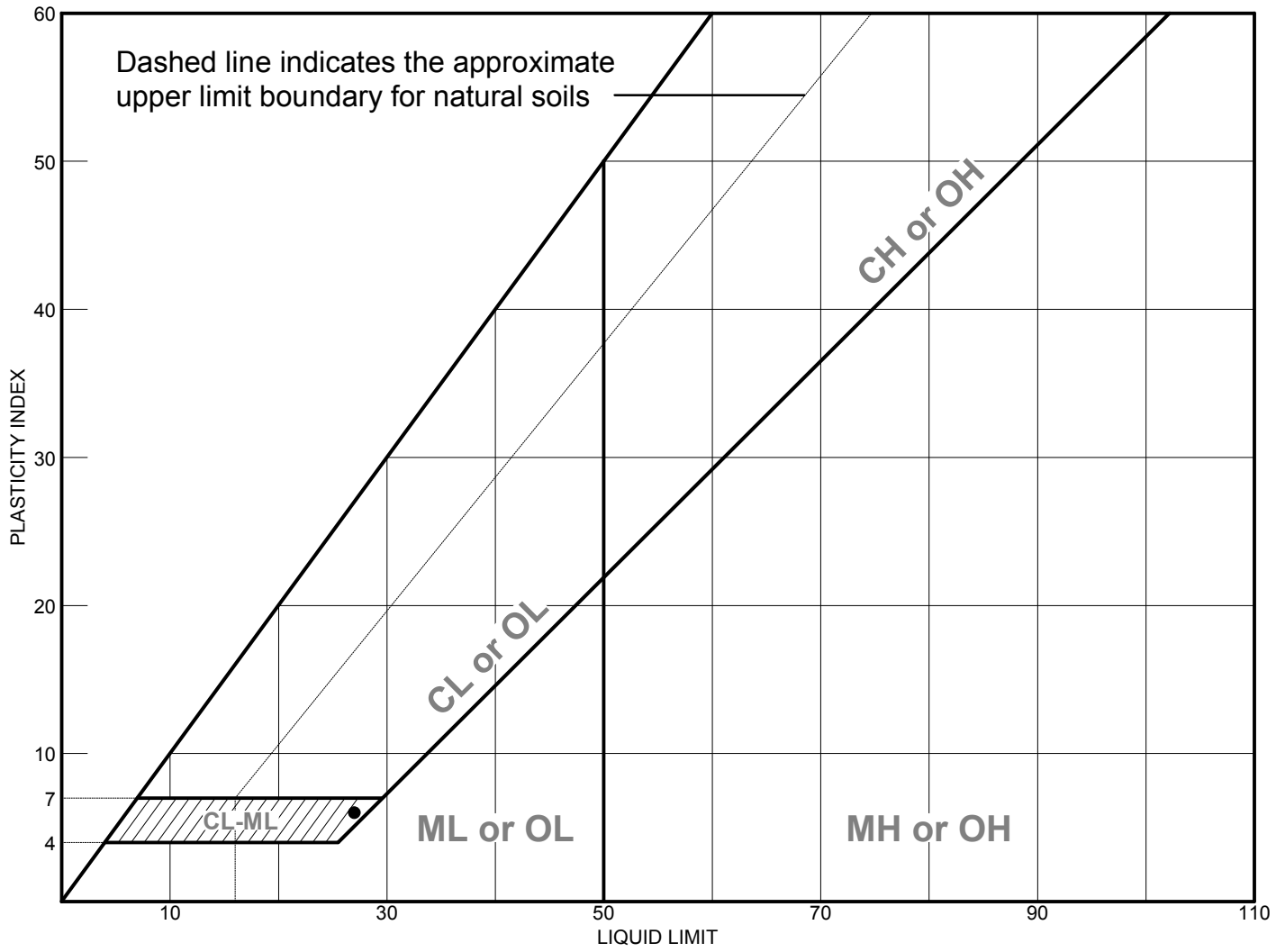
●

Moore Twining Associates, Inc.

Fresno, CA

Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Silty, clayey sand	27	21	6	94.9	44.8	SC-SM

Project No. G71523.02 **Client:**

Project: Proposed Circle K

● **Source:** **Sample No.:** B-5 **Elev./Depth:** 1.5-3'

Remarks:

●

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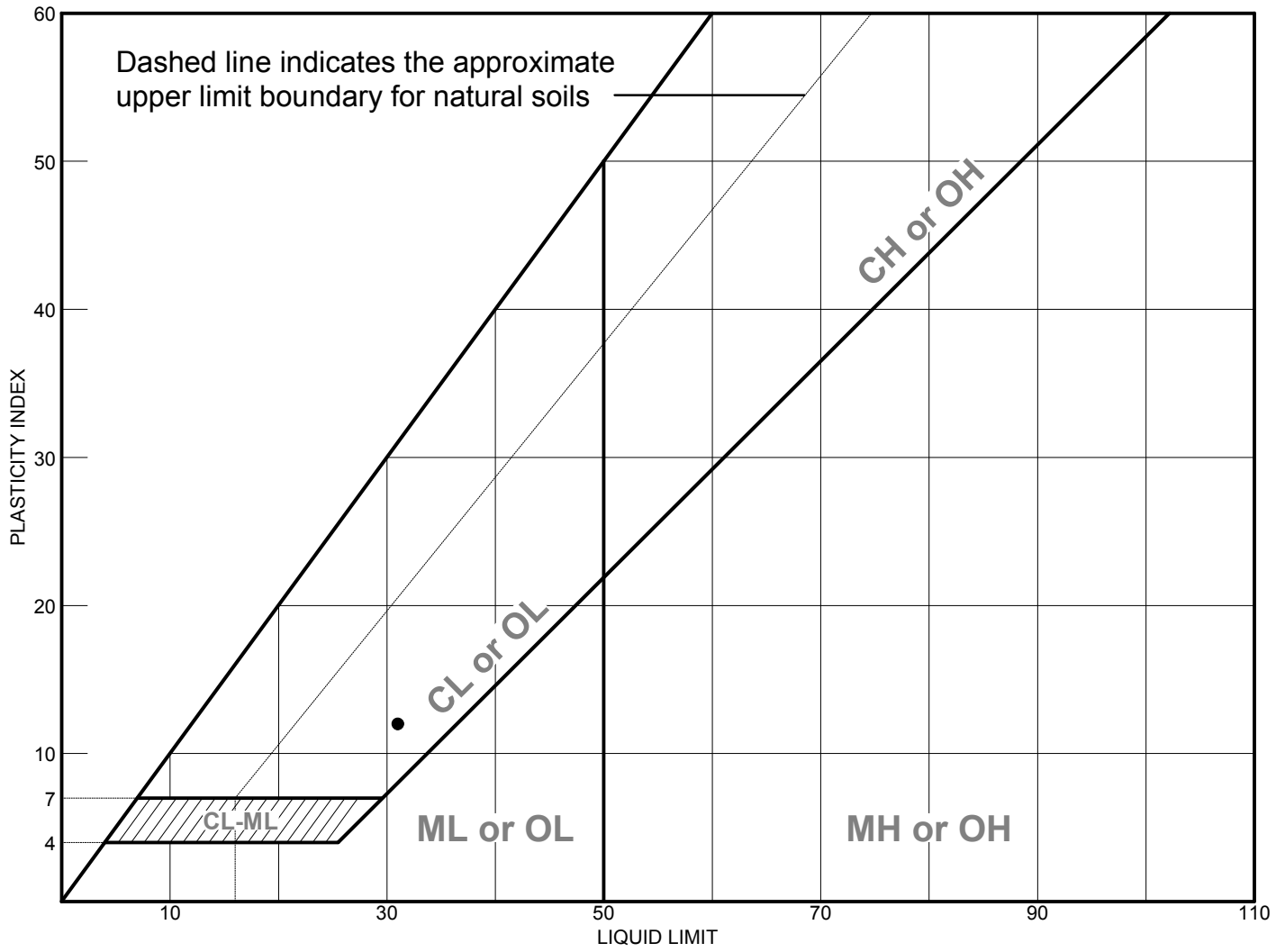
Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Sandy lean clay	31	19	12			CL

Project No. G71523.02 **Client:**

Project: Proposed Circle K

● **Source:** **Sample No.:** B-6 **Elev./Depth:** 0-3.5'

Remarks:

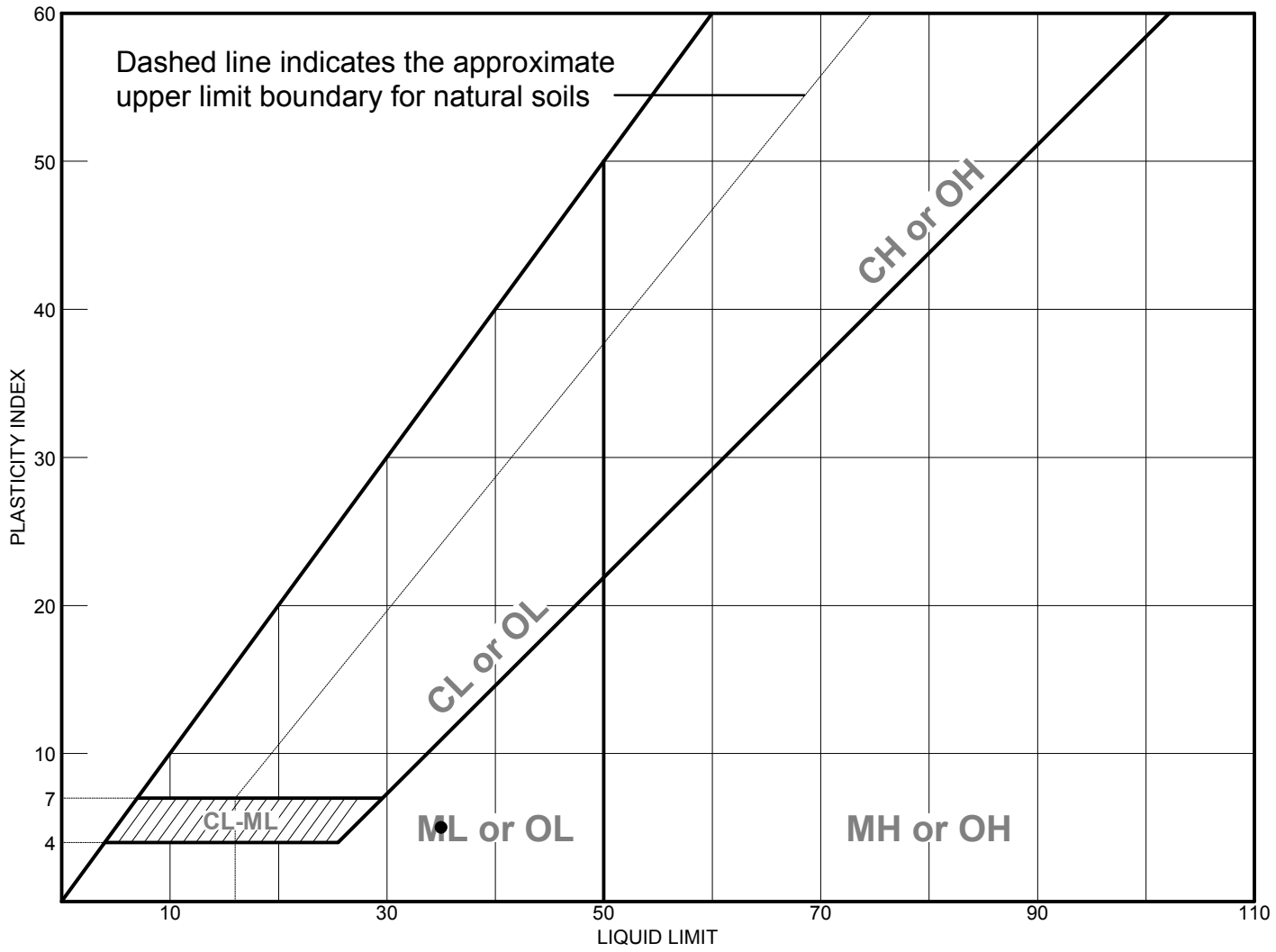
●

Moore Twining Associates, Inc.

Fresno, CA

Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Sandy silt	35	30	5			ML

Project No. G71523.02 **Client:**

Project: Proposed Circle K

● **Source:** **Sample No.:** B-7 **Elev./Depth:** 8.5-10'

Remarks:

●

Moore Twining Associates, Inc.

Fresno, CA

Figure

MOORE TWINING ASSOCIATES, INC.

EXPANSION INDEX TEST, ASTM D4829

MTA PROJECT NAME:	Proposed Circle K	REPORT DATE:	8/26/2020
		TEST DATE:	8/20/2020
MTA PROJECT NO.:	G71523.02		
SAMPLE I.D.:	B-1 @ 0-3.5'		
SAMPLED BY:	ZA		
SAMPLE DATE:	8/4/2020	TESTED BY:	MA
MATERIALS DESCRIPTION:	Clayey sand		
% PASSING # 4 SIEVE	100		

Initial Moisture Determination:		Final Moisture Determination:	
Pan + Wet Soil Wt., gm	250.0	Wet Soil Wt., lbs	0.9304
Pan + Dry Soil Wt., gm	225.0	Dry Soil Wt., lbs	0.7633
Pan Wt., gm	0.0		
Initial % Moisture Content	11.1	Final % Moisture Content	21.9

Initial Expansion Data:		**Final Expansion Data:**	
Ring + Sample Wt., lbs	0.8481	Ring + Sample Wt., lbs	0.9304
Ring Wt., lbs	0.0000	Ring Wt., lbs	0.0000
Remolded Wt., lbs	0.8481	Remolded Wt., lbs	0.9304
Remolded Wet Density, pcf	116.6	Remolded Wet Density, pcf	125.3
Remolded Dry Density, pcf	105.0	Remolded Dry Density, pcf	102.8

Expansion Data:		Initial Volume	Final Volume
		0.00727222	0.007426
Initial Gage Reading, in:	0.0500		
Final Gage Reading, in:	0.0712		
Expansion, in:	0.0212		
Expansion Index	21	**Comments:**	**Low Expansion Potential**

Classification of Expansive Soils. (Table No.1 From ASTM D4829)

Expansion Index	Potential Expansion
0-20	Very Low
21-50	Low
51-90	Medium
91-130	High
>130	Very High

PH: 559.268.7021
FX: 559.268.7126
2527 Fresno Street
Fresno, CA 93721

MOORE TWINING ASSOCIATES, INC.

EXPANSION INDEX TEST, ASTM D4829

MTA PROJECT NAME:	Proposed Circle K	REPORT DATE:	8/26/2020
		TEST DATE:	8/20/2020
MTA PROJECT NO.:	G71523.02		
SAMPLE I.D.:	B-4 @ 0-3.5'		
SAMPLED BY:	ZA		
SAMPLE DATE:	8/4/2020	TESTED BY:	MA
MATERIALS DESCRIPTION:	Clayey sand		
% PASSING # 4 SIEVE	100		

Initial Moisture Determination:		Final Moisture Determination:	
Pan + Wet Soil Wt., gm	250.0	Wet Soil Wt., lbs	0.9950
Pan + Dry Soil Wt., gm	231.4	Dry Soil Wt., lbs	0.8662
Pan Wt., gm	0.0		
Initial % Moisture Content	8.0	Final % Moisture Content	14.9

Initial Expansion Data:		**Final Expansion Data:**	
Ring + Sample Wt., lbs	0.9358	Ring + Sample Wt., lbs	0.9950
Ring Wt., lbs	0.0000	Ring Wt., lbs	0.0000
Remolded Wt., lbs	0.9358	Remolded Wt., lbs	0.9950
Remolded Wet Density, pcf	128.7	Remolded Wet Density, pcf	136.7
Remolded Dry Density, pcf	119.1	Remolded Dry Density, pcf	119.0

Expansion Data:		Initial Volume	Final Volume
		0.00727222	0.007279
Initial Gage Reading, in:	0.0500		
Final Gage Reading, in:	0.0510		
Expansion, in:	0.0010		
Expansion Index	1	**Comments:**	**Very Low Expansion Potential**

Classification of Expansive Soils. (Table No.1 From ASTM D4829)

Expansion Index	Potential Expansion
0-20	Very Low
21-50	Low
51-90	Medium
91-130	High
>130	Very High

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FX: 559.268.7126
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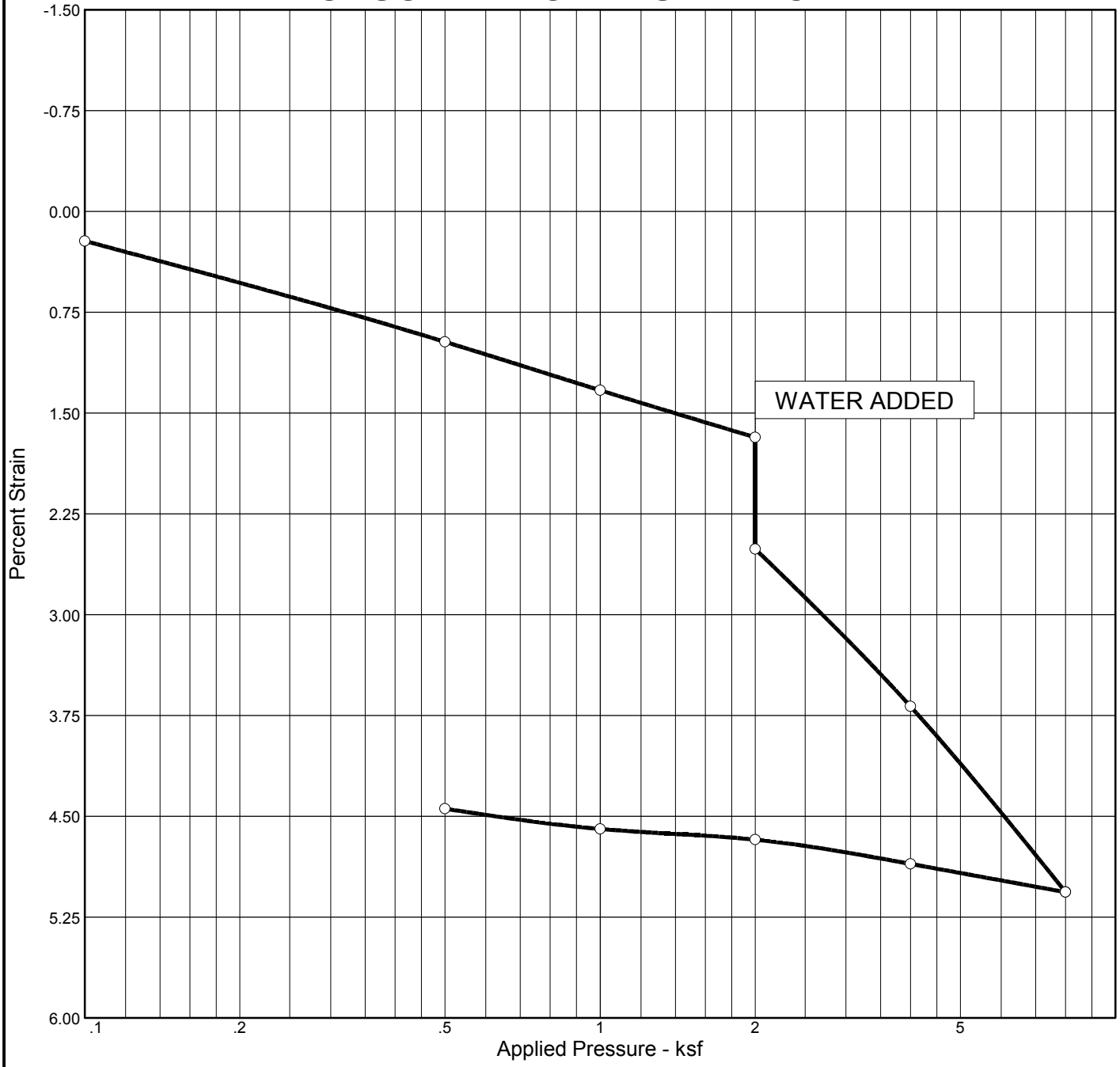
Fresno, CA 93721

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (ksf)	P_c (ksf)	C_c	C_s	Swell Press. (ksf)	Clpse. %	e_o
Sat.	Moist.											
70.9 %	11.3 %	116.3			2.65		4.10	0.07	0.01		0.8	0.423

MATERIAL DESCRIPTION	USCS	AASHTO
Lean clay	CL	

Project No. G71523.02 **Client:**

Project: Proposed Circle K

Source: **Sample No.:** B-1 **Elev./Depth:** 6.3-6.5'

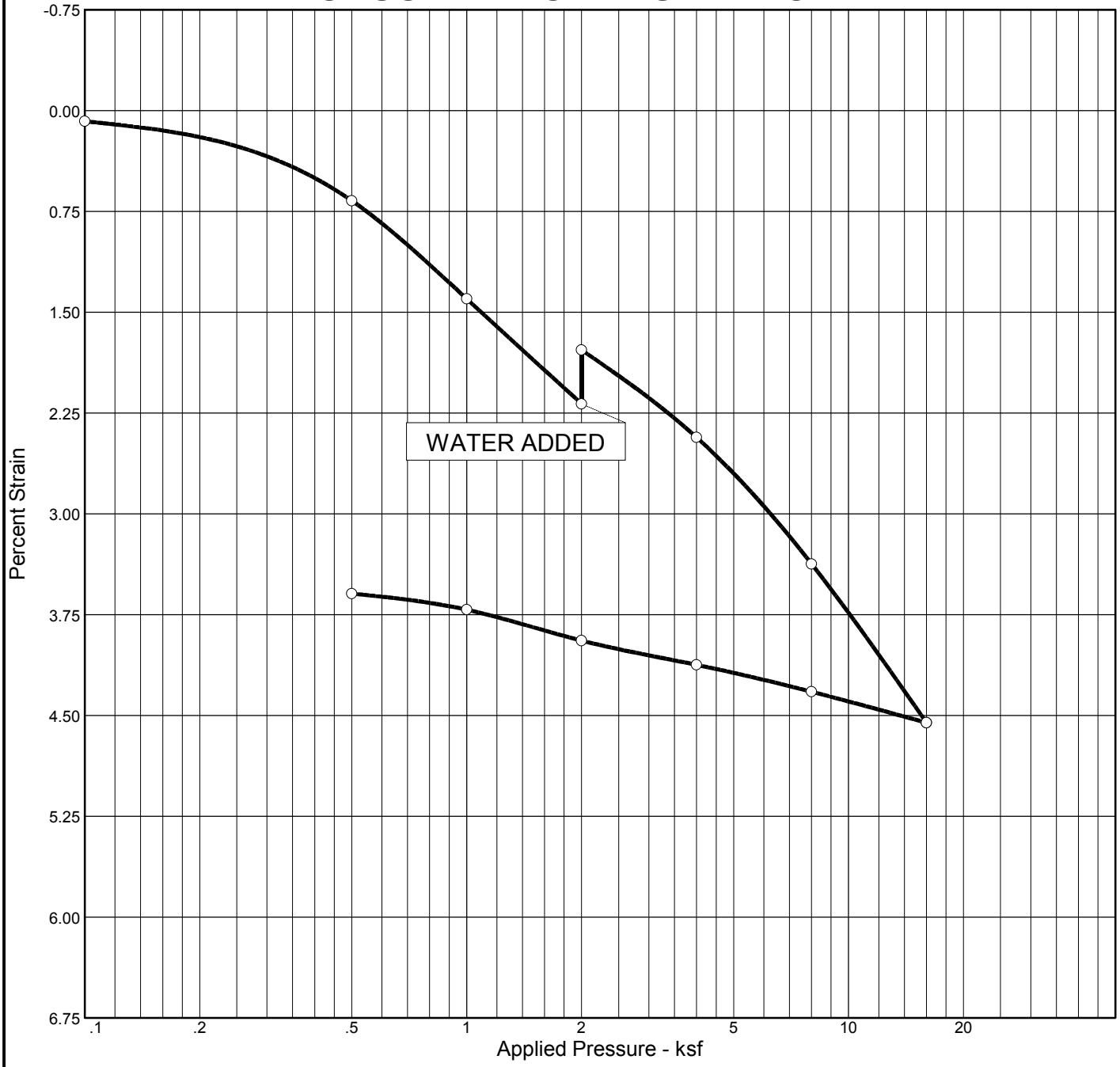
Moore Twining Associates, Inc.

Fresno, CA

Remarks:

Figure

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (ksf)	P_c (ksf)	C_c	C_s	Swell Press. (ksf)	Swell %	e_o
Sat.	Moist.											
17.8 %	2.3 %	123.4			2.65		2.51	0.05	0.01	3.14	0.4	0.341

MATERIAL DESCRIPTION	USCS	AASHTO
Clayey sand	SC	

Project No. G71523.02 **Client:**

Project: Proposed Circle K

Source: **Sample No.:** B-3 **Elev./Depth:** 5-6.3'

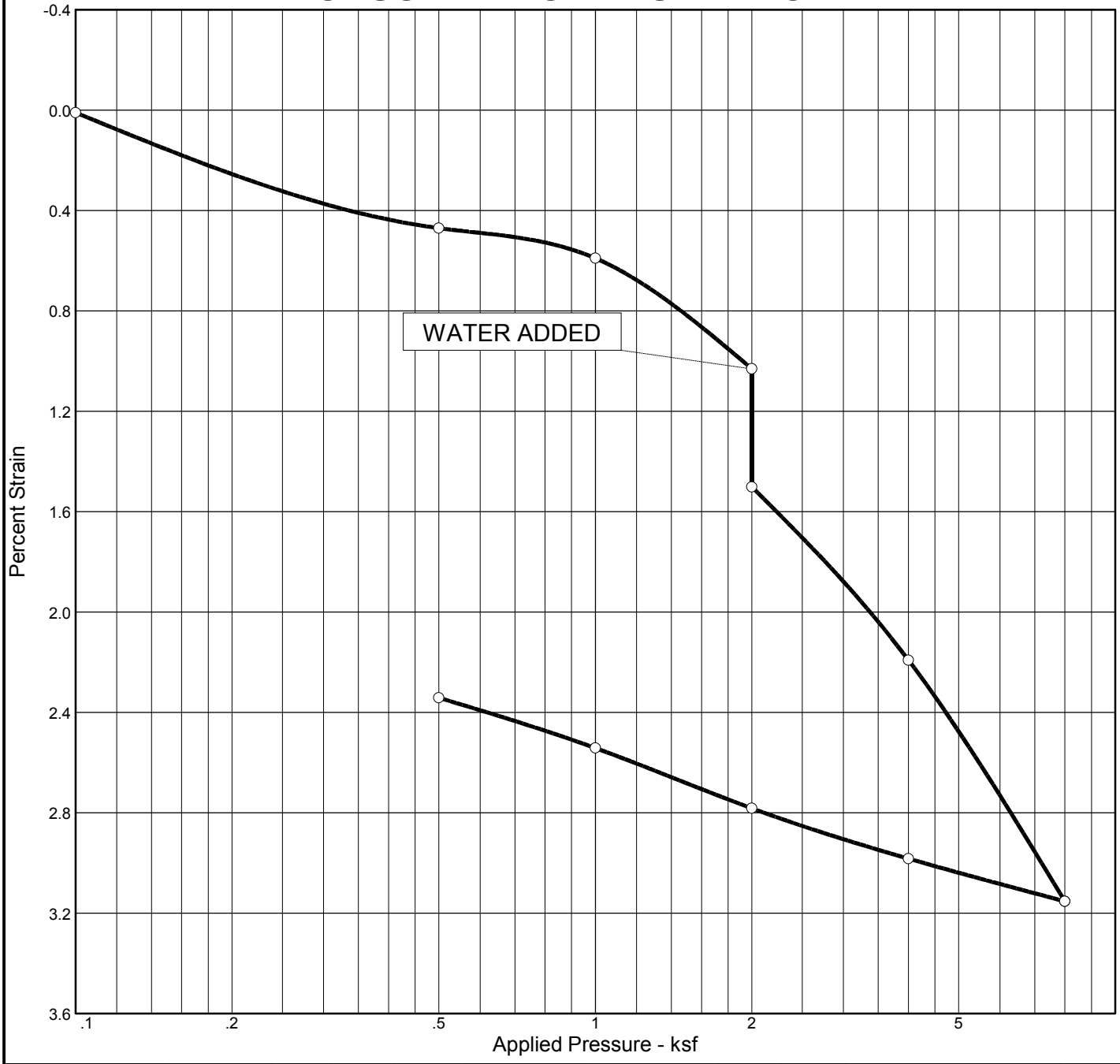
Remarks:

Moore Twining Associates, Inc.

Fresno, CA

Figure

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (ksf)	P_c (ksf)	C_c	C_s	Swell Press. (ksf)	Clpse. %	e_o
Sat.	Moist.											
51.3 %	16.7 %	88.9			2.65		1.38	0.06	0.01		0.5	0.860

MATERIAL DESCRIPTION	USCS	AASHTO
Sandy silt	ML	

Project No. G71523.02 **Client:**

Project: Proposed Circle K

Source: **Sample No.:** B-5 **Elev./Depth:** 8.5-10'

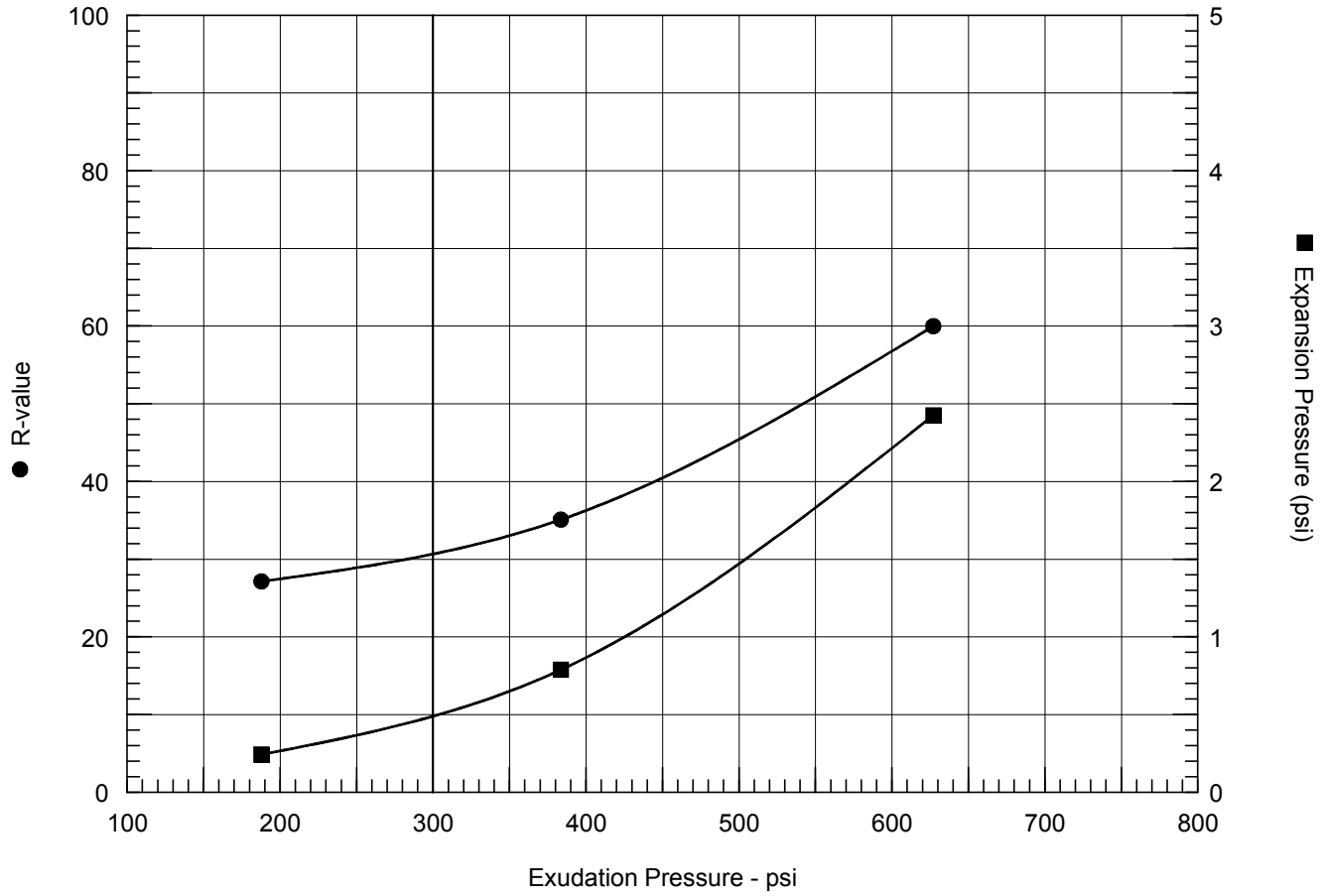
Remarks:

Moore Twining Associates, Inc.

Fresno, CA

Figure

R-VALUE TEST REPORT



Resistance R-Value and Expansion Pressure - ASTM D 2844

No.	Compact. Pressure psi	Density pcf	Moist. %	Expansion Pressure psi	Horizontal Press. psi @ 160 psi	Sample Height in.	Exud. Pressure psi	R Value	R Value Corr.
1	350	107.4	20.2	2.43	58	2.60	627	57	60
2	250	104.5	21.5	0.79	86	2.55	384	35	35
3	150	102.0	23.2	0.24	102	2.64	188	25	27

Test Results	Material Description
R-value at 300 psi exudation pressure = 31 **Exp. pressure at 300 psi exudation pressure =** 0.49 psi	Sandy lean clay

Project No.: G71523.02
Project: Proposed Circle K
Sample Number: B-6 **Depth:** 0-3.5'
Date: 9/4/2020

Tested by: GC
Checked by: MS
Remarks:

R-VALUE TEST REPORT

Moore Twining Associates, Inc.

Figure NA

MOORE TWINING ASSOCIATES, INC.

Project No:	Proposed Circle K	Report Date:	8/26/2020
Project:	G71523.02		

Materials Testing Report
ASTM D2974

Sample Location:	B-3 @ 5-6.25'		
Sampled By:	ZA	Tested By:	MA
Sample Date:	8/4/2020	Date Tested:	8/20/2020
Material Description:	Clayey sand		

Start Weight, gm:	199.7
Final Weight, gm:	196.60
Tare Weight, gm	62.2
Percent of Organic, %:	2.3

PH: 559.268.7021
FX: 559.268.7126
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Fresno, CA 93721

MOORE TWINING ASSOCIATES, INC.

Project No:	Proposed Circle K	Report Date:	8/26/2020
Project:	G71523.02		

Materials Testing Report
ASTM D2974

Sample Location:	B-10 @ 5-5.5		
Sampled By:	ZA	Tested By:	MA
Sample Date:	8/4/2020	Date Tested:	8/20/2020
Material Description:	Silty sand		

Start Weight, gm:	152.0
Final Weight, gm:	150.60
Tare Weight, gm	62.0
Percent of Organic, %:	1.6

PH: 559.268.7021
FX: 559.268.7126
2527 Fresno Street
Fresno, CA 93721

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

August 26, 2020

Work Order #: **GH11007**

Zubair Anwar
MTA Geotechnical Division
2527 Fresno Street
Fresno, CA 93721

RE: Proposed Circle K

Enclosed are the analytical results for samples received by our laboratory on **08/11/20** . For your reference, these analyses have been assigned laboratory work order number **GH11007**.

All analyses have been performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, Moore Twining Associates, Inc. (MTA) is not responsible for use of less than complete reports. Results apply only to samples analyzed.

If you have any questions, please feel free to contact us at the number listed above.

Sincerely,

Moore Twining Associates, Inc.

Susan Federico
Client Services Representative

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Geotechnical Division	**Project:** Proposed Circle K	**Reported:**
2527 Fresno Street	**Project Number:** G71523.02	08/26/2020
Fresno CA, 93721	**Project Manager:** Zubair Anwar	

Analytical Report for the Following Samples

Sample ID	Notes	Laboratory ID	Matrix	Date Sampled	Date Received
B1 @ 0 -3.5		GH11007-01	Soil	08/05/20 00:00	08/11/20 11:15
B4 @ 0 -3.5		GH11007-02	Soil	08/05/20 00:00	08/11/20 11:15

MOORE TWINING ASSOCIATES, INC.
California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Geotechnical Division	**Project:** Proposed Circle K	**Reported:**
2527 Fresno Street	**Project Number:** G71523.02	08/26/2020
Fresno CA, 93721	**Project Manager:** Zubair Anwar	

B1 @ 0 -3.5

GH11007-01 (Soil) Sampled: 08/05/20 00:00

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Inorganics									
Chloride		ND	6.0	mg/kg	3	B0H2408	08/24/20	08/24/20	ASTM D4327
Chloride		ND	0.00060	% by Weight	3	[CALC]	08/24/20	08/24/20	ASTM D4327
Sulfate as SO4		**0.00094**	0.00060	% by Weight	3	[CALC]	08/24/20	08/24/20	ASTM D4327
pH		**7.1**	0.10	pH Units	1	B0H2408	08/24/20	08/24/20	ASTM D4972 Mod
Sulfate as SO4		**9.4**	6.0	mg/kg	3	B0H2408	08/24/20	08/24/20	ASTM D4327

B4 @ 0 -3.5

GH11007-02 (Soil) Sampled: 08/05/20 00:00

Analyte	Flag	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Inorganics									
Chloride		ND	6.0	mg/kg	3	B0H2408	08/24/20	08/24/20	ASTM D4327
Chloride		ND	0.00060	% by Weight	3	[CALC]	08/24/20	08/24/20	ASTM D4327
Sulfate as SO4		ND	0.00060	% by Weight	3	[CALC]	08/24/20	08/24/20	ASTM D4327
pH		**6.3**	0.10	pH Units	1	B0H2408	08/24/20	08/24/20	ASTM D4972 Mod
Sulfate as SO4		ND	6.0	mg/kg	3	B0H2408	08/24/20	08/24/20	ASTM D4327

Notes and Definitions

µg/L	micrograms per liter (parts per billion concentration units)
mg/L	milligrams per liter (parts per million concentration units)
mg/kg	milligrams per kilogram (parts per million concentration units)
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference

Analysis of pH, filtration, and residual chlorine is to take place immediately after sampling in the field. If the test was performed in the laboratory, the hold time was exceeded. **(for aqueous matrices only)**

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MOORE TWINING

CHAIN OF CUSTODY / ANALYSIS REQUEST

2527 FRESNO STREET • FRESNO, CA 93721 • PHONE (559) 268-7021 • FAX: (559) 268-0740

ANALYTICAL CHEMISTRY DIVISION
CALIFORNIA ELAP CERTIFICATION # 1371

WORK ORDER #: 20H11007
PAGE 1 **OF** 2

REPORT TO:
ATTENTION: Zubair Answar
COMPANY NAME:
ADDRESS:
PHONE:
EMAIL / FAX:

☐ **INVOICE TO:**
ATTENTION:
COMPANY NAME:
ADDRESS:
PHONE:
EMAIL / FAX:

☐ **REPORT COPY TO:**

REPORTING:
☑ STANDARD FORMAT ☐ PDF
☐ EDT (SWRCB) ☐ EXCEL
☐ GEOTRACKER/COELT (LUFT)
GLOBAL ID:
☐ COUNTY ENVIRONMENTAL HEALTH:
☐ STATE WATER RESOURCES CONTROL BOARD:
☐ OTHER:

SAMPLE INFORMATION
SAMPLED BY (PRINT):
SIGNATURE:
☐ PUBLIC SYSTEM ☑ ROUTINE
☐ PRIVATE WELL ☐ REPEAT
☐ OTHER ☐ REPLACEMENT

SAMPLE TYPES
SOLID:
BS - BIOSOLID
CR - CERAMIC
SL - SOIL/SOLID
LIQUID:
DW - DRINKING WATER
GW - GROUND WATER
OL - OIL
SF - SURFACE WATER
ST - STORM WATER
WW - WASTEWATER

PROJECT INFORMATION
CONTRACT / P.O. NO.:
PROJECT: Proposed Circle K
PROJECT NUMBER: G71523.02
PROJECT MANAGER: Zubair Answar

TURN AROUND TIME
☑ STANDARD
☐ RUSH, DUE ON:

ANALYSIS REQUESTED

LAB USE

NOTES ON RECEIVED CONDITION:
☐ CUSTODY SEAL(S) BROKEN ☐ SAMPLES(S) DAMAGED
☐ ON ICE ☐ AMBIENT TEMP. ☐ INCORRECT PRESERVATION

	CLIENT SAMPLE ID	DATE	TIME	TYPE	Corrosion	STATION CODE
1	B1e0-3.5	8/4-5/20	N/A	SL	✓	
2	B4e0-3.5	8/4-5/20	N/A	SL	✓	

COMMENTS / ADDITIONAL INSTRUCTIONS:

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY
Miguel Alcaraz	MTA/MAT	8-11-20	1115		MTA

Payment for services rendered as noted herein are due in full within 30 days from the date invoiced. If not so paid, account balances are deemed delinquent. Delinquent balances are subject to monthly service charges and interest specified in MTA's current Standard Terms and Conditions for Laboratory Services. The person signing for the Client/Company acknowledges that they are either the Client or an authorized agent to the Client, that the Client agrees to be responsible for payment for the services on this Chain of Custody and agrees to MTA's terms and conditions for laboratory services unless contractually bound otherwise. MTA's current terms and conditions can be obtained by contacting our accounting department at (559) 268-7021.

Sample Integrity — Page 2 of 2 — Moore Twining Associates WO# GH11007 — MTA Bottles: Yes or No

COC Info

Was temperature within range? Chemistry ≤6°C Micro <10°C Temp_____°C	Yes No N/A	Did all bottle labels agree with COC?	Yes No N/A
If samples were taken today, is there evidence that chilling has begun? Recvd_____C°	Yes No N/A	Was a sufficient amount of sample received?	Yes No N/A
Did all bottles arrive unbroken and intact?	Yes No N/A	Were correct containers and preservatives received for the tests requested?	Yes No N/A
Do samples have a hold time <72 hours?	Yes No N/A		

Were there bubbles in VOA vials? (**Volatiles Only**)	Yes No N/A		
Was PM notified of discrepancies? PM: By/Time:	Yes No N/A		

Bottles Received

125ml (A) 250ml (B) 1Liter (C) 40ml VOA (V)	1-2																						
Bacti $Na_2S_2O_3$																							
None (P)																							
Cr6 Buffer (P) Borate Carbonate Buffer																							
HNO_3 (P)																							
H_2SO_4 (P)																							
NaOH (P)																							
NaOH+ZnAc (P)																							
Dissolved Oxygen 300ml (P)																							
None (AG)																							
None (CG) 500ml																							
$Na_2S_2O_3$ 250ml (Brown P) 549																							
$Na_2S_2O_3$ (AG)																							
$Na_2S_2O_3$ (AG)																							
Thio/K Citrate																							
NH_4Cl (AG) 552																							
HCl (AG)																							
None (CG) 500ml																							
H_3PO_4 (AG)																							
Other:																							
Plastic Bag	1																						
Low Level Hg/Metals Double Bag																							
Client Own																							
Glass Jar: 125/ 250/ 500																							
Soil Tube: Brass/ Steel/ Plastic																							
5 g Encore																							
Ascorboc Acid (AG) Voa																							
1gallon Cubitainer																							

Filter or Split

	Container	Preservative	Date/Time/Initials
S P F			
S P F			
S P F			
S P F			
S P F			

Comments

Page 5 of 5

Labeled by: VB @_____ Labels checked by: VB @1150

FL-SC-0003-06

MOORE TWINING ASSOCIATES, INC.

Project Name:	Proposed Circle K	Report Date:	8/26/2020
		Sample Date:	8/4/2020
Project Number:	G71523.02		
		Sampled By:	ZA
Subject:	Minimum Resistivity, ASTM G187	Tested By:	MA
Material Description:	Clayey sand	Test Date:	8/20/2020
Location:	B-1 @ 0-3.5'		

Laboratory Test Results, Minimum Resistivity - ASTM G187

Total Water Added, mls	Resistivity, Ohm-cm
75 mls	9,300
100 mls	7,100
125 mls	3,700
150 mls	930
175 mls	720
200 mls	690
225 mls	2,200

Remarks: Min. Resistivity is 690 Ohm-cm

www.mooretwining.com
PH: 559.268.7021
FX: 559.268.7126
2527 Fresno Street
Fresno, CA 93721

MOORE TWINING ASSOCIATES, INC.

Project Name:	Proposed Circle K	Report Date:	8/26/2020
		Sample Date:	8/4/2020
Project Number:	G71523.02		
		Sampled By:	ZA
Subject:	Minimum Resistivity, ASTM G187	Tested By:	MA
Material Description:	Clayey sand	Test Date:	8/20/2020
Location:	B-4 @ 0-3.5'		

Laboratory Test Results, Minimum Resistivity - ASTM G187

Total Water Added, mls	Resistivity, Ohm-cm
75 mls	19,000
100 mls	11,000
125 mls	6,400
150 mls	6,000
175 mls	5,800
200 mls	6,300

Remarks: Min. Resistivity is 5,800 Ohm-cm

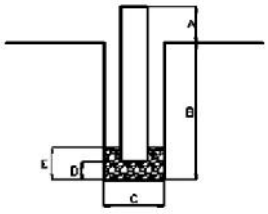
www.mooretwining.com
PH: 559.268.7021
FX: 559.268.7126
2527 Fresno Street
Fresno, CA 93721

APPENDIX D

RESULTS OF PERCOLATION TESTS

PERCOLATION TEST FOR INFILTRATION ESTIMATE
P-1

Project: Proposed Circle K Store **Project No. G71523.02**
Location: Roseville, CA **Test Date: 8/5/2020**



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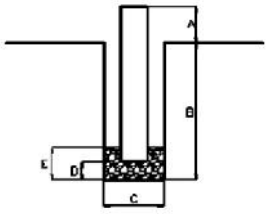
PERCOLATION TEST FOR INFILTRATION ESTIMATE
P-2

Project: Proposed Circle K Store **Project No. G71523.02**
Location: Roseville, CA **Test Date: 8/5/2020**



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PLANT SCHEDULE

TREES	BOTANICAL NAME	COMMON NAME	SIZE	TYPE	USE	WUCOLS	STYLE	CA NATIVE	QTY
	Cercis canadensis	Eastern Redbud Multi-trunk	15 gal	Deciduous	Accent Tree	Medium	Multi	No	10
	Lagerstroemia indica 'Purple Tower'	Purple Tower Crape Myrtle	24"box	Deciduous	Accent Tree	Low	Standard	No	7
	Laurus x 'Saratoga'	Saratoga Hybrid Laurel	15 gal	Evergreen	Screen Tree	Low	Standard	No	3
	Pistacia chinensis 'Keith Davey'	Keith Davey Chinese Pistache	24"box	Deciduous	Parking Lot Tree	Low	Standard	No	17
	Platanus racemosa	California Sycamore	15 gal	Deciduous	Street Tree	Medium	Standard	No	5
	Quercus rubra	Red Oak	15 gal	Deciduous	Street Tree	Medium	Standard	No	2
	Quercus wislizenii	Interior Live Oak	15 gal	Evergreen	Street Tree	Low	Standard	Yes	7
SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	TYPE	WUCOLS	CA NATIVE			
	Arctostaphylos densiflora 'Howard McMinn'	Howard McMinn Vine Hill Manzanita	5 gal	Evergreen	Low	Yes			2
	Arctostaphylos x 'Sunset'	Sunset Manzanita	5 gal	Evergreen	Low	Yes			11
	Baccharis pilularis 'Pigeon Point'	Pigeon Point Coyote Brush	5 gal	Evergreen	Low	Yes			33
	Callistemon viminalis 'Little John'	Little John Weeping Bottlebrush	5 gal	Evergreen	Low	No			144
	Carpenteria californica 'Elizabeth'	Elizabeth Bush Anemone	5 gal	Evergreen	Low	Yes			12
	Ceanothus griseus horizontalis 'Yankee Point'	Yankee Point Carmel Creeper	5 gal	Evergreen	Low	Yes			67
	Ceanothus maritimus 'Valley Violet'	Valley Violet Maritime Ceanothus	5 gal	Evergreen	Low	Yes			71
	Cistus x pulverulentus 'Sunset'	Sunset Rockrose	5 gal	Evergreen	Low	No			74
	Festuca mairei	Atlas Fescue	1 gal	Evergreen	Low	No			118
	Ligustrum japonicum 'Texanum'	Texas Japanese Privet	5 gal	Evergreen	Low	No			135
	Pennisetum spathiolatum	Rye Puffs	1 gal	Evergreen	Low	No			60
	Ribes viburnifolium	Evergreen Currant	5 gal	Evergreen	Low	Yes			8
	Salvia greggii 'Furmans Red'	Furman's Red Autumn Sage	5 gal	Evergreen	Low	No			50
	Salvia leucantha 'Midnight'	Mexican Bush Sage	5 gal	Evergreen	Low	No			15
	Salvia leucantha 'Santa Barbara'	Mexican Bush Sage	5 gal	Evergreen	Low	No			69
	Teucrium cossonii majoricum	Germander	1 gal	Evergreen	Low	No			204

Shade Calculations			
Tree	Interior Planter-100%	South, East and West-50%	Corner and North-25%
Pistacia chinensis 'Keith Davey'	2 x 962 = 1,924	7 x 481 = 3,367	3 x 240 = 720
Calculated Total	1,924 +	3,367 +	720 = 6,011

Required Total

Parking lot area shade calculations: 11,846 square feet - Parking stalls and all vehicular back up areas.

Area Required to be shaded: 11,846 x 50% = 5,923 square feet 6,011 > 5,923
Shade provided is more than amount required. Thus, shading requirement is satisfied.

0 20 40 60 feet
1" = 20'

NORTH

CIRCLE K STORES INC.

LAND DEVELOPMENT CONSULTANTS, LLC
3281 EAST GUASTI ROAD, STE 700
ONTARIO, CA 91761

GreenbergFarrow
30 Executive Park, Suite 100
Irvine, CA 92614
t: 949 296 0450 f: 949 296 0479

CIRCLE K STORES
5990 BASELINE ROAD
ROSEVILLE, CA

WOOD ARCHITECTURE
www.iwoodarchitecture.com

Project: 21040_WA
Date: 12.14.2021
Scale: 1" = 20'

\\Mac\Home\Desktop\Wood Architecture\21\21040_WA-Circle K-NEC Baseline Rd. & Westbrook Blvd., Roseville, CA (GF)\Land\Schematic\21040_WA-schematic_2.dwg14.12.2021bykurtkoether

DESIGN COMMITTEE COMMUNICATION

Title:	NIPA PCL 50 - Warehouse, 751 Roseville Pw, File # PL21-0210 (Continued from the 12/16/21 Design Committee Meeting)
Contact:	Shelby Maples, smaples@roseville.ca.us, (916) 746-1347

Meeting Date: 1/20/2022
Item #: 4.2.

ATTACHMENTS:

Description

Staff Report

Memorandum and Attachment

Exhibit A Addendum

Exhibit B Site Plan and Details

Exhibit C Floor Plan

Exhibit D Elevations

Exhibit E Preliminary Grading Plan

Exhibit F Preliminary Utility Plan

Exhibit G Preliminary Landscape Plan

Exhibit H Photometric Plan

CITY OF ROSEVILLE CALIFORNIA

Planning Division Staff Report
Design Committee Meeting January 20, 2022

Prepared by: Shelby Maples, Associate Planner

ITEM 4.2: Design Review Permit – 751 Roseville Pw. – NIPA PCL 50 - Warehouse – PL21-0210

REQUEST

The applicant requests approval of a Design Review Permit to allow the construction of a 206,795-square-foot warehouse building and associated site improvements on an approximately 14.05-acre parcel in the North Industrial Plan area.

Applicant – Jeff Thompson, Morton & Pitalo
Owner – Michelle Azevedo, Ridge Capital Inc.

SUMMARY RECOMMENDATION

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

A. Consider the Addendum to the NIPA PCL 50 – Foothills Corporate Center Grading Plan Mitigated Negative Declaration;

B. Adopt the four (4) findings of fact and approve the Design Review Permit subject to seventy (70) 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 located at 751 Roseville Pw., formerly addressed as 8801 Foothills Bl. The site is to the east of Foothills Bl., and is bounded on the south by the future extension of Roseville Pw. and on the east by the Union Pacific rail lines. The approximately 14.05 acre parcel is a portion of the Foothills Corporate Center site. The project site has a Light Industrial (M1) zoning designation and a Light Industrial (LI) land use designation, and is located within the City's North Industrial Plan area (NIPA). The NIPA is not subject to a specific plan, but is a recognized planning subarea of the city that was approved in 1995. It includes Design Guidelines, a land use table, and a land use map. The NIPA is intended primarily for industrial uses and employment centers, and consists of approximately 2,046 gross acres west of Washington Bl. and north of the Northwest Roseville Specific Plan.

The subject parcel was created as a result of a four-lot parcel map (File #2013PL-029) that was approved and ultimately recorded in 2013. The map included an Irrevocable Offer of Dedication for the extension of the future Roseville Pw. along the southern boundary of the site, and the dedication of a 58-foot-wide right-of-way for the extension of Niblick Drive along the western project boundary (connecting to the rear of the existing FedEx property to the south). On October 11, 2012, a Major Grading Plan (File #2012PL-064) was approved, which covered mass grading activities on all of the undeveloped property between Foothills Bl. to the west, the train tracks to the east, the Niblick Dr. stub to the north, and a point even with the southern Hewlett Packard driveway. The properties to the south have already been graded and developed with the approved Grading Plan. The future Roseville Pw. extension has not been completed, but a segment of the roadway between Foothills Bl. and Niblick Dr. is constructed and complete with intersection improvements. The NIPA PCL 50 – Foothills Corporate Center Grading Plan Mitigated Negative Declaration (SCH #2012092002, certified October 11, 2012) covered the impacts of grading the project site and the surrounding properties; an Addendum to that document was prepared for this project, and is included as Exhibit A of this report. This is the third Addendum to the MND as an

Addendum was also prepared in 2015 for the Roseville Self-Storage project (File #PL15-0058) and 2018 for the NIPA PCL 25 Rezone project (File #PL18-0371).

The project request includes a Design Review Permit to evaluate a proposed 206,785-square-foot, 41-foot-tall warehouse building and associated site improvements. As proposed, the plan includes a total of four (4) potential offices, 42 loading dock doors on the north side of the building, and a total of 233 parking stalls.

Figure 1 – Project Location

EVALUATION

The DRP evaluation of the project is based on the applicable development standards within the City's Zoning Ordinance, NIPA, and the design standards of the Community Design Guidelines (CDG). Section 19.78.60(B) of the City of Roseville Zoning Ordinance requires that four findings be made to approve or conditionally approve a DRP. The four findings are listed below in ***italicized, bold*** text and are followed by an evaluation of the map in relation to each finding.

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

The project site is currently undeveloped. The site consists of non-native annual grasses and has been graded consistent with a prior approved master grading plan (2012PL-064). This grading plan approval required appropriate Section 404 permits to fill an ephemeral wetland drainage swale that occurred on the property. These permits have since been obtained. The project has been reviewed by the City's Engineering Division and has been designed consistent with City standards related to drainage improvements and stormwater quality facilities. The proposed warehouse use is consistent with the site's Light Industrial land use designation, and developing the property will allow beneficial use of the site.

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; irrigation; and lighting which results in 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.

Vehicle Access and Circulation: Access to the project site will be provided via a driveway on Roseville Pw., as well as a driveway connection to the existing section of Niblick Dr. To the north of the site, Niblick Dr. connects to Albertsons Dr. (adjacent to the FedEx building), providing access to Foothills Bl. The project includes an internal drive aisle that circles the proposed building, and provides access to the parking areas (primarily along the west side of the building, near Niblick Dr.). Niblick Dr. was identified as an emergency vehicle access location of the parcel map, and this access is maintained with the proposed project. The project was reviewed by the City Engineering and Fire Department staff and was found to comply with city standards and emergency circulation requirements.

Parking: The Zoning Ordinance parking requirement for warehouse uses is one (1) space per 1,000 square feet. If the office areas are less than 10-percent of overall square footage, as is the case for the proposed project, parking for those areas can be calculated at the same rate. The proposed total building area is 206,785 square feet, resulting in a requirement of 207 parking stalls. Overall, 233 parking spaces are provided on site, exceeding the minimum requirement. An additional 63 truck trailer parking stalls are provided, but these stalls are not included in the parking calculation. Bicycle parking spaces and spaces dedicated to carpool and electric vehicles will also be provided, consistent with the City's Alternative Transportation Department requirements.

Landscaping and Lighting: The proposed project provides landscaping and lighting consistent with CDG standards. Landscaping for the project is provided in planters around the perimeter of the site, within the parking lot, at building entries, and along the pedestrian walkways around the building. The City's minimum requirement of 50-percent shading in parking lots is accomplished with a mix of Chinese Pistache, Forest Green Oak, Golden Rain Tree, Frontier Elm, and other species. The proposed planting plan is consistent with the CDG and the City's Water Efficient Landscape Ordinance. A photometric plan was provided for the project, which demonstrates consistency with the City's minimum lighting level requirements of 0.5 foot-candles in pedestrian areas and 1.0 foot-candles in vehicle areas.

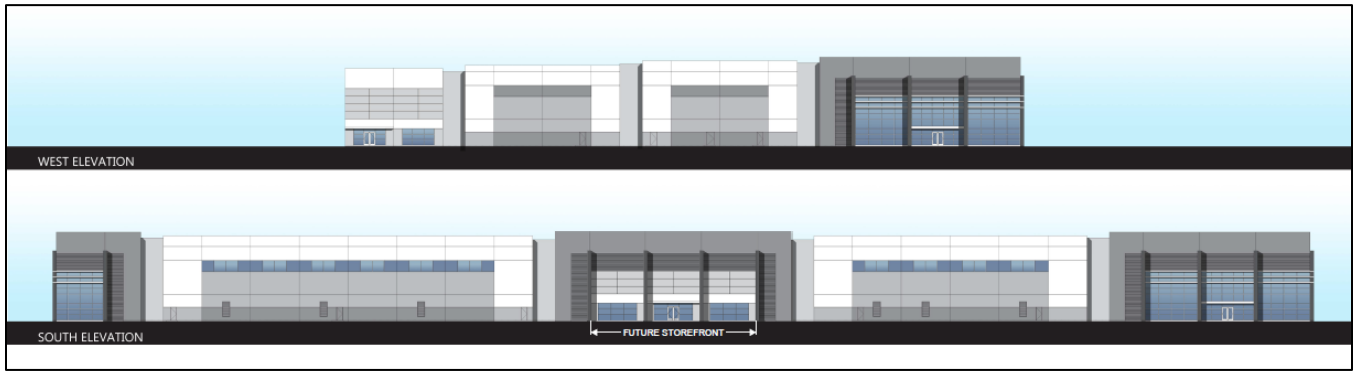
3. The building design, including the materials, colors, height, bulk, size and relief, and the arrangement of the structures on the site, as approved is harmonious with other development and buildings in the vicinity and is consistent with the applicable goals, policies, and objectives set forth in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

The project is subject to the City's Community Design Guidelines (CDG) for office and industrial development. In addition, projects within the NIPA are subject to the North Roseville Area Design Guidelines (NRADG), which provide development standards and guidelines for new construction, including building setbacks, height limits, and lot coverage. The NRADG requires a minimum setback of 90 feet from Roseville Pw. for buildings larger than 100,000 square feet, as well as a 50-foot landscape setback. The subject parcel is setback approximately 177 feet from the ultimate right-of-way for Roseville Pw., therefore meeting the setback requirement. The proposed building square footage results in 34-percent lot coverage, which is below the maximum 50-percent lot coverage permitted in the NRADG. The overall height of the building is approximately 41 feet, which is less than the 50-foot maximum height outlined in the Zoning Ordinance for buildings in the M1 zone.

The project is requesting to deviate from the required side setbacks along the eastern side of the property, adjacent to the railroad. The NRADG requires a 50-foot setback for single buildings greater than 100,000 square feet, with a 15-foot landscape setback to allow for screening of the railroad. The project proposes a 42-foot building setback, and a seven (7) foot landscape planter along the eastern property boundary. Proposed Condition 12 (h) requires that a row of screen trees, with a mix of deciduous and evergreen trees, be planted along the project boundary to screen the project from Industrial Av. to the east. The overall design of the site and layout has been reviewed by the Development Services Department, and adequate access and site circulation is provided. With the conditions of approval, the proposed building siting and landscape design is compatible with the CDG and NRADG.

The architecture reflects a functional design that is consistent with the CDG standards for industrial development. The materials include metal awnings, glass, and aluminum framing, and include a color palate of blues, greys, and whites. The design incorporates score lines into the concrete tilt up panels to break up the façade for visual interest. Furthermore, design orients the more visually engaging office locations, which include the aluminum framing and spandrel glass, towards the future Roseville Pw., while the truck dock locations are along the north (rear) of the building. Overall, the proposed design is consistent with the guidelines and policies outlined in the CDG and NRADG.

Figure 2 – West and South Elevations (facing Foothills Bl. and Roseville Pw.)



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.

All trash containers will be screened within trash enclosures. The enclosures will surround the three non-accessible sides of the trash container, and will be surrounded by landscaping. All other service equipment will be screened from public view, consistent with the conditions of approval.

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 December 3, 2021, and was distributed to all property owners within 300 feet of the project site. To date, no comments have been received.

CONCLUSION

As demonstrated by the analyses in the foregoing sections, the proposed project is consistent with the objectives and intent of the General Plan, NIPA, Zoning Ordinance, and CDG. The required findings can be made for the requested Design Review Permit, and staff requests that the Design Committee take the actions listed in the Recommendation section of this report.

ENVIRONMENTAL DETERMINATION

Consistent with CEQA Guidelines Section 15164, regarding previously adopted negative or mitigated negative declarations, an Addendum may be prepared if only minor technical changes or additions are necessary or none of the conditions requiring a subsequent Environmental Impact Report or negative declaration have occurred. Consistent with this section, an Addendum to the NIPA PCL 50 Foothills Corporate Center Grading Plan Mitigated Negative Declaration (File# 2012PL-064, adopted October 11, 2012) has been prepared for the project. The Addendum, included as Exhibit A of this report, did not identify any new significant environmental impacts; the project impacts are therefore within the scope of the previously adopted Mitigated Negative Declaration.

RECOMMENDATION

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

A. Consider the Addendum to the NIPA PCL 50 – Foothills Corporate Center Grading Plan Mitigated Negative Declaration;

B. Adopt the findings of fact as stated in the staff report and approve the **Design Review Permit – 751 Roseville Pw. –NIPA PCL 50 – Warehouse – PL21-0210** subject to seventy (70) conditions of approval.

CONDITIONS OF APPROVAL FOR DESIGN REVIEW PERMIT FILE # PL21-0210

1. This Design Review Permit approval shall be effectuated within a period of two (2) years from **January 20, 2022** and if not effectuated shall expire on **January 20, 2024**. Prior to said expiration date, the applicant may apply for an extension of time, provided this approval does not extend the expiration beyond **January 20, 2025**. (Planning)

2. The project is approved as shown in Exhibits A - H and as conditioned or modified below. (Planning)

3. The project shall comply with all required environmental mitigation identified in NIPA PCL 50 – Foothills Corporate Center Grading Plan Mitigated Negative Declaration, and shall include all applicable mitigation measures as notes on the grading plans. (All Departments)

4. The project shall be addressed as 751 Roseville Parkway. All projects with multi-tenants or buildings must submit a site plan with building footprint(s) to the Development Services Department (Business Services – Addressing) for building/suite addressing. (Business Services)

5. 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 (2) months after the end of warranty or the Notice of Termination date for the SWPPP, whichever occurs later. (Engineering, Environmental Utilities, Electric, Finance)

6. 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)

7. 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 have been submitted for review and are approved with grading and/or encroachment permits issued by the Department of Development Services – Engineering Division. (Engineering)

8. 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. The Developer shall submit civil drawings to the Department of Development Services – Engineering Division for review and approval. (Engineering)

PRIOR TO ISSUANCE OF BUILDING PERMITS

9. Parking lot design shall conform to the City's design standards, including the following minimum standards for parking stalls:

    a) All parking stalls shall be double-striped. Parking stalls adjacent to sidewalks, landscaped areas or light fixtures, and all Accessible stalls shall abut a 6-inch 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 11 of the CBC.

        iii) Accessible parking and exterior route of travel shall comply with CBC, Sections 11B-206 and 11B-208. (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 Division 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, Engineering)

b) The tree plantings in the parking lot shall be designed to provide a minimum of 50% shade coverage after 15 years. (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 the North Industrial Plan area and the City of Roseville Water Efficient Landscape Ordinance. (Planning, Environmental Utilities)

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)

f) Slopes within landscape planters shall be no more than 3:1. A two-foot flat bench located at back-of-walk shall be included in the landscape area to slow or allow absorption of nuisance run-off from the planters. (Parks, Recreation, and Libraries)

g) All landscaping shall conform to the standards of crime prevention through environmental design with the intent to create natural surveillance, controlling access, and territorial reinforcement to property boundaries. (Police)

h) At improvement plans, provide a row of screen trees, including a mix of deciduous and evergreen trees, in the landscape planter along the eastern property boundary adjacent to the rail lines, to the satisfaction of the Planning Division. (Planning)

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. A separate Architectural 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)

15. For Multiple Building Complexes: As part of the required Architectural 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)

16. 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)

17. 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)

18. 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 Development Services- Engineering prior to approval of any plans. (Engineering)

19. 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)

20. 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."* (Engineering)

21. Prior to issuance of building permits, provide a public access easement along southern drive aisle from Roseville Parkway to the east property line. This easement is required to allow access to the future overpass for construction. (Engineering)

22. The proposed building encroaches into the existing 15' PUE. That portion of the PUE, will need to be formally abandoned via separate document prior to issuance of Building Permits. (Engineering)

23. Bike parking and clean air vehicle spaces shall be provided per the California Green Building Standards. Bike rack/locker design and location shall be approved by Alternative Transportation. (Alternative Transportation, Building).

24. 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)

25. Prior to the approval of the Improvement Plans, the project proponent shall provide proof of preparation and submittal of a Storm Water Pollution Prevention Plan (SWPPP) to the Regional Water Quality Control Board (RWQCB). Proof shall be in the form of the Waste Discharge Identification Number (WDID#), provided to the applicant from RWQCB, placed on the coversheet of the improvement plans. Upon approval of the improvement plans, a copy of the SWPPP shall be required onsite and available for viewing by City inspection staff upon request. (Engineering)

26. The developer shall be responsible for any necessary relocation of signal interconnect cables that may require re-location as a result of the construction of turn lanes and/or driveways. (Engineering)

27. Sight distances for all driveways shall be clearly shown on the improvement plans to verify that minimum standards are achieved. It will be the responsibility of the project proponent to provide appropriate landscaping and improvement plans, and to relocate and/or modify existing facilities as needed to meet these design objectives. (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, Development Services - Engineering 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. (Engineering)

31. The applicant/developer shall prepare a Transportation Systems Management (TSM) Plan for 751 Roseville Parkway to be reviewed and approved by the Transportation Commission. (Alternative Transportation)

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 feet 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 feet below finished grade, unless authorized in these conditions of approval or as shown in the approved exhibits.

    c) All sewer manholes shall have all-weather, 10-ton vehicle access unless otherwise authorized by these conditions of approval. (Environmental Utilities)

35. 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)

36. 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)

37. 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)

38. 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)

39. 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)

40. 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

41. 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)

42. 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)

43. 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

44. 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)

45. The following easements shall be provided by separate instrument and shown on the site plan, unless otherwise provided for in these conditions:

    a) Sewer easements.

    b) Additional internal easements will be required to cover primary electrical facilities to the project when the final electrical design is completed. (Electric)

46. 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. (Engineering, Environmental Utilities, Electric)

47. 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)

48. All improvements being constructed in accordance with the approved grading and improvement plans shall be accepted as complete by the City. (Engineering)

49. 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)

50. The applicant/developer shall prepare a Transportation Systems Management (TSM) Agreement for 751 Roseville Parkway to be reviewed and approved by the City Manager. (Engineering, Alternative Transportation)

51. Water and sewer shall be constructed pursuant to the adopted City of Roseville Improvement Standards and the City of Roseville Construction Standards. (Environmental Utilities)

52. All water backflow devices shall be tested and approved by the Environmental Utilities Department. (Environmental Utilities)

53. All Electric Department facilities, including streetlights where applicable, shall be designed and built to the "City of Roseville Specifications for Commercial Construction." (Electric)

54. 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)

55. Any relocation, rearrangement, or change of existing electric facilities due to this development shall be at the developer's expense. (Electric)

56. 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)

57. 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)

58. One ¾-inch conduit with a 2-pair phone line shall be installed from the building's telephone service panel to the meter section of the customer's electrical switchgear or panel. (Electric)

59. It is the responsibility of the developer to ensure 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

60. 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)

61. 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)

62. 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. (Public Works)

63. 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)

64. 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)

65. 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 of not and if site remediation is required. (Fire)

66. 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)

67. 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 that all construction equipment shall be fitted with factory installed muffling devices and be maintained in good working order. (Building)

68. 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 Division Field Inspector at the time of or prior to the foundation inspection. (Building)

69. Prior to Certificate of Occupancy, the applicant may apply for a Temporary Certificate of Occupancy (TCO) of the building. If a TCO 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 Certificate of Occupancy. (Building)

70. 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 Division and shall include 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) An estimated time frame for each phase and a specific date for the first phase. (Planning, Building)

Exhibits

A. Addendum to the NIPA PCL 50 – Foothills Corporate Center Grading Plan Mitigated Negative Declaration
B. Site Plan and Details
C. Floor Plan
D. Elevations and Colors/Materials
E. Preliminary Grading Plan
F. Preliminary Utility Plan
G. Preliminary Landscape Plan
H. Photometric Plan

Note to Applicant and/or Developer: 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.

CITY OF ROSEVILLE CALIFORNIA

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

MEMORANDUM

To: Design Committee

From: Shelby Maples, Associate Planner

Date: January 14, 2022

Re: NIPA PCL 50 - Warehouse – Response to Comments, File # PL21-0210

Planning staff received a letter from Lozeau Drury on December 16, 2021 challenging the determination that an Addendum was the appropriate environmental document for the NIPA PCL 50 – Warehouse project at 751 Roseville Pw. The following memorandum discusses the major points presented in the Lozeau Drury letter and staff's response. The letter is included as Attachment 1 of this Memorandum.

Assertion: the City cannot prepare an Addendum for the proposed project.

Response: Under the California Environmental Quality Act (CEQA), an Addendum to an adopted Mitigated Negative Declaration (MND) is needed if minor technical changes or modifications to the proposed project occur (CEQA Guidelines § 15164). An addendum is appropriate only if these minor technical changes or modifications do not result in any new significant impacts or a substantial increase in the severity of previously identified significant impacts. The Addendum need not be circulated for public review (CEQA Guidelines § 15164[c]); however, an addendum is to be considered along with the adopted MND by the decision making body prior to making a decision on the project (CEQA Guidelines § 15164[d]).

The MND Addendum demonstrates that the environmental analysis, impacts, and mitigation requirements identified in the previous MND remain substantively unchanged by the proposed project, and supports the finding that the proposed project does not raise any new issues and does not exceed the level of impacts identified in the previous MND.

The determination of applicability of an Addendum was based on the result of CEQA checklist, which concluded that the project would not generate potentially significant impacts. The Checklist included a side-by-side comparison of the current project with the original Mitigated Negative Declaration (MND) document, identifying the page where the impact area was first analyzed, and identifying whether or not any new or substantially more severe impacts would occur with the Project. As there were no new impacts or mitigation measures identified for the proposed project, and each checklist item discussion concluded that pursuant to Section 15164 of the CEQA Guidelines, "none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred", the Addendum remains the appropriate document.

It is also important to note that review under Section 15162 presumes that the project approved under the General Plan 2035 EIR is the baseline for analysis. In several instances throughout the Addendum, the land use designation, as established in the General Plan, is referenced as an as existing, anticipated condition.

Assertion: The Project may have potentially significant cumulative impacts to wildlife from increased traffic.

Response: The Lozeau Drury letter states that the Addendum did not address the cumulative impact of increased traffic on wildlife, referencing figures related to vehicle-related deaths of animals in Canada and Contra Costa County, CA. The letter also states that this subject was not addressed in the original 2012 MND. The letter is correct that this topic was not evaluated in prior CEQA documents; however, staff disagrees that extrapolated rates of vehicle-related wildlife deaths (based on unspecified sections of roadway outside of Placer County) constitute a fair argument for new, potentially significant cumulative impacts that should preclude the adoption of an Addendum. Consistent with a body of case law[1], issues which were known or could have been known at the time of approval of the MND or certification of the General Plan EIR do not preclude adoption of the Addendum. Animals killed by vehicles on roads and highways is not a new or previously unknown occurrence, even though it was not discussed in the prior MND or General Plan EIR. Further, the letter does not present sufficient evidence that the figures presented are scalable to the City of Roseville (for example, in an urbanized vs. rural environment) nor are any thresholds of significance indicated. This issue alone does not require preparation of a subsequent document.

Further, the proposed project will be constructed within an area completed surrounded by industrial development, centrally located within the City of Roseville. No wildlife corridors are present on or adjacent to the site, and trucks and passenger vehicles from the project site will utilize existing and previously planned for roadways and highways. The project will be operating within the level anticipated in the Citywide Traffic Demand Model for this land use. Additionally, staff notes that all state and federal resource protection agency permits required for development of this site have been obtained, consistent with the Biological Resources evaluation and mitigation outlined in the 2012 MND. Based on the highly urbanized location of the project, lack of evidence or thresholds of significance for vehicle-related deaths of wildlife in a local jurisdiction, there is no reason to believe that this is a reasonably foreseeable impact.

Assertion: The Project may have potentially significant air quality impacts.

Response: The Addendum includes a project-level evaluation of air quality impacts, which would remain at a less than significant level. Staff compared the proposed project to the Placer County Air Pollution Control District (PCAPCD) published Thresholds of Significance and Screening Thresholds. , and found that the proposed development would not generate emissions exceeding the PCAPCD thresholds of significance. Therefore, the evaluation is consistent with CEQA

[1] Referenced cases include Citizens for Responsible Equitable Environmental Development (CREED) v. City of San Diego (2011) 196 Cal. App. 4th 515; Concerned Dublin Citizens v. City of Dublin (2013) 214 Cal. App. 4th 1301; Citizens Against Airport Pollution v. City of San Jose (2014) 227 Cal. App. 4th 788.

Guidelines Section 15164 (e) concerning the decision not to prepare a subsequent MND, as none of the conditions calling for preparation of a subsequent MND would apply pursuant to CEQA Guidelines Section 15162.

Assertion: The Project may have potentially significant traffic impacts.

Response: The letter states that the project does not require all feasible mitigation measures, such as bike lanes, shuttles, and other mitigation measures, to quantifiably reduce the Project's potentially significant Vehicle Miles Traveled (VMT) impacts. The adopted MND, and Addendum to the MND, rely on the project's consistency with the land uses identified in the 2035 General Plan EIR, and, and accordingly tiers from, the 2035 General Plan EIR finding of Significant and Unavoidable Impact for generation of VMT.

The proposed project is an industrial warehouse, with truck distribution being the primary activity on site. The industrial nature of the project is not conducive to the types of mitigation measures proposed by the Lozeau Drury letter. Bike lanes, for example, could create safety hazards and related conflicts between bicyclists and delivery trucks, and given the nature of the project, are not conducive to enforcing and quantifying any potential benefit of the mitigation measure. CEQA requires the implementation of feasible mitigation measures, and given the industrial nature of the project and surrounding context, the VMT-reducing mitigation measures proposed in the letter are not appropriate for the development.

In conclusion, staff finds that the Addendum remains the appropriate document to comply with CEQA. No new or substantially more severe impacts have been identified which would necessitate the preparation of a subsequent or supplemental EIR.

Attachments

1. Lozeau Drury LLP letter, Received via email on December 16, 2021

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VIA E-MAIL

December 16, 2021

John Prior, Chair
Rex Clark, Member
Jared Poulsen, Member
c/o Lupe Nelson, Administrative Assistant
Design Committee
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Shelby Maples
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Re: Comment on the Design Review Permit for 751 Roseville Parkway – NIPA PCL 50 – Warehouse – PL21-0210

Dear Chair Prior, Mr. Clark, and Mr. Poulson:

I am writing on behalf of the Laborers International Union of North America, Local Union 185 and its members living in and around the City of Roseville ("LIUNA") concerning the Design Review Permit for the warehouse project located at 751 Roseville Parkway ("Project") proposed for the City of Roseville, and the Addendum that has been prepared for the Project. The Addendum relies on the erroneous conclusion that the proposed new warehouse facility was a project that was analyzed by the Mitigated Negative Declaration for the NIPA PCL 50 Foothills Corporate Center Grading Plan adopted on October 11, 2012 (File #2012PL-064).

The 2012 MND does not address any project to construct an over 200,000 square-foot warehouse building and associated site improvements. The Project is a new project never before evaluated in a negative declaration or EIR. There is no legal authority under CEQA for the City to use an addendum for a project that was not a specific project considered in the 2012 MND.

In addition to that fundamental legal error, the addendum also overlooks numerous potential environmental impacts of the Project, none of which have ever been addressed in the prior CEQA documents referenced by the City. These include:

1. Potential significant cumulative impacts to wildlife from increased traffic due to the Project;
2. Potential significant impacts to air quality;
3. Potential significant impacts from vehicle miles travelled ("VMT").

I. Project Description

The proposed Project is a 206,785-square-foot, 41-foot-tall warehouse building with four potential offices, 42 loading dock doors on the north side of the building, 233 parking stalls, and 63 truck trailer parking stalls. The Project site has a Light Industrial (M1) zoning designation and a Light Industrial (LI) land use designation, and is located in the City's North Industrial Plan Area (NIPA).

II. The City Cannot as a Matter of Law Rely Upon an Addendum to Evaluate the Warehouse Project Because the Project Has Never Been Previously Addressed Under CEQA in Any Prior Negative Declaration or EIR.

The City claims that the Project is "within the development footprint evaluated by the adopted [October 2012] MND." Addendum, p. 3. The City contends that Project impacts are "identical" to the impacts in the MND because the Project "does not change the anticipated land use type, mass grading assumptions, or development footprint of the site." *Id.* at 4. The Addendum also states that physical impacts, including those to biological resources, are based on "grading and development of an area, not on the proposed use types of the building." *Id.*

CEQA Guideline section 15164 provides for the preparation of an addendum to an EIR or negative declaration if none of the conditions in Guideline section 15162 have occurred. (14 CCR § 15164(a).) However, Guideline section 15162 only applies if an EIR or negative declaration has been adopted for a project, allowing an agency to avoid preparing a "subsequent EIR . . . for *that project*" unless one or more of the listed conditions apply. (*Id*. [emphasis added].) Therefore, an agency can only prepare an addendum and avoid preparing an EIR for a project that has already undergone CEQA review, and for which an EIR has been certified or a negative declaration has been adopted for, so long as one of the conditions does not apply.

The proposed warehouse facility is not the project evaluated in the 2012 MND and no reasonable person could claim that the 2012 MND describes the proposed warehouse project for purposes of CEQA. A review of the 2012 MND demonstrates that it did not evaluate the currently proposed warehouse project. The title of the MND, "Foothills Corporate Center Grading Plan" further supports this argument because it shows that the MND was only contemplating potential environmental impacts from grading the site, and not the many environmental impacts associated with construction and operation of a warehouse onsite. While the City assumed general development to make its assessment of grading impacts, that is insufficient to fully assess how the currently proposed project will affect air quality, biological resources, greenhouse gas emissions, and other environmental impacts. The City can therefore not rely on Guideline sections 15162 or 15164 because an addendum cannot be issued for a project that never underwent CEQA review.

Further, the proposed project does not modify or revise the 2012 MND. As the addendum device was created to make minor corrections to EIRs and MNDs, the City's use of the addendum device for this new proposed project is inappropriate and goes against the Resource Agency's intent in creating it because the project is not correcting anything in the 2012 MND.

III. There is Substantial Evidence of a Fair Argument That the Warehouse Project May Have Significant Environmental Impacts.

As the California Supreme Court held, "[i]f no EIR has been prepared for a nonexempt project, but substantial evidence in the record supports a fair argument that the project may result in significant adverse impacts, the proper remedy is to order preparation of an EIR." (*Communities for a Better Env't v. South Coast Air Quality Mgmt. Dist.* (2010) 48 Cal.4th 310, 319-320 (*CBE v. SCAQMD*) [citing *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 75, 88; *Brentwood Assn. for No Drilling, Inc. v. City of Los Angeles* (1982) 134 Cal.App.3d 491, 504–505.].) "Significant environmental effect" is defined very broadly as "a substantial or potentially substantial adverse change in the environment." (Pub. Res. Code ["PRC"] § 21068; *see also* 14 Cal. Admin. Code § 15382.) An effect on the environment need not be "momentous" to meet the CEQA test for significance; it is enough that the impacts are "not trivial*."* (*No Oil, Inc., supra*, 13 Cal.3d at 83.) "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." (*Communities for a Better Env't v. Cal. Res. Agency* (2002) 103 Cal.App.4th 98, 109 (*CBE v. CRA*).)

The EIR is the very heart of CEQA. (*Bakersfield Citizens for Local Control v. City of Bakersfield (*2004) 124 Cal.App.4th 1184, 1214 (*Bakersfield Citizens*); *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 927.) The EIR is an "environmental 'alarm bell' whose purpose is to alert the public and its responsible officials to environmental changes before they have reached the ecological points of no return." (*Bakersfield Citizens, supra*, 124 Cal.App.4th at 1220.) The EIR also functions as a "document of accountability," intended to "demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action." (*Laurel Heights Improvements Assn. v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 376, 392.) The EIR process "protects not only the environment but also informed self-government." (*Pocket Protectors*, *supra*, 124 Cal.App.4th at 927.)

An EIR is required if "there is substantial evidence, in light of the whole record before the lead agency, that the project may have a significant effect on the environment." (PRC § 21080(d); see also *Pocket Protectors*, *supra*, 124 Cal.App.4th at 927.) In very limited circumstances where there is not even a "fair argument" that the project will have a significant environmental effect may an agency avoid preparing an EIR by issuing a negative declaration, a written statement briefly indicating that a project will have no significant impact thus requiring no EIR. (14 Cal. Code Regs. § 15371; PRC, §§ 21100, 21064.) Since "[t]he adoption of a negative declaration . . . has a terminal effect on the environmental review process," by allowing the agency "to dispense with the duty [to prepare an EIR]," negative declarations are allowed only in cases where "the proposed project will not affect the environment at all." (*Citizens of Lake Murray v. San Diego* (1989) 129 Cal.App.3d 436, 440.) A mitigated negative declaration is proper only if the project revisions would avoid or mitigate the potentially significant effects identified in the initial study "to a point where clearly no significant effect on the environment would occur, and…there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment." (PRC §§ 21064.5 and 21080(c)(2); *Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322, 331.) In that context, "may" means a reasonable possibility of a significant effect on the environment. (PRC

§§ 21082.2(a), 21100, 21151(a); *Pocket Protectors,* 124 Cal.App.4th at 927; *League for Protection of Oakland's etc. Historic Res. v. City of Oakland* (1997) 52 Cal.App.4th 896, 904–905.)

Even assuming the 2012 MND is the warehouse project currently being proposed, the expansion of a grading project to the construction and operation of a 200,000 square foot distribution center is a substantial change to the project requiring major revisions to the EIR. (CEQA Guidelines § 15162(a)(1).) Likewise, that newly identified project will have one or more significant effects not discussed in the previous negative declaration. (§ 15162(a)(3)(A).) Importantly, where, as here, the previous CEQA document is an MND rather than an environmental impact report ("EIR"), the fair argument standard of review applies. As the California Supreme Court has explained,

> [T]he inquiry prescribed by the Guidelines is not whether the environmental impacts of the modification are significant, but whether the modification requires major revisions to the negative declaration because of the involvement of new, potentially significant environmental effects that had not previously been considered in connection with the earlier environmental study." (*Friends of Coll. of San Mateo Gardens v. San Mateo Cnty. Comm. Coll. Dist*. (2016) 1 Cal.5th 937, 958 n.6 ("*San Mateo Gardens*").)

The court in *San Mateo Gardens* further explained that an addendum is not appropriate "if the proposed modification ***may*** produce a significant environmental effect that had not previously been studied." (*San Mateo Gardens*, 1 Cal.5th at 958.)

Under the "fair argument" standard, an EIR is required if any substantial evidence in the record indicates that a project may have an adverse environmental effect—even if contrary evidence exists to support the agency's decision. (14 CCR § 15064(f)(1); *Pocket Protectors*, 124 Cal.App.4th at 931; *Stanislaus Audubon Society v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-51; *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1602.) The "fair argument" standard creates a "low threshold" favoring environmental review through an EIR rather than through issuance of negative declarations or notices of exemption from CEQA. (*Pocket Protectors*, 124 Cal.App.4th at 928.)

The "fair argument" standard is virtually the opposite of the typical deferential standard accorded to agencies. As a leading CEQA treatise explains:

> This 'fair argument' standard is very different from the standard normally followed by public agencies in making administrative determinations. Ordinarily, public agencies weigh the evidence in the record before them and reach a decision based on a preponderance of the evidence. [Citations]. The fair argument standard, by contrast, prevents the lead agency from weighing competing evidence to determine who has a better argument concerning the likelihood or extent of a potential environmental impact. The lead agency's decision is thus largely legal rather than factual; it does not resolve conflicts in the evidence but determines only whether substantial evidence exists in the record to support the prescribed fair argument.

(Kostka & Zischke*, Practice Under CEQA*, § 6.29, pp. 273-274.) The Courts have explained that "it is a question of law, not fact, whether a fair argument exists, and the courts owe no deference to the lead agency's determination. Review is de novo, with a preference for resolving doubts in favor of environmental review." (*Pocket Protectors*, 124 Cal.App.4th at 928.)

IV. DISCUSSION

A. There is a Fair Argument That the Project Will Have Potentially Significant Cumulative Impacts to Wildlife.

CEQA documents must discuss cumulative impacts, and mitigate significant cumulative impacts. 14 CCR § 15130(a). This requirement flows from CEQA section 21083, which requires a finding that a project may have a significant effect on the environment if "the possible effects of a project are individually limited but cumulatively considerable. . . . 'Cumulatively considerable' means that the incremental effects of an individual 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." A legally adequate cumulative impacts analysis views a particular project over time and in conjunction with other related past, present, and reasonably foreseeable probable future projects whose impacts might compound or interrelate with those of the project at hand.

The 2012 MND does not address the impacts the Project's vehicle trips will have on wildlife. The project will generate thousands of vehicle miles traveled (VMT) per day by cars and heavy trucks. The 2012 MND not analyze the direct and cumulative impacts on wildlife that will be caused by this increase in traffic on roadways servicing the Project. Vehicle collisions have the potential to impact dozens of special-status species.

Vehicle collisions with wildlife is not a minor issue, but rather results in the death of millions of species each year. In Canada, 3,562 birds were estimated killed per 100 km of road per year (Bishop and Brogan 2013), and the US estimate of avian mortality on roads is 2,200 to 8,405 deaths per 100 km per year, or 89 million to 340 million total per year (Loss et al. 2014). In a recent study of traffic-caused wildlife mortality, investigators found 1,275 carcasses of 49 species of mammals, birds, amphibians and reptiles over 15 months of searches along a 2.5 mile stretch of Vasco Road in Contra Costa County, California (Mendelsohn et al. 2009). Using carcass detection trials performed on land immediately adjacent to the traffic mortality study (Brown et al. 2016) to adjust the found fatalities for the proportion of fatalities not found due to scavenger removal and searcher error, the estimated traffic-caused fatalities was 12,187. This fatality estimate translates to a rate of 3,900 wild animals per mile per year that were killed by automobiles. In terms comparable to the national estimates, the estimates from the Mendelsohn et al. (2009) study would translate to 243,740 animals killed per 100 km of road per year, or 29 times that of Loss et al.'s (2014) upper bound estimate and 68 times the Canadian estimate. An analysis is needed of whether increased traffic generated by the project site would similarly result in local impacts on wildlife.

The potentially large number of direct kills by the Project's traffic is a significant

potential impact that is not addressed in the 2012 MND. These deaths also will contribute significantly to the cumulative road kills that occur in Placer County.

B. There is a Fair Argument that the Project Will Have Significant Air Quality Impacts.

The Addendum states that according to published screening tables associated with the Placer County Air Pollution Control Board (PCAPCB), general industrial buildings below a certain square footage do not result in NOx emissions which exceed 55 lbs/day. Addendum, p.8. Because the proposed Project's square footage falls below that threshold, the Addendum concludes that the project's construction and operation emissions are not expected to exceed the District's thresholds of significance. *Id.* However, this analysis is inadequate to assess the Project's potential air quality impacts because a warehouse is distinct from a general industrial building. The Project's proposed 42 loading dock doors are enough to demonstrate that this Project will potentially generate very high amounts of traffic which have not been adequately assessed in the Addendum.

The Addendum also concluded that the MND's findings were still applicable to the Project. *Id.* The MND found that construction emissions were below PCAPCB thresholds and that standard dust control and other construction measures would be enough to avoid construction impacts. *Id.* However, the air quality impacts of the Project as proposed could not have been foreseen at the time the MND was prepared. Emissions for the Project must be modeled using a program such as CalEEMod, and project-specific input parameters must be measured against applicable thresholds. These potentially significant impacts must be analyzed in an EIR specific to this project.

C. There is a Fair Argument that the Project Will Have Significant Traffic Impacts.

The Addendum states that operational activities were not evaluated as part of the MND for the grading plan. Addendum, p. 23. It then states that because the Project is consistent with existing industrial land use and zoning designations, the site will not generate trips in excess of what was anticipated by the General Plan EIR. *Id.* However, this assessment fails to require all feasible mitigation measures including additional bike lanes, shuttles, and other mitigation measures, to quantifiably reduce the Project's potentially significant Vehicle Miles Traveled (VMT) impacts. As stated in CEQA § 15162(a)(3)(D), the section will not apply if there is new information regarding "mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR" which would "substantially reduce one or more significant effects on the environment." The Addendum makes no attempt to assess project-specific VMT impacts, and an EIR must be prepared to adequately analyze these impacts.

V. CONCLUSION

For the foregoing reasons, LIUNA and its members urge the City to abandon the use of the Addendum for the Project and to complete and circulate an EIR addressing the Project's significant impacts and mitigation measures. Thank you for your attention to these comments.

Sincerely,

Michael R. Lozeau
Lozeau | Drury LLP

CITY OF ROSEVILLE CALIFORNIA

DEVELOPMENT SERVICES DEPARTMENT–PLANNING DIVISION

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

ADDENDUM TO NIPA PCL 50 – FOOTHILLS CORPORATE CENTER GRADING PLAN

Project Title/File Number:	NIPA PCL 50 – Warehouse, File #PL21-0210
Project Location:	751 Roseville Pw, Roseville, CA 95678
Project Description:	The project request includes a Design Review Permit to allow the construction of a 206,785 square foot warehouse building and associated site improvements on a 14.05 acre parcel in the North Industrial Plan Area (NIPA).
Project Applicant:	Jeff Thompson, Morton & Pitalo
Property Owner:	Ridge Capital Inc., c/o Michelle Azevedo
Lead Agency Contact:	Shelby Maples, Associate Planner

An Addendum to a previously certified and adopted negative declaration or environmental impact report may be prepared for a project if only minor technical changes or additions are necessary or none of the conditions calling for the preparation of a subsequent EIR or negative declaration have occurred (California Environmental Quality Act Guidelines [CEQA] Section 15164). Consistent with CEQA Guidelines Section 15164, the below analysis has been prepared in order to demonstrate that none of the conditions described in Section 15162 of the CEQA Guidelines calling for preparation of a subsequent EIR have occurred and that only minor technical changes or additions are necessary in order to deem the adopted negative declaration adequate to describe the impacts of the proposed project. CEQA Guidelines Section 15164 also states that an addendum need not be circulated for public review, but can be included in or attached to the adopted negative declaration for consideration by the hearing body. This Addendum focuses only on those aspects of the project or its impacts which require additional discussion.

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PROJECT DESCRIPTION

Project Location

The project site is located at 751 Roseville Pw., formerly addressed as 8801 Foothills Bl. The site is to the east of Foothills Bl., and is bounded on the south by the future extension of Roseville Pw. and on the east by the Union Pacific rail lines. The approximately 14.05 acre parcel is a portion of the Foothills Corporate Center site.

Background

The project site was previously evaluated with the Foothills Corporate Center Grading Plan project, File #2012PL-064. The prior MND covered approximately 60 acres, and included vernal pools, seasonal wetlands, and seasonal wetland swales on the site. The MND, supporting Initial Study, and related attachments are included as Attachment 1 of this Addendum. The adopted MND analyzed impacts related to aesthetics, agricultural and forestry resources, air quality and greenhouse gases, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, and utilities and service systems. The proposed project is within the development footprint evaluated by the adopted MND, and will construct a warehouse facility that is consistent with the existing land use and zoning designations.

Location	Zoning	General Plan Land Use	Actual Use of Property
Site	M1	Light Industrial	Vacant
North	M1	Light Industrial	Save Mart Distribution Center, warehouse
South	M1	Light Industrial	Fedex Distribution Center, warehouse
East	M2	General Industrial	Vacant, industrial
West	M1	Light Industrial	Vacant

Environmental Setting

The approximately 14.05 acre project site is located within a developed area of the City of Roseville, and constitutes a portion of the site known as the Foothill Corporate Center. The entire site has been graded, and no biological or other resources remain on the site.

Proposed Project

The project request includes a Design Review Permit to evaluate a proposed 206,785-square-foot, 41-foot-tall warehouse building and associated site improvements. As proposed, the plan includes a total of four (4) potential offices, 42 loading dock doors on the north side of the building, and a total of 233 parking stalls. The project site has a Light Industrial (M1) zoning designation and a Light Industrial (LI) land use designation, and is located within the City's North Industrial Plan area.

PURPOSE AND SCOPE OF ADDENDUM

As discussed in the Background section, a Mitigated Negative Declaration (MND) for the NIPA PCL 50 Foothills Corporate Center Grading Plan was adopted on October 11, 2012 (File #2012PL-064). The MND covered the mass grading activity for the entire Foothills Commerce Center site. The proposed project site at 751 Roseville Pw. comprises a small portion of that site. The MND, supporting Initial Study, and related attachments are included as Attachment 1 of this Addendum. The adopted MND analyzed impacts related to aesthetics, agricultural and forestry resources, air quality and greenhouse gases, biological resources, cultural resources,

geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, and utilities and service systems. The proposed project is within the development footprint evaluated by the adopted MND, and will construct a warehouse facility that is consistent with the existing land use and zoning designations.

The analyses below rely on the MND analysis with minor supplements or technical updates where appropriate. Most of the project impacts remain identical to the impacts of the MND because the proposed project does not change the anticipated land use type, mass grading assumptions, or development footprint of the site. Impacts to physical resources (such as agricultural land, biological resources, etc.) are based on the grading and development of an area, not on the proposed use types of the buildings (i.e. restaurant vs. retail) on the property. For other types of impacts which are affected by use type and square footages, the project uses are consistent with what was anticipated for the land use type and maintain the same levels potential impacts, as discussed in this Addendum.

ENVIRONMENTAL CHECKLIST FOR ADDENDUM ENVIRONMENTAL REVIEW

The purpose of this checklist is to evaluate the categories in terms of any "changed condition" (i.e. changed circumstances, project changes, or new information of substantial importance) that may result in a changed environmental result. A "no" answer does not necessarily mean there are no potential impacts relative to the environmental category, but that there is no change in the condition or status of the impact since it was analyzed and addressed in prior environmental documents.

EXPLANATION OF CHECKLIST EVALUATION CATEGORIES

Where Impact was Analyzed
This column provides a cross-reference to the pages of the prior environmental documents where information and analysis may be found relative to the environmental issue listed under each topic.

Do Proposed Changes Involve New Significant Impacts?
Pursuant to Section 15162(a)(1) of the CEQA Guidelines, this column indicates whether the changes represented by the current project will result in new significant impacts that have not already been considered and mitigated by the prior environmental review documents and related approvals, or will result in a substantial increase in the severity of a previously identified impact.

Any new Circumstances Involving New Impacts?
Pursuant to Section 15162(a)(2) of the CEQA Guidelines, this column indicates whether there have been changes to the project site or the vicinity (circumstances under which the project is undertaken) which have occurred subsequent to the certification or adoption of prior environmental documents, which would result in the current project having new significant environmental impacts that were not considered in the prior environmental documents or that substantially increase the severity of a previously identified impact.

Any new Information Requiring New Analysis or Verification?
Pursuant to Section 15162(a)(3)(A–D) of the CEQA Guidelines, this column indicates whether new information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence at the time the previous environmental documents were certified or adopted is available requiring an update to the analysis of the previous environmental documents to verify that the environmental conclusions and mitigation measures remain valid. Either "yes" or "no" will be answered to indicate whether there is new information showing that: (A) the project will have one or more significant effects not discussed in the prior environmental documents; (B) that significant effects previously examined will be substantially more severe than shown in the prior environmental documents; (C) that mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or (D) that mitigation measures or alternatives which are considerably different from those analyzed in the prior environmental

documents would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative. If "no," then no additional environmental documentation (supplemental or subsequent EIR) is required.

Mitigation Measures Implemented or Addressing Impacts
Pursuant to Section 15162(a)(3) of the CEQA Guidelines, this column indicates whether the prior environmental documents provide mitigation measures to address effects in the related impact category. In some cases, the mitigation measures have already been implemented. A "yes" response will be provided in any instance where mitigation was included, regardless of whether the mitigation has been completed at this time. If "none" is indicated, this environmental analysis concludes a significant impact does not occur with this project, no mitigation was previously included, and no mitigation is needed.

DISCUSSION AND MITIGATION SECTIONS

Discussion
A discussion of the elements of the checklist is provided under each environmental category in order to clarify the answers. The discussion provides information about the particular environmental issue, how the project relates to the issue and the status of any mitigation that may be required or has already been implemented.

Mitigation Measures
Applicable mitigation measures from the prior environmental review that apply to the project are listed under each environmental category.

Conclusions
A discussion of the conclusion relating to the analysis contained in each section.

CHECKLIST

I. Aesthetics

	Where Impact Was Analyzed in Prior Environmental Documents	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents' Mitigation Measures Implemented or Addressing Impacts.
a. Have a substantial adverse effect on a scenic vista?	Page 7	No	No	No	None
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	Same	No	No	No	None
c. In non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Same	No	No	No	None
d. Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	Same	No	No	No	None

Discussion: The previous analysis stated that the project area does not abut and is not visible from any designated scenic vista or scenic highway. The proposed project involves the construction of an industrial warehouse building, which is consistent with the land use and zoning designations, North Industrial Plan Area (NIPA) Design Guidelines, and the Community Design Guidelines. The project site is surrounded by urban development.

The primary aesthetic disruption is due to the conversion of an undeveloped site to an urban environment. This impact was covered by the MND. The Findings of Fact for the CEQA Implementing Procedures indicate that compliance with the Community Design Guidelines (Resolution 95-347) and applicable Specific Plan policies and/or Specific Plan Design Guidelines (in this case, NIPA) will prevent significant impacts related to construction of buildings in urban settings. Therefore, pursuant to CEQA Guidelines Section 15164, subdivision (a), the city finds that "none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred" relative to aesthetic resources.

Mitigation Measures: None required for this Project.

II. Agricultural & Forestry Resources

	Where Impact Was Analyzed in Prior Environmental Documents	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents' Mitigation Measures Implemented or Addressing Impacts.
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?	Page 8	No	No	No	None
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	Same	No	No	No	None
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))?	Same	No	No	No	None
d) Result in the loss of forest land or conversion of forest land to non-forest use?	Same	No	No	No	None
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?	Same	No	No	No	None

Discussion: The MND concluded that there were no resources to be affected by conversion of the site to urban uses. This conclusion remains appropriate for this Project. Therefore, pursuant to CEQA Guidelines Section 15164, subdivision (a), the city finds that "none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred" relative to agricultural resources.

Mitigation Measures: None required for this Project.

III. Air Quality

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents' Mitigation Measures Implemented or Addressing Impacts.
a) Conflict with or obstruct implementation of the applicable air quality plan?	Page 10-15	No	No	No	None
b) Result in a cumulatively considerable net increase of any criteria for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	Same	No	No	No	None
c) Expose sensitive receptors to substantial pollutant concentrations?	Same	No	No	No	None
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Same	No	No	No	None

Discussion: The MND concluded that construction emissions were below significance threshold adopted by the Placer County Air Pollution Control Board (PCAPCD) and that standard dust control and other construction measures would be sufficient to avoid construction impacts. The analysis noted that the General Plan EIR adopted a statement of overriding considerations related to the cumulative impact analyses of air quality impacts, and details the reductions and policies implemented to reduce impacts where feasible. The MND further found that there are no substantial odor producers in the vicinity, and the probable users of the site would not produce substantial odors. The MND also concluded that the operational emissions of the project would be below the identified thresholds.

The proposed industrial warehouse building is approximately 206,785 square feet in size, located on one of the parcels previously analyzed by the MND. According to the published screening table associated with the PCAPCD thresholds of significance, general industrial buildings under 894,262 square feet will not result in NOx emissions that exceed 55 lbs/day. Typically, NOx emissions are substantially higher than ROG and PM10; therefore, it can be assumed that projects that do not exceed the NOx threshold will not exceed the ROG and PM10 thresholds and will not result in a significant operational impact. As the proposed project is well below the screening threshold, the project is not expected to result in construction or operation emissions that would exceed the district's thresholds of significance. The MND findings are still applicable to the Project. Therefore, pursuant to CEQA Guidelines Section 15164, subdivision (a), the city finds that "none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred" relative to air quality.

Mitigation Measures: None required for this Project.

IV. Biological Resources

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents' Mitigation Measures Implemented or Addressing Impacts.
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?	Page 16-17	No	No	No	MM2
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?	Same	No	No	No	None
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Same	No	No	No	MM1
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?	Same	No	No	No	None

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Same	No	No	No	None
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?	Same	No	No	No	None

Discussion: The MND included an analysis of biological resources, and found that mitigation would be required to reduce impacts to less than significant levels. At the time the MND was prepared, the site consisted of rolling grasslands, an ephemeral drainage swale, and several wetland features, including vernal pools, seasonal wetlands, and a seasonal wetland swale. No trees were located on site. A Wetland Delineation was prepared by ECORP Consulting in 2005 and a Biological Assessment (BA) was prepared in 2006 which identified these features and detailed the effects of project implementation on special status species. The surveys found that no special status species were present on site. However, due to the impact of the grading plan on wetland features, the MND required Mitigation Measure MM1, which stated that prior to issuance of the grading permit, "the project shall obtain an Army Corps of Engineers wetland fill or discharge 'Section 404' permit. The project will be required to purchase credits in an approved wetland mitigation fund or other mitigation required by the 404 permit to ensure no net loss of wetlands." As grading for the site has already occurred, this mitigation measure has been completed.

Additionally, the MND included an analysis of habitat on the site, which at the time was undisturbed. Mitigation Measure MM2 required the completion of special status species surveys prior to construction, pursuant to Federal and State protocols.

At this time, the entire site has been mass graded and approximately 50-percent of the site is developed. The proposed project does not change the previously evaluated area of development, and does not result in any new or modified impacts to biological resources. Therefore, pursuant to CEQA Guidelines section 15164, subdivision (a), the City finds that "none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred."

Mitigation Measures: None required for this Project.

V. Cultural Resources

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents' Mitigation Measures Implemented or Addressing Impacts.
a) Cause a substantial adverse change in the significance of an historic resource pursuant to in Section 15064.5?	Page 18	No	No	No	MM3
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	Same	No	No	No	Same
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	Same	No	No	No	Same

Discussion: The MND discussed the potential for subsurface remains or deposits to be found on the site, and found that unanticipated discoveries were unlikely due to previous surveys of the Plan area. However, the MND applied the City's standard construction measures, which required cessation of work should any item of cultural interest be found, to ensure the Project will have a less than significant impact on cultural resources (MM30. This condition remains applicable to the proposed project and no additional mitigation is required. Therefore, pursuant to CEQA Guidelines section 15164, subdivision (a), the City finds that "none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred."

Mitigation Measures: None required for this Project.

VI. Geology and Soils

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents' Mitigation Measures Implemented or Addressing Impacts.
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	Page 19	No	No	No	None
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.)	Same	No	No	No	None
ii) Strong seismic ground shaking?	Same	No	No	No	None
iii) Seismic-related ground failure, including liquefaction?	Same	No	No	No	None
iv) Landslides?	Same	No	No	No	None
b) Result in substantial soil erosion or the loss of topsoil?	Same	No	No	No	None
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?	Same	No	No	No	None
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?	Same	No	No	No	None

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?	Same	No	No	No	None
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	Same	No	No	No	None

Discussion: The MND indicated that compliance with existing regulations and permit requirements would be sufficient to avoid impacts related to geology and soils. This conclusion remains appropriate for this Project. Therefore, pursuant to CEQA Guidelines section 15164, subdivision (a), the City finds that "none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred."

Mitigation Measures: None required for this Project.

VII. Greenhouse Gases

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents' Mitigation Measures Implemented or Addressing Impacts.
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Page 10-15	No	No	No	None
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Same	No	No	No	Same

Discussion: In the original MND, Greenhouse Gas impacts were analyzed in the Air Quality section of the document. The MND concluded that standard dust control and other construction measures would be sufficient to avoid construction impacts, and that Citywide measures for the control of greenhouse gases were likewise sufficient for both construction and operation of allowed uses on the site. The MND concluded that the operational emissions of the project would be below the identified thresholds.

The proposed industrial warehouse building is approximately 206,785 square feet in size, located on one of the parcels previously analyzed by the MND. According to the published screening table associated with the PCAPCD thresholds of significance for greenhouse gas emissions, general industrial buildings under 901,709 square feet will not exceed the bright line threshold of 10,000 MT CO2e/yr established for the construction and operational phase of land use projects and stationary source projects. As the proposed project is well below the screening threshold, the project is not expected to result in construction or operation emissions that would exceed the district's thresholds of significance. The MND findings are still applicable to the Project. Therefore, pursuant to CEQA Guidelines Section 15164, subdivision (a), the city finds that "none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred" relative to greenhouse gas emissions.

Mitigation Measures: None required for this Project.

VIII. Hazards and Hazardous Materials

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents' Mitigation Measures Implemented or Addressing Impacts.
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Page 21	No	No	No	None
b) Create a significant hazard to the public or the environment though reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Same	No	No	No	None
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Same	No	No	No	None

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?	Same	No	No	No	None
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	Same	No	No	No	None
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Same	No	No	No	None
g) Expose people or structures either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	Same	No	No	No	None

Discussion: The MND noted that the project site is not located on a site that is included on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5, and therefore would not create a significant hazard to the public or the environment. The MND concluded that the City's existing regulations and permits would prevent significant impacts as it relates to construction activities on the site. The proposed project will be required to comply with these standards. Therefore, pursuant to CEQA Guidelines Section 15164, subdivision (a), the city finds that "none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred" relative to hazardous materials.

Mitigation Measures: None required for this Project.

IX. Hydrology and Water Quality

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents' Mitigation Measures Implemented or Addressing Impacts.
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Page 22-23	No	No	No	None
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Same	No	No	No	None
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	Same	No	No	No	None
i) result in substantial erosion or siltation on or off-site;	Same	No	No	No	None
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	Same	No	No	No	None
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater systems or provide substantial additional sources of polluted runoff; or	Same	No	No	No	None
iv) impede or redirect flood flows?	Same	No	No	No	None

d) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Same	No	No	No	None
e) 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?	Same	No	No	No	None
f) In flood hazard, tsunami, or seiches zones, risk release of pollutants due to project innundation?	Same	No	No	No	None

Discussion: The MND noted that the developer is required to prepare and submit a Stormwater Pollution Prevention Plan (SWPPP) to the City, as defined by the Regional Water Quality Control Board, to ensure that the project will not result in the release of the materials that will affect water quality. Compliance with City standards, as well as the best management practices (BMPs) required by the SWPPP, will ensure than impacts to water quality are considered less than significant. Additionally, the MND discusses the potential impacts related to increased runoff as disclosed in the General Plan EIR. The General Plan EIR assumed full build-out of this site, as well as other properties in the City, and evaluated downstream flooding impacts from increased surface water runoff. The proposed Project does not expand the development footprint beyond what was evaluated in the MND, and no new or substantially more severe impacts are anticipated. Therefore, pursuant to CEQA Guidelines Section 15164, subdivision (a), the city finds that “none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred” relative to hydrology and water quality.

Mitigation Measures: None required for this Project.

X. Land Use and Planning

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents' Mitigation Measures Implemented or Addressing Impacts.
a) Physically divide an established community?	Page 22-23	No	No	No	None
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation of an agency adopted for the purpose of avoiding or mitigating an environmental effect?	Same	No	No	No	None

Discussion: The MND indicated that there would be no impact with respect to these criteria, and that the project was consistent with the Zoning Ordinance, NIPA, and General Plan policies which were adopted for the purpose of avoiding environmental effects. The proposed project is consistent with the Light Industrial land use and zoning designations. Therefore, pursuant to CEQA Guidelines Section 15164, subdivision (a), the city finds that "none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred" relative to land use and planning.

Mitigation Measures: None required for this Project.

XI. Mineral Resources

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents' Mitigation Measures Implemented or Addressing Impacts.
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?	Page 24	No	No	No	None

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?	Same	No	No	No	None

Discussion: The MND indicated that there were no significant mineral resources in the area. This conclusion remains appropriate for this Project. Therefore, pursuant to CEQA Guidelines Section 15164, subdivision (a), the city finds that "none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred" relative to mineral resources.

Mitigation Measures: None required for this Project.

XII. Noise

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents' Mitigation Measures Implemented or Addressing Impacts.
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Page 25	No	No	No	None
b) Generation of excessive ground borne vibration of ground borne noise levels?	Same	No	No	No	None
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	Same	No	No	No	None

Discussion: The MND addressed construction noise, and found the impact to be less than significant. Operational noise was not evaluated for the grading activities. The proposed Project will develop the site with a warehouse facility, which includes truck activity and loading bays. The project site is an industrial parcel, surrounded by other industrial parcels, and is not located near any sensitive receptors (the MND indicates the nearest sensitive receptors are greater than 1,700 feet away). The Project will develop the site consistent with the General Plan land use and zoning designations, and will be subject to City Noise Ordinance regulations. Pursuant the CEQA Guidelines Section 15164, subdivision (a), the City finds that "none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred" relative to noise impacts.

Mitigation Measures: None required for this Project.

XIII. Population and Housing

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents Mitigation Measures Implemented or Addressing Impacts.
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, though extension of roads or other infrastructure)?	Page 26	No	No	No	None
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	Same	No	No	No	None

Discussion: The MND states that the project is not housing-related, does not displace existing housing, and does not induce growth beyond what was anticipated in the General Plan EIR; therefore, there are no impacts to population and housing. This conclusion remains appropriate for the proposed Project. Pursuant the CEQA Guidelines Section 15164, subdivision (a), the City finds that "none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred" relative to population and housing.

Mitigation Measures: None required for this Project.

XIV. Public Services

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents Mitigation Measures Implemented or Addressing Impacts.
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 governmental 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 the public services:					
a) Fire protection?	Page 26	No	No	No	None
b) Police protection?	Same	No	No	No	None
c) Schools?	Same	No	No	No	None
d) Parks?	Same	No	No	No	None
e) Other public facilities?	Same	No	No	No	None

Discussion: The MND states that the project site will develop consistent with the land use and zoning designations, and therefore not increase demands for public services, including police and fire protection, wastewater services, and solid waste disposal, beyond levels anticipated in the General Plan EIR. This conclusion remains appropriate for the proposed Project. Pursuant the CEQA Guidelines Section 15164, subdivision (a), the City finds that "none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred" relative to public services.

Mitigation Measures: None required for this Project.

XV. Recreation

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents Mitigation Measures Implemented or Addressing Impacts.
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?	Page 27	No	No	No	None
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?	Page 27	No	No	No	None

Discussion: The MND indicates that the Project would not increase park usage in the area of the project. The proposed project is a warehouse, and industrial uses are not expected to increase recreation demands. The MND notes that adequate recreation facilities are located near the project area and no additional facilities are required. There is no impact to recreation facilities. Pursuant the CEQA Guidelines Section 15164, subdivision (a), the City finds that "none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred" relative to recreation.

Mitigation Measures: None required for this Project.

XVI. Transportation

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents Mitigation Measures Implemented or Addressing Impacts.
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	Pages 27-28	No	No	No	None
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	Same	No	No	No	None
c) Substantially increase hazards due to a geometric design feature(s) (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Same	No	No	No	None
d) Result in inadequate emergency access?	Same	No	No	No	None

Discussion: The MND anticipated short term impacts during construction; however, operational activities were not evaluated for the grading plan. The proposed Project is a warehouse facility, which will have employee travel and trucking activity. The proposed Project was reviewed by the Development Services – Engineering Division, and as the project is consistent with the existing industrial land use and zoning designations, the site will not generate trips in excess of what was anticipated by the General Plan EIR. Impacts to transportation and traffic are consistent with the impacts analyzed in the General Plan EIR. Pursuant the CEQA Guidelines Section 15164, subdivision (a), the City finds that "none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred" relative to transportation.

Mitigation Measures: None required for this Project.

XVII. Utilities and Service Systems

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents Mitigation Measures Implemented or Addressing Impacts.
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Page 28	No	No	No	None
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	Same	No	No	No	None
c) Result in a determination by the wastewater treatment provider which serves the project that it has adequate capacity to serve the project's projected demand in addition of the provider's existing commitments?	Same	No	No	No	None
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Same	No	No	No	None
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Same	No	No	No	None

Discussion: The MND found that the prior project would have no impacts on utilities and services as it related to grading activities. The proposed project has been evaluated by City and external service and utility providers, and has been found to be consistent with standards. The proposed Project is consistent with the industrial land use and zoning designations; therefore, the demands for utilities and services are within the scope of what was evaluated by the General Plan EIR. Pursuant the CEQA Guidelines Section 15164, subdivision (a), the City finds that "none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred" relative to utilities and service systems.

Mitigation Measures: None required for this Project.

XVIII. Other Considerations

Since the publication of the MND and its subsequent Addendums, the Office of Planning and Research (OPR) has updated CEQA Guidelines Appendix G (Environmental Checklist Form). These updates address legislative changes to CEQA, clarify language, and update language consistent with case law. None of the changes to the checklist require new analysis related to impacts which were not known or which could not have been known at the time the MND was prepared. The majority of the checklist changes clarify language, reorganize existing language, or eliminate analysis requirements. For analysis requirements which have been eliminated, this is in response to case law affirming that analysis must focus on impacts caused by the project, not impacts to the project. An example of each of these types of changes is included below:

- Cultural Resources (a): Cause a substantial adverse change in the significance of an historic resource as defined in pursuant to Section 15064.5?
    - The replacement of "as defined in" with "pursuant to" is a phrasing change which has no impact on required analysis.
- Cultural Resources (c) has been moved to Geology and Soils (f).
    - Moving the topical section of this analysis requirement (which is related to paleontological resources) from Cultural Resources to Geology and Soils has no impact on required analysis.
- Noise (b): Exposure of persons to or generation of excessive ground borne vibration of ground borne noise levels?
    - The above changes redirect the analysis from considering overall exposure of persons to ground borne vibration, and focus the analysis on any ground borne vibration generated by a project. This same change is reflected in all other checklist questions related to noise. Therefore, the MND includes more analysis than is currently required, because it included analysis related to exposing neighboring areas to noise, but also analyzed the effect of noise on the proposed uses; the latter analysis is no longer required.

The updated CEQA Guidelines Appendix G also includes three new sections (Tribal Cultural Resources, Energy, and Wildfire) and includes new and modified requirements as part of the Transportation/Traffic section. Although Tribal Cultural Resources section is new, the analysis of this impact area was included in the MND as part of the Cultural Resources section. The new Energy section was formerly included in CEQA Guidelines Appendix F, but has been moved into the Appendix G, so while it is new to the checklist it is not new to the CEQA Guidelines. The changes to the Transportation/Traffic section—which is now called simply Transportation—refocuses the analysis on vehicle miles traveled (VMT). The analysis included in the Addendum does not include VMT analysis in order to be consistent with the original MND. For the Wildfire section, impacts are analyzed for areas in or near CalFire state responsibility areas. Impacts to fire protection were analyzed in the MND, and incorporated cities such as the City of Roseville are not located within state responsibility areas.

Based on the foregoing, none of the modifications to CEQA Guidelines Appendix G require new analysis related to impacts which were not known or which could not have been known at the time the MND was prepared. Therefore, an Addendum is the appropriate environmental document to describe the impacts of the proposed project.

XIX. Mandatory Findings of Significance

	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior Environmental Documents Mitigation Measures Implemented or Addressing Impacts.
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?	Pages 29-30	No	No	No	None

b) Does the project have impacts which are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	Same	No	No	No	None
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	Same	No	No	No	None

Discussion: The MND indicated that because development of the site would be consistent with existing land use designations, that any cumulative impacts had already been addressed in the City's General Plan EIR. This conclusion remains appropriate for this Project. The Amoruso Ranch EIR, which included an updated Citywide analysis, evaluated the potential for cumulative impacts. The proposed Project intends to develop the site consistent with the land use and zoning designations. The project would not substantially increase the severity of the identified significant cumulative impacts. Pursuant the CEQA Guidelines Section 15164, subdivision (a), the City finds that "none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred" relative to the mandatory findings.

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 findings of CEQA Section 15162 concerning the decision not to prepare a subsequent EIR or negative declaration and the findings of CEQA Section 15164 concerning the decision to prepare an Addendum can be made. As supported by substantial evidence within the Addendum to the NIPA PCL 50 – Foothills Corporate Center Grading Plan Mitigated Negative Declaration the Lead Agency makes the following findings:

[**X**] No substantial changes are proposed in the project which would require major revisions of the previous EIR or Mitigated Negative Declaration.

[**X**] No substantial changes have occurred with respect to the circumstances under which the project is undertaken.

[**X**] There is no new information of substantial importance which was not known and could not have been known with the exercise of due diligence at the time the previous EIR was certified as complete or the Mitigated Negative Declaration was adopted.

[**X**] Only minor technical changes or additions are necessary in order to deem the adopted environmental document adequate.

Addendum Prepared by:

_____

Shelby Maples, Associate Planner
City of Roseville, Development Services–Planning Division

Attachments:

1. NIPA PCL 50 – Foothills Corporate Center Grading Plan Mitigated Negative Declaration and Attachments

DC Exhibit A, Attachment 1

CITY OF ROSEVILLE CALIFORNIA

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

NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

Project Title/File Number:	NIPA PCL 50 – Foothills Corporate Center Grading Plan
Project Location:	8501 Foothills Bl.; Roseville; Placer County; APN: 017-230-014-000
Project Description:	The applicant requests approval of a Major Grading Plan that would allow rough grading of the site and seasonal wetlands on the site to be filled.
Project Applicant:	Greg Bardini, Morton & Pitalo, Inc.; (916) 984-7621; 75 Iron Point Circle #120, Folsom, CA 95630
Property Owner:	Daisy Stires, Sterling Savings Bank ; (509) 227-0960 ; 111 North Wall St., Spokane, WA 99026
Lead Agency Contract Person:	Derek Ogden, Associate Planner

DECLARATION: The Planning Director has determined that the above project will have no significant effect on the environment and therefore does not require preparation of an Environmental Impact Report. The determination is based on the following findings:

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

Copies of the proposed Mitigated Negative Declaration and all documents referenced therein are available for review by members of the public at the City of Roseville, Planning Department, 311 Vernon Street, Roseville, CA 95678, during the normal business hours of 8 am to 5 pm, Monday through Friday.

Written comments shall be submitted no later than October 5, 2012, which is 30 days from the start of the posting date of September 5, 2012.

POSTING PERIOD: September 5, 2012 to October 5, 2012

SUBMIT COMMENTS TO:

Roseville Planning Department
Attn: Derek Ogden
311 Vernon Street
Roseville, CA 95678

Initial Study Prepared by:

Derek Ogden

Derek Ogden, Associate Planner

The public hearing regarding the project will be held on October 11, 2012 at 7:00 p.m. before the Planning Commission. The hearing will be held in the City of Roseville Council Chambers located at 311 Vernon Street, Roseville, California.

NOTE TO PLACER COUNTY CLERK: Please mail the original of this document back to the Roseville City Clerk at 311 Vernon Street, Suite 208, Roseville, CA 95678.

CITY OF ROSEVILLE CALIFORNIA

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

INITIAL STUDY & ENVIRONMENTAL CHECKLIST

Project Title/File Number:	NIPA PCL 50 – Foothills Corporate Center Grading Plan
Project Location:	8501 Foothills Bl.; Roseville; Placer County; APN: 017-230-014-000
Project Description:	The applicant requests approval of a Major Grading Plan that would allow rough grading of the site and seasonal wetlands on the site to be filled.
Project Applicant:	Greg Bardini, Morton & Pitalo, Inc.; (916) 984-7621; 75 Iron Point Circle #120, Folsom, CA 95630
Property Owner:	Daisy Stires, Sterling Savings Bank ; (509) 227-0960 ; 111 North Wall St., Spokane, WA 99026
Lead Agency Contact Person:	Derek Ogden, Associate Planner - City of Roseville; (916) 774-5276

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

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

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

Because the proposed project is consistent with the City's General Plan, for which an EIR was prepared, the project is subject to the streamlining provisions of CEQA Guidelines Section 15183.

Under that section, certain categories of impacts can be exempt from CEQA, including significant effects of projects that were previously disclosed in a General Plan EIR. (See CEQA Guidelines, § 15183, subd. (b)(2).) In general, project-specific review under that section is focused on "project-specific significant impacts which are peculiar to the project or its site." (*Id.*, subd. (a).) Notably, "[a]n effect of a project on the environment shall not be considered peculiar to the project or the parcel . . . if uniformly applied development policies or standards have been previously adopted by the city . . . with a finding that the development policies or standards will substantially mitigate that environmental effect when applied to future projects, unless substantial new information shows that the policies or standards will not substantially mitigate the environmental effect." (*Id.*, subd. (f).).

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

Prepared by: Derek Ogden Date: 9/5/12

Derek Ogden, Associate Planner

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PROJECT DESCRIPTION

Project Location

The project site is located at 8501 Foothills Bl. The site is physically located on the eastern side of Foothills Bl. in between Foothills Bl. and Washington Bl. (see Figure1).

Setting

The project site is approximately 60 acres and is primarily rolling grasslands with a single ephemeral drainage swale that traverses the property in the northern portion of the site. There are several other wetland features including vernal pools, seasonal wetlands and seasonal wetland swales on the property. Approximately .28 acres of seasonal wetlands and drainage areas exist on the site. In addition, a public utility easement exists along the southern property line where existing overhead electric lines are located.

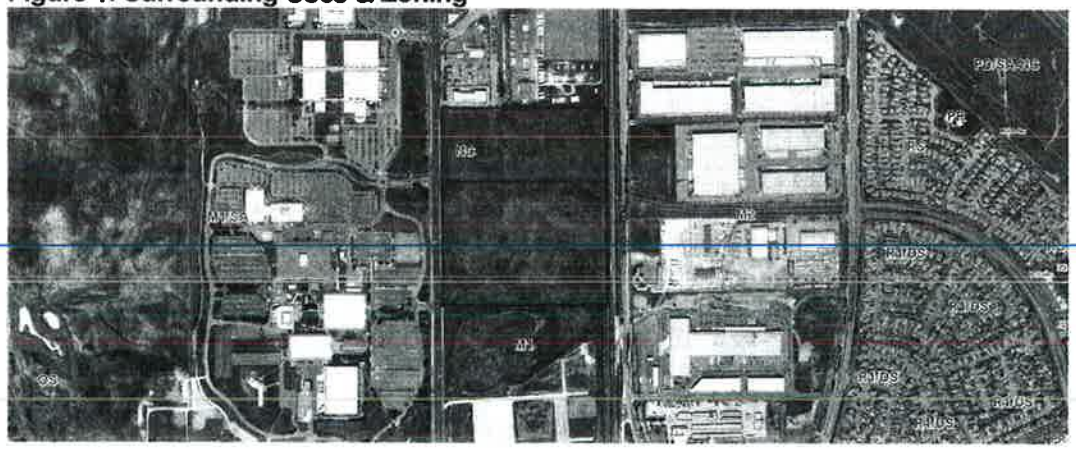
The majority of the property has a zoning designation of Light Industrial (M1) and a General Plan land use designation of Light Industrial (LI) (Figure 1). A portion of the property in the northwestern corner of the site has a zoning designation of Neighborhood Commercial (NC).

Surrounding Zoning and Land Use

Location	Zoning	General Plan Land Use	Actual Use of Property
Site	Light Industrial (M1) & Neighborhood Commercial (NC)	Light Industrial (LI) & Neighborhood Commercial (NC)	vacant
North	M1	LI	Office/ Industrial Complex
South	M1	LI	Telefunken Campus (vacant land immediately south)
East	M2	Industrial (IND)	Industrial Complex
West	M1/SA	LI	Hewlett Packard Campus

The current request is to prepare the site for future development by rough grading the property and filling the .28 acres of wetland areas on the site. The City's Grading Ordinance requires approval of a Major Grading Plan when a project will impact natural features such as wetlands or native oak trees.

Figure 1: Surrounding Uses & Zoning



UNIFORMLY APPLIED POLICIES 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, as noted earlier, 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)). In April 2008, the City of Roseville adopted Findings of Fact related to the mitigating policies and standards, and adopting the City of Roseville CEQA implementing procedures for the preparation, processing, and review of environmental documents (Resolution 08-172). These findings are applicable to the following regulations and ordinances, which include standards and policies that are uniformly applied throughout the City, and will substantially mitigate specified environmental effects of future projects:

- City of Roseville CEQA Implementing Procedures
- City of Roseville General Plan Policies
- City of Roseville Zoning Ordinance (RMC Title 19)
- Noise Regulation (RMC Ch.9.24)
- Flood Damage Prevention Ordinance (RMC Ch.9.80)
- 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)
- Drainage Fees (Dry Creek [RMC Ch.4.49] and Pleasant Grove Creek [RMC Ch.4.48])
- City of Roseville Improvement Standards (Resolution 02-37)
- City of Roseville Construction Standards (Resolution 01-208)
- Tree Preservation Ordinance (RMC Ch.19.66)
- Subdivision Ordinance (RMC Title 18)
- Community Design Guidelines (Resolution 95-347)
- Specific Plan Design Guidelines:
    - Development Guidelines Del Webb Specific Plan (Resolution 96-330)
    - North Central Roseville Specific Plan and Landscape Design Guidelines (Resolution 90-170)
    - North Roseville Specific Plan and Design Guidelines (Resolution 00-432)
    - Northeast Roseville Specific Plan (Olympus Pointe) Signage Guidelines (Resolution 89-42)
    - North Roseville Area Design Guidelines (Resolution 92-226)
    - Northeast Roseville Specific Plan Landscape Design Guidelines (Resolution 87-31)
    - Southeast Roseville Specific Plan Landscape Design Guidelines (Resolution 88-51)
    - Stoneridge Specific Plan and Design Guidelines (Resolution 98-53)
    - West Roseville Specific Plan (Resolution #04-38)

The City's Mitigating Policies and Standards are referenced, where applicable, in the Initial Study Checklist. The City of Roseville has adopted CEQA Findings that these Mitigating Policies and Standards substantially mitigate specified environmental impacts of the future project.

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 to 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.

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

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 "Potentially Significant Unless Mitigation Incorporated" answer is appropriate where the applicant has agreed to incorporate a mitigation measure to reduce an impact from "Potentially Significant" to a "Less than Significant." For instance, impacts to flood waters could be reduced from a "potentially significant impact" to a "less than significant impact" 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 that 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 impact.

4) A "No Impact" answer is appropriate where it can be clearly seen that the impact at hand does not have the potential to adversely affect the environment. For instance, a project in the center of an urbanized area will clearly not have an adverse effect on agricultural resources or operations.

All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project level, indirect as well as direct, and construction as well as operational impacts.

A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources cited in the parentheses following each response. A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards.

INITIAL STUDY CHECKLIST

I. Aesthetics

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			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
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	

Discussion of Checklist Answers:
a-c) The project site does not abut and is not visible from any designated scenic vista or scenic highway. The project will involve grading a vacant parcel that has been anticipated for development by both the NIPA and the General Plan. The General Plan EIR identified that the conversion of an undeveloped parcel to urban development as an unavoidable significant impact for which the City Council also adopted a statement of overriding considerations. The site is now surrounded by development. Since the setting is now an urban environment, contour grading on the site is considered a less than significant impact.

d) Light and glare will not increase above the existing condition. The proposed project will only involve minor grading and the City's Improvement Standards require the areas where grading will occur to be covered with an erosion control seed mixture that will help to prevent degradation of views of the property.

Aesthetic impacts will be less than significant.

II. Agricultural & Forestry Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

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				X

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

Discussion of Checklist Answers:
a, e) The subject property contains no prime farmland, unique farmland, or farmland of statewide importance or active agricultural operations. The Special Status species assessment prepared for the Foothills Corporate Center (Attachment 1) identified the soil type in the project area as Cometa-Fiddyment Complex. This soil type is not listed as a high quality soil that supports agriculture. Therefore there will be no impact to farmlands and no mitigation is required.

b) The subject property is not currently under a Williamson Act contract or zoned for agricultural use. Development of the proposed project will not conflict with existing zoning for agriculture use or an active Williamson Act contract and no mitigation is required.

c- e) The project site does not support any forest resources and the land is not zoned for forestry activities or timberland. The project would have no impacts to forest resources. No mitigation is required.

No agricultural or forestry resources are present on the site. Therefore, the proposed project will not have an impact on agricultural or forestry resources.

III. Air Quality and Greenhouse Gases

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. 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	
f) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
g) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Discussion of Checklist Answers:

A-E): *California Clean Air Act Requirements*

The City of Roseville, along with the south Placer County area, is located in the Sacramento Air Quality Maintenance Area (SAQMA). Under the California Clean Air Act, Placer County has been designated a "serious non-attainment" area for ozone and a "non-attainment" area for PM10 (particulate matter less than 10 microns in diameter). The Placer County Air Pollution Control District (PCAPCD) is responsible for administration of state and federal air quality standards. In 1991, the PCAPCD adopted its first Air Quality Attainment Plan (AQAP). The AQAP is required by the California Clean Air Act (CCAA), and is designed to bring Placer County into compliance with state ozone standards, which are generally more stringent than current federal ambient standards.

Federal Clean Air Act Requirements

Under the Federal Clean Air Act, Placer County is designated as a severe non-attainment area for ozone, and is an attainment area for the federal PM10 standards, and other criteria pollutants. The City of Roseville, along with the south Placer County area, is located in the Sacramento Air Quality Maintenance Area (SAQMA). The Sacramento Area Council of Governments (SACOG), in conjunction with SAQMA air quality management districts, and the California Air Resources Board, developed the SAQMA portion of

the State Implementation Plan (SIP). The SIP is required to demonstrate compliance with the Federal Clean Air Act Amendments. The U.S. EPA approved the SIP in 1996, and the SAQMA has since been operating under the SIP control measures.

This project alone does not have a potential to significantly degrade air quality. However, the incremental impacts associated with this project considered cumulatively with the incremental impacts of other projects will degrade air quality. The General Plan EIR has assessed the impacts to air quality from development of the parcel in its cumulative impact analyses. The General Plan EIR found that the significant adverse air quality impacts cannot be mitigated to a less than significant level even with the mitigation measures proposed. Addressing the unmitigatable cumulative impacts to air quality, the EIR adopted findings of overriding consideration. However, CEQA requires that reductions in adverse project impacts be made, where it is feasible to do so.

Short term impacts to air quality can be expected in association with construction activities. These impacts are primarily associated with construction activities and the increased potential for dust and wind driven erosion of soils. Particulate matter resulting from construction dust will be reduced by implementing standard dust control measures on the job site as part of an erosion control plan. The grading permit and on-site inspection by the Public Works Department will ensure appropriate dust control measures, such as watering are done to reduce short-term air quality impacts. Vehicle exhaust, produced during project construction, could temporarily contribute to the deterioration of ambient air quality. Diesel fuel fumes from construction equipment may be noticeable in the vicinity of the site; however, this is a short-term effect. All equipment must comply with California emissions standards.

This project remains consistent with the development scenarios modeled for the General Plan EIR and the findings and statement of overriding considerations adopted by the City for the General Plan EIR.

There are no sensitive receptors located in the vicinity of the project site. The project does not include components with the potential to create significant objectionable odors. No significant impact associated with odor would result from the project.

F & G) The State has adopted several policies and regulations for the purpose of reducing GHG emissions. The most stringent of these is Assembly Bill 32 (AB 32), which is designated to reduce statewide GHG emissions to 1990 levels by 2020. The City of Roseville has been proactive in improving air quality and reducing GHG's through the following measures:

General Plan

The City of Roseville General Plan was updated in 2008 to specifically identify policies that reduce greenhouse gas emissions. These policies, which address global climate change by requiring greenhouse gas emissions reduction, conserving energy and resources and by addressing the potential impact of climate change (e.g., the flood protection policies) are identified in the General Plan with a leaf symbol.

City of Roseville Operations

Utility Operations: The following is a list of City initiated measures to reduce GHG's that are included in the City of Roseville Utility Operations:

- The Water Treatment, Water Distribution, Storm Water, Wastewater Treatment, Wastewater Collection, and Recycled Water facilities are the primary divisions in the Environmental Utilities Department that are affected by the implementation of the energy efficiency standards listed below.
- Automatic Process Controls Systems: There are numerous benefits of automatic process control systems. Two of the chief benefits are chemical and energy savings. Savings of 20% in chemical and energy consumption with a payback period of 2 years are not uncommon.

- Reduced chemical usage is achieved automatically by varying the chemicals delivered to the process to precisely match the amount of chemical needed. The reduced chemical consumption also achieves the benefit of reducing shipments of chemicals to the facility, reducing pumping costs, and less wear and tear on chemical systems due to excessive operation. All of the chemical control systems in Environmental Utilities utilize automatic process control systems.
- Reduction in electricity consumption is achieved via automatic process controls since the automated system will only operate equipment that is needed for current process conditions. The system constantly evaluates the equipment that is required to control the processes and turns on or off equipment as necessary to maintain permit and regulatory compliance. In addition to turning on and off equipment, many of the motors on process equipment are equipped to vary their speed automatically with variable frequency drives. The variable frequency drives will automatically vary the speed of a pump or other device to match the exact speed required for the process. All capital improvement projects for Environmental Utilities since 1994 utilize automatic process control systems.
- Variable Frequency Drives: Variable frequency drives is a system used to vary the speed of rotating equipment rather than running it at full speed, thereby reducing energy consumption.
- The majority of variable frequency drive applications are for pumps and fans. The savings is largest for them since the theoretical power required varies with the cube of the speed of the equipment. The Energy and Water Management Report conducted by Xenergy in 2001 revealed no additional treatment processes would benefit by addition of variable frequency drives at our treatment facilities since Environmental Utilities had already properly assessed their treatment systems. Each treatment process continues to be evaluated during design to determine whether variable frequency drives will provide a benefit.
- Soft Starters: Soft Starters are utilized to reduce the initial inrush of current that occurs when a city vehicle motor is started.
- Typical starting current for a motor ranges from ten to thirteen times the normal operating current. With the use of soft starters, the starting current is typically reduced to two to three times the normal operating current. Roseville Electric is required to have reserve power available at all times to allow for the extra current demands created by the motors and other loads in the City. Use of soft starters reduces the peak current demand on Roseville Electric and also has the benefit of reducing mechanical and electrical stresses on the affected equipment.
- Premium Efficiency Motors: Electric motors account for majority of the energy costs for Environmental Utilities facilities.
- In 1992 the National Electrical Manufacturers Association standardized the criteria for labeling motors as "premium efficiency'. This label could only be applied to motors that meet stringent criteria for efficiency standards. These efficiencies translate into reduced energy consumption for each motor, and the increased cost of these motors typically has a payback from a few months to a couple of years. Environmental Utilities has required the use of premium efficiency motor for all new replacement motors wince 1998.
- Heating Ventilation and Air Conditioning (HVAC) and Lighting Systems: Less than three percent of electricity consumed in the water and wastewater treatment process is due to HVAC and lighting.
- Environmental Utilities meets or exceeds California Code of Regulations Title 24 energy efficiency standards. These efficiencies include use of occupancy sensors for indoor lighting, photocells for outdoor lighting, and programmable thermostats for HVAC systems.

In addition to all of the minimum requirements listed above, Environmental Utilities is partnering with Roseville Electric to investigate new and emerging technologies to reduce the overall electrical consumption by Environmental Utilities. Some of the programs currently being analyzed or

implemented include installation of solar panel grids, wastewater treatment gas powered fuel cells and low pressure-high output ultraviolet disinfection systems for the wastewater treatment facilities.

Diesel Emissions Control Systems (DECS): Twenty-Three (23) solid waste collection trucks and nine (9) diesel transit buses have been retrofitted with DECS reducing the diesel particulate material (PM) by 85% and Nitrogen Oxides (NOx) by 25% for each vehicle.

Ultra Low Sulfur Diesel (ULSD): The City of Roseville has been using ULSD for over two years on its transit fleet and it is now used exclusively by all fleet diesel engines.

Compressed Natural Gas (CNG) Fuel: Nine (9) transit buses and one (2) passenger van operate on CNG fuel.

Hybrid Vehicles: Currently there are four (4) hybrid vehicles in the City's fleet and the City is looking to add more this year.

Biodiesel: Vehicle Maintenance has entered into discussions with area users and distributors to look at the cost/benefit of using biodiesel within the city's diesel fleet.

Traffic Signal-head Retrofits: Over the past 6 years, Roseville has installed or converted 2,539 traffic signal heads, 914-pedestrian signal heads, and 16 internally illuminated street name signs from traditional incandescent light bulbs to energy efficient LED's (Light Emitting Diodes). This change resulted in a 300,900 kWh (kilowatt hour) monthly reduction in energy consumption (3,610,548 kWh annually). Thanks to the LED changeover, the City saves over $24,900 a month in energy costs – almost $300,000 a year.

Traffic Signal Coordination: Roseville has 16 roadway segments that are coordinated at various times throughout the day. Out of the 150 existing traffic signals within the city, 87 signals are coordinated – about 58% of all traffic signals in Roseville. Coordinated traffic signals help deter emissions normally created by vehicles through reduced vehicle idling, acceleration and deceleration. It also contributes to increased vehicle fuel economy for the motoring public. Studies have documented a 20% overall reduction in total delay on the coordinated corridors.

Asphalt Recycling: The City's Street Maintenance Division reduces emissions by recycling asphalt materials replaced during maintenance on roadways. Recycled asphalt is reused as base material for overflow parking lots and roadway repairs. This practice saves money and avoids emissions created by asphalt processing.

Climate Action Initiatives

In September 2006, City Council took a major step toward charting a course for a greener and more sustainable Roseville by adopting the National Action Plan for Energy Efficiency and the guiding principles for Greenhouse Gas Reduction Goals. Roseville joined the California Climate Action Registry in 2006 as well.

- **National Action Plan for Energy Efficiency** – In 2006, the United States Environmental Protection Agency (EPA) and Department of Energy (DOE) co-sponsored the National Action Plan for Energy Efficiency (the Action Plan). The Action Plan presents policy recommendations for creating a sustainable, aggressive national commitment to energy efficiency through gas and electric utilities and partner organizations. Such a commitment could save Americans many billions of dollars on energy bills over the next 10 to 15 years, contribute to energy security, and improve our environment. Roseville has adopted the principles of the Action Plan.
- **Climate Action Registry** – Roseville Electric joined the California Climate Action Registry (CCAR) in late 2006. As a member, Roseville Electric compiled and reported its Green House Gas (GHG)

emissions. Roseville Electric's first filing only reported CO_2. All filings subsequent to 2008 report the six Kyoto gases (carbon dioxide, methane, nitrous oxide, hydro fluorocarbons, per fluorocarbons, and sulfur hexafluoride) to the extent Roseville Electric is a producer of the respective gas.

- **Greenhouse Gas Goals** – Roseville Electric is actively monitoring and participating in the efforts of the California Air Resources Board as it implements the "The California Global Warming Solutions Act of 2006," or AB32.
- **Renewable Portfolio (RPS)** – The Roseville Electric Renewable Portfolio Standard requires 20% renewable power resources in Roseville Electric's power portfolio. For over 20 years, the City of Roseville has used renewable energy resources to meet a portion of its customer's needs with its ownership participation in the Northern California Power Agency projects: Collierville hydroelectric facility (1990); geothermal facilities (1983 & 1985 or Plans 1 & 2, respectively); and its purchased power from the Federal entity Western Area Power Administration – Sierra Nevada Region Central Valley Project hydroelectric system. In addition, power is purchased from the landfill gas facility in Lincoln Landfill. The project uses landfill gas, which is mostly methane, to produce electricity instead of allowing the gas to vent into the atmosphere or burned through flaring. Each ton of methane has the equivalent effect of 21 tons of carbon dioxide in its global warming potential. In 2006, these projects, as well as other power purchases served approximately 45% of Roseville's electrical needs. When compared to conventional fossil fuel generation, the output from these renewable sources avoids the projection of 266 million pounds of $C0_2$ which has the environmental impact of removing 26,176 cars form the road or planting more than 50 million trees each year.
- **The Roseville Energy Park (REP)** – The Roseville Energy Park is a 166 megawatt natural gas fired power plant that utilizes the state-of-the-art and most efficient current combined cycle gas turbine ("CCGT") technology available – a technology recognized and selected by the California state legislature to serve as the benchmark for the Emission Performance Standard ("EPS"). The benchmark will be applied to base load resources located within the state of California and resources that ultimately produce the power that is imported into California.
- **City Owned Solar Electric Systems** – Roseville Electric and the City of Roseville have been active supporters of solar electric generation (photovoltaic, or "PV") since 1997; Electric and Central Services Departments have installed PV on the Ray Sharp Memorial Fire Station #6, at the Roseville Aquatics Center, the Civic Center, and the historic locomotive on Vernon Street. In addition, RE installed a PV system on a rooftop at Silverado Middle School in the Dry Creek School District. These systems provide enough locally generated clean renewable energy to offset approximately 102,000 pounds of CO_2 greenhouse gas emissions from traditional fossil fuel fired generation each year.
- **City Facilities Powered by Clean Renewable Energy** – Currently, Roseville Electric provides both the City's Civic Center and Roseville Electric buildings with clean, renewable power by purchasing 100% of their energy use from Green Roseville, described blow. These City buildings alone avoid the projection of more than 1.2 million pounds of CO_2 per year. Roseville Electric hopes to have all City owned facilities powered by clean energy.
- **Green Roseville – Clean Green Energy Program** – Roseville Electric offers its customers the choice to purchase clean, renewable energy for their homes or businesses. Choosing clean energy is one of the most significant efforts an individual or an organization can take to reduce their impact on the environment. Renewable energy ties directly to a reduction in CO_2 emissions and is recognized by the Environmental Protection Agency to have a substantial positive effect on the environment. Green Roseville provides renewable energy from the cleanest, local sources available – wind and solar. The wind energy comes from High Winds wind farm, the largest modern wind farm in California located in nearby Solano County. The solar energy is produced within the City of Roseville by facilities such as Fire Station #6, the Roseville Aquatics Center and the Civic Center. In order to expand the benefits of the program to the community, all proceeds from the solar energy customers are matched by the City of Roseville to support the production of new City-owned PV systems that provide the solar energy used in the program. The average Roseville home enrolled in

the program can prevent about 7,700 pounds of carbon dioxide and other harmful air pollutants such as particulates from entering the atmosphere each year. Small businesses and Large Green Roseville Business Partner Champions have a much greater impact.

- **Shade Tree Program** – Roseville Electric, in cooperation with Roseville Urban Forest Foundation, provides free shade trees to residential and commercial customers as an energy efficiency measure. Properly placed shade trees can reduce summer cooling costs by 20-40 percent while also providing environmental benefits through oxygen exchange and noise reduction.

- **Strategic Planning and Initiatives** – Roseville Electric has a strong commitment to energy reductions and renewable energy resources, two effective ways to reduce GHG's and assist in creating a sustainable community. As a strategic goal, Roseville will reduce energy requirements by 5% by 2012 through demand side programs such as energy efficiency and renewable energy resources like solar energy facilities. State law requires roughly 3% of total electric revenue be targeted toward demand side efforts. Roseville exceeds this requirement with an allocation of 5% of total revenues toward the demand side programs and resources.

- **Solar Electric (PV) Incentive Programs** – Solar electric generation incentives are provided to Roseville residential and commercial electric customers – both for new buildings and to retrofit existing buildings. PV systems reach peak production during times of the day when the Roseville Electric system experiences maximum electric demand from City customers. PV incentives are designed to minimize the customer's project "first cost" (initial investment) with respect to installing new PV equipment. Roseville Electric presently has 460 AC watts installed, with generation of approximately 741,328 kWh per year. This level of clean energy generation creates an environmental benefit equal to the reduction of 922,000 pounds of CO_2 per year.

- **Energy Audits** – Roseville Electric (RE) provides "on-line" and on-site energy audits to residential and commercial electric customers. Based upon the premise that "you can't change what you don't understand"; these audits provide the customers with a report on their present energy use patterns and habits. They also identify opportunities for the customer to change electric usage patterns or purchase more energy efficient appliances and equipment that will reduce their monthly energy bills. Commercial customers can link into the Customer Connection advice available on the Roseville Electric website for more in-depth information. Residential customers can click on the RE-View Energy and Water audit on RosevilleElectric.org.

- **Residential Energy Efficiency Programs** – RE's Residential Energy Efficiency Programs for new and existing homes offer rebates, educational materials and technical assistance designed to help customers use electricity more efficiently. Customers benefit from reduced electric bills and by reducing emissions due to reduced power consumption. Programs focus on rebates for new window upgrades, energy efficient appliances, better insulation, and high efficiency air conditioners and heart pumps. For the new home market, Roseville Electric offers award winning programs. Via development agreements, all new construction requires air conditions that exceed state energy efficiency requirements. Preferred Homes provides rebates to builders who construct energy efficient homes. The annual goal is 1000 new homes per year. The BEST Homes program takes an additional step by adding electricity producing solar electric panels, Energy Star appliances and shade trees to the Preferred Homes requirements. Goals are to include 30% of all new homes in Roseville in one of these programs. Over the next 25 years, the result will be a reduction in further emissions of CO_2 by 62,000 ton lbs. additionally; this is equivalent to planting 22,000,000 trees over the next 25 years.

- **Energy Efficiency Programs for Low Income Residents** – Loans, grants and the Handyperson Program provide financial assistance to low income residents and can be used to improve the energy efficiency of a home. These programs are funded through Federal and State programs for low income residents and administered by the Roseville's Housing Division.

- **Commercial Energy Efficiency Programs** – Roseville Electric's Commercial Retrofit Energy Efficiency Rebate Program helps new and existing businesses save energy and money and reduce

summer peak electric consumption. Reductions in summer peak demand reduce greenhouse gases and save ratepayers money. RE offers rebates to assist with reduction of first cost expenditures for energy efficiency upgrades in equipment. Rebates are available for HVAC, lighting, chillers, and are part of a customized approach that allows the customer to create their own energy efficiency measure. In the new construction market, cash rebates are available to architects, engineers, and owners who build at a minimum of 10 percent beyond Title 24 requirements.

- **Alternatively Fueled Vehicles** – Highway vehicles are a major contributor to air pollution in the U.S., producing 29-63% of key chemicals that cause smog and health problems. www.fueleconomy.gov.U.S.Dept.ofEnergy.
    - **Carbon monoxide (CO)** – 63%
    - **Nitrogen oxides (NO_X)** – 36%
    - **Hydro-carbons** – 29%

  Hybird-electirc vehicles combine the benefits of gasoline engines and electric motors to reduce reliance on fossil fuels and provide up to a 50% reduction in emissions. The Roseville Electric fleet of vehicles includes 4 hybrid fuel vehicles. All new staff cars will be hybrid. The use of hybrid vehicles in the City's fleet will substantially reduce GHG emissions. According to the City's Draft Municipal climate Action Plan, it is estimated that the City's Fleet Program will save approximately 55,000 gallons of fuel a year which would equate to approximately 500 tons of CO_2 emissions avoided.

- **Electric Vehicle Charging Stations** – Electric vehicles are energy efficient, environmentally friendly and are not dependent on gasoline. Electric vehicles are limited in driving range and can take from 4 to 8 hours to recharge. (www.fueleconomy.gov) Roseville Electric supports Electric Vehicle (EV) owners in the Roseville community, and others, by maintaining 3 electric vehicle charging stations in Roseville; one in the Galleria, one on Oak Street and one in the Amtrak parking lot on Church Street. These charging stations are promoted through the Electric Vehicle Enthusiast online news site, *EV Charger News*.

- **Sustainability Plan** – The City of Roseville accepted by resolution the City of Roseville Communitywide Sustainability Action Plan on February, 1 2012. The plan establishes the City's baseline estimated total Greenhouse Gas emissions as well as targets for reducing those emissions.

Although most of these City measures do not apply directly to the Project, they are relevant to the cumulative citywide context, in which the City is actively working to reduce its own GHG emissions. Thus, project-generated GHG emissions would not conflict with, and are consistent with, the State goals listed in AB32 and policies and regulations adopted by the California Air Resources Board pursuant to AB32. This impact is considered less than significant.

IV. Biological Resources

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		X		

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
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 Game 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		
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	

Discussion of Checklist Answers:

The project site is primarily rolling grasslands with a single ephemeral drainage swale that traverses the property in the northern portion of the site. No trees currently exist on the site. There are several other wetland features including vernal pools, seasonal wetlands and a seasonal wetland swale on the property. A Wetland Delineation was prepared by ECORP Consulting in 2005 and a Biological Assessment (BA) was prepared in 2006 which identified these features and also detailed the effects on special status species with implementation of the project. The BA was prepared to support the application to the US Army Corps of Engineers to fill the wetland features on the site. Surveys conducted at the project site found no special status species present. On June 27, 2012 ECORP performed a special status species assessment to assess the potential for the occurrence of special status plant and wildlife species or their habitat to occur on the project site. (Attachment 2)

Wetlands

The project involves minor grading activities that will fill wetlands on the site. The special status species surveys that were conducted did identify potential habitat was present onsite for vernal pool crustaceans. Grading activities will impact wetland features and the applicant is proposing to mitigate those impacts through the purchase of off-site wetland credits.

The City's General Plan Implementation Measures for wetland resources (pg.V-22) require avoidance as a first priority, with compensation or mitigation implemented when avoidance is not feasible. The measures also identify no net loss of wetland acreage, values, or function. The project will provide wetland mitigation as required by the US Army Corps of Engineers. With the proposed mitigation the project will not conflict with local policies regarding protection of biological resources.

Implementation of the mitigation measure (MM1) listed below by the Foothills Corporate Center grading project would ensure that permits are obtained from federal agencies and adherence to the permit would further ensure that the project will result in "no net loss" of wetlands/waters, and that discharge into the waters is regulated. Therefore, with mitigation measures, impacts to wetlands/waters and associated vernal pool/loss of associated rare plants are considered less than significant with mitigation.

MM1: Prior to grading permit the project shall obtain an Army Corps of Engineers wetland fill or discharge "Section 404" permit. The project will be required to purchase credits in an approved wetland mitigation fund or other mitigation required by the 404 permit to ensure no net loss of wetlands.

Special Status Wildlife

Several special-status wildlife species are known to occur or potentially occur within the project site (Western spadefoot, Swainson's hawk, Burrowing owl, and other legally protected raptors). As was mentioned above, the applicant has previously completed a Biological Assessment and completed consultation with the United States Fish and Wildlife Service (USFWS) for the impact of a previous project on vernal pool crustaceans. This BA found that the site contained suitable habitat for these species. In addition the loss of vegetation could destroy foraging and nesting habitat for bird species. Therefore, consistent with the mitigation measure listed below, pre-construction surveys shall be conducted to confirm the presence or absence of special status wildlife. With the mitigation measure the impact is considered less than significant.

MM2: Prior to project construction special status species surveys shall be conducted to establish the presence/absence of these species on the site. These studies shall be conducted via the appropriate federal and state protocols.

V. 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			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
change in the significance of a historic resource as defined in Section 15064.5?				
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		

Discussion of Checklist Answers:
The project will involve grading activities that includes 130,000 cubic yards of balanced cut and fill earthwork. CEQA Guidelines Section 15064.5, subdivision (e), requires that excavation activities be stopped whenever potential resources are uncovered. Should human remains be found, the county coroner shall be called in to assess the remains. If the county coroner determines that the remains are those of Native Americans, the Native American Heritage Commission must be contacted within 24 hours. At that time, the lead agency must consult with the appropriate Native Americans, if any, as timely identified by the Native American Heritage Commission. Section 15064.5 directs the lead agency (or applicant), under certain circumstances, to develop an agreement with the Native Americans for the treatment and disposition of the remains. If archaeological artifacts are found, work shall cease and a qualified archaeologist shall be called in. As with archaeological artifacts, the site could contain unique types of invertebrate (marine), plant, or vertebrate fossils or other resources of paleontological value. These resources could be damaged or destroyed during site preparation. Therefore, should any fossils be discovered during excavation or grading, all work shall cease and would not be permitted to resume until a qualified paleontologist is retained to review the find, and the paleontologist's recommendation for recordation and, if appropriate, preservation of the find have been implemented. Therefore, with the following mitigation measure, the project will have a less than significant impact on cultural resources.

Implementation of the mitigation measure (MM3) listed below by the Foothills Commerce Center Grading project would ensure that should any cultural resources, such as structural features, any amount of bone or shell, artifacts, human remains, or architectural remains, be encountered during any subsurface development activities, work shall be suspended within 100-feet of the find. Therefore, with the mitigation measure, impacts to cultural resources are considered less than significant with mitigation.

MM3: In the event of the discovery of buried paleontological, archaeological or historic deposits, project activities in the vicinity of the find shall be temporarily halted and a qualified archaeologist consulted to assess the resource and provide proper management recommendations. Possible management recommendations for important resources could include resource avoidance or data recovery excavations. If human remains are found, the Placer County Coroner's office shall be contacted immediately. The corner shall contact the Native American Heritage Commission, which shall notify the appropriate descendant.

VI. Geology and Soils

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) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (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	
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

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) The project site is located in Roseville, which is within Placer County. The California Department of Mines and Geology classifies the South Placer area as a low severity earthquake zone. No active faults are known to exist within the County. The project site is considered to have low seismic risk with respect to faulting, ground shaking, seismically

related ground failure and liquefaction. Therefore, less than significant impacts would occur in association with rupture of a known earthquake fault or seismic related ground failure.

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 are not steep enough to present a hazard during development or upon completion of the project. In addition, during construction, measures would be incorporated to shore slopes and prevent potential earth movement. Therefore, impacts associated with landslides are considered less than significant.

b) Grading activities require a grading permit from the Engineering Division of the Public Works Department. The grading permit will be 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. A geotechnical study will also be required prior to building permit issuance to more fully address other erosion hazards. As conditioned, the project will be consistent with the City Improvement Standards. Therefore, the impacts associated with disruption, displacement, and compaction of soils associated with the development is considered less than significant.

c-d) As noted above, the project site is not located in a sensitive geologic area and does not expose people to potential geologic impacts. Additionally, such impacts are considered to be less than significant since new buildings and structures are required to comply with all applicable building codes.

e) No septic tanks are proposed as part of the project.

VII. Hazards and Hazardous Materials

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
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 one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section				X

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
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	

Discussion of Checklist Answers:

a-c) The project only involves grading activities. The project involves the use of heavy equipment that has the potential to leak or spill toxic substances such as oil, gas and radiator fluid. However the City's Improvement standards will require the contactor to have a spill prevention plan in place, should an accidental spill occur.

d) The project is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, and therefore would not create a significant hazard to the public or the environment.

e-f) The project site is not located within an airport land use plan or within two miles of a public or private airport or airstrip.

g) This project is located within an area currently receiving City emergency services. Fire Station 8 is located less than half a mile from the property and would be able to serve the site within the City's standard response time. The project will not increase the demand for emergency services and therefore will have a less than significant impact to the City's Emergency Response or Management Plans.

h) The project site is surrounded by existing and planned urban development. The project does not include residential development. The property owner preforms annual weed abatement per the City's weed abatement ordinance. These weed control measures reduce the potential occurrence of wildfires in the vicinity of the project site.

VIII. Hydrology and Water Quality

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			X	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			X	
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted water?			X	
f) Otherwise substantially degrade water quality?			X	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?				X
i) Expose people or structures to a				X

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				
j) Inundation by seiche, tsunami, or mudflow?				X

Discussion of Checklist Answers:
Prior to the approval of the Improvement Plans, the developer shall prepare and submit a Storm Water Pollution Prevention Plan (SWPPP) to the City, as defined by the Regional Water Quality Control Board, to ensure that the project will not result in the release of materials that will affect water quality. The SWPP shall include, but not be limited to, best management practices (BMP's) like erosion controls with hydro-seeding and mulching, and sediment control with fiber rolls and sediment basins. Additionally a grading permit, with BMP measures for dust control, will be required before construction starts. There may be minor amounts of wind and/or water erosion associated with construction. The uniformly applied BMP standard erosion control measures will be required during construction. With implementation of a grading permit and associated best management practices to address water quality, impacts to water quality are considered less than significant.

The City evaluated the potential impacts related to increased runoff in the General Plan EIR. The General Plan EIR assumed full build-out of the site and other properties in the City and evaluated downstream flooding impacts resulting from increased surface water runoff. The General Plan EIR found that, with the implementation of City standards and programs, the potential flooding impacts would be less than significant. No new information available subsequent to certification of the General Plan EIR has called that conclusion into question. Based on the above information, the impacts associated with water quality are less than significant.

IX. Land Use and Planning

Would the project:

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

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
plan?				

Discussion of Checklist Answers:
The majority of the site's General Plan land use designation is Light Industrial (LI); the zone district designation is also Light Industrial (M1). There is a portion of the site that has a land use and zoning designation of Neighborhood Commercial (NC). The project will include grading activities on the site. The City's General Plan does contain policies designed to avoid the loss of wetland areas. However the project will incorporate mitigation measures designed to compensate for the loss of wetlands.

There are no Habitat Conservation Plans or Natural Community Conservation Plans covering the project site. Future development of the site is expected to be in accordance with the Light Industrial land use and zoning designations for the site. The project will have no impact on land use and planning efforts.

X. Mineral Resources

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

Discussion of Checklist Answers:
a-b) The California Department of Geology survey lists the project site as being located within the MRZ-1 zone, indicating that significant mineral resources are not likely to be located in this area. Because the project site is not known to include any mineral resources that would be of local, regional, or statewide importance, the project is not considered to have any impacts on mineral resources.

XI. Noise

Would the project result in:

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

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Exposure 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 or 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

Discussion of Checklist Answers:

Short term impacts from grading activities could expose nearby tenants/landowners to increased noise levels. The closest sensitive receptors are approximately 1,700 feet from the project site. These impacts would be temporary and are considered less then significant since noise levels and construction hours are limited by the City's Municipal Code to daytime hours (7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00a.m. to 8:00 p.m., Saturday, Sunday and holidays). In addition, the City's Public Works Department requires all construction equipment to be fitted with factory installed muffling and noise attenuation equipment.

XII. Population and Housing

Would the project:

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

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, through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

Discussion of Checklist Answers:
The proposal is not a housing-related project, does not induce growth beyond that anticipated in the General Plan EIR and does not displace any existing housing. Therefore, there is no change from the impacts addressed in the General Plan EIR, and the impact is considered less than significant.

XIII. Public Services

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 governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

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

Discussion of Checklist Answers:
The General Plan EIR identifies and adopts mitigation for impacts to public services, including police and fire protection, wastewater services, and solid waste disposal. The proposed project will not increase the need for public services and utilities beyond that identified in the General Plan EIR, and the impact is considered less than significant.

XIV. Recreation

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	

Discussion of Checklist Answers:
The proposed project will only involve grading activities and will not increase park usage in the area of the project. However adequate facilitates are located within the project area and the project does not require any additional facilities. Therefore, the project will not impact the existing and planned park facilities.

XV. Transportation/Traffic

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?			X	
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads and 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			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
due to a design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
e) Result in inadequate emergency access?			X	
f) Result in inadequate parking capacity?			X	
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?			X	

Discussion of Checklist Answers:
The project will only involve minor grading activities and no development of the site is anticipated at this time. It is expected short term traffic impacts will be minor with grading equipment to be brought to the site from Foothills Bl. Traffic and transportation impacts from the project are consistent with the impacts analyzed in the General Plan EIR, and the impact is less than significant.

XVI. Utilities and Service Systems

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

Discussion of Checklist Answers:
The project consists of minor grading activities and will not have an impact on utilities.

XVII. Mandatory Findings of Significance

Environmental Issue	Potentially Significant	Potentially Significant Unless Mitigated	Less Than Significant	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 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			X	

Environmental Issue	Potentially Significant	Potentially Significant Unless Mitigated	Less Than Significant	No Impact
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	

Discussion of Checklist Answers:
Long term environmental goals are not impacted by the proposed project. The cumulative impacts do not deviate beyond what was contemplated by the General Plan EIR. With implementation of the proposed mitigation measures the project does not have the potential to degrade the quality of the environment, substantially reduce the habitat of any wildlife species nor create adverse effects on human beings.

ENVIRONMENTAL DETERMINATION:

As shown in the checklist prepared as part of this Initial Study, City staff has not identified any impacts that are not peculiar to the parcel that cannot be mitigated to less than significant levels, whether offsite or cumulative in nature, and the City's Mitigating Policies and Standards, have been undertaken.

On the basis of this initial evaluation:

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

Initial Study Prepared by:

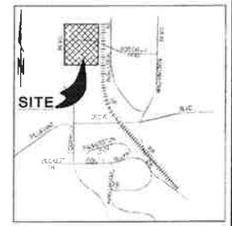
Derek Ogden

Derek Ogden, Associate Planner
City of Roseville Planning & Housing Department

Attachments:

1. Project Grading Plan
2. ECORP Summary

ATTACHMENT 1



VICINITY MAP

GRAPHIC SCALE
100 50 0 100 200
1 in = 100 ft

GRAPHIC SCALE
200 100 0 50 100
1 in = 100 ft

EXISTING DRAIN
FL=126.30

PROJECT LIMITS

PARCEL 3
25 PM 27

PARCEL 1
25 PM 27

PARCEL 5
19 PM 23

PARCEL 6
19 PM 23

PARCEL A
15 PM 139

FOOTHILLS BOULEVARD

PACIFIC RAILROAD

INDUSTRIAL AVENUE

N89°14'19"E 1474.99'

N00°25'42"W 1764.55'

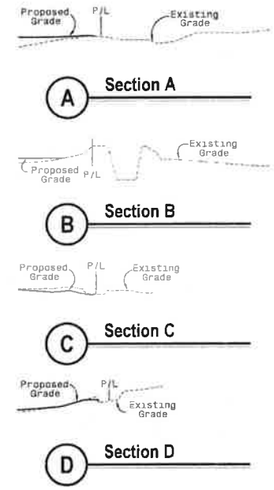
N00°24'30"W 1751.68'

N89°25'44"E 1478.99'

PROJECT LIMITS

EXISTING DRAIN
FL=131.84

EXISTING DRAIN
FL=138.81



LEGEND

EXISTING	DESCRIPTION
12"D	STORM DRAIN PIPE & SIZE
6"S	SANITARY SEWER PIPE & SIZE
6"W	DOMESTIC WATER PIPE & SIZE
6"F	FIRE PROTECTION WATER PIPE & SIZE
2"G	NATURAL GAS PIPE & SIZE
	CATV, TEL, ELEC, OR JOINT TRENCH
	MANHOLE
	DRAIN INLET
	CLEANOUT
	VALVE
	FIRE HYDRANT
	BLOW OFF VALVE
	RIDGE OR GRADE BREAK
	FLOWLINE OF SWALE
	FENCE

ABBREVIATIONS

AB	AGGREGATE BASE	LT	LEFT
AC	ASPHALTIC CONCRETE OR ACRE	MAX	MAXIMUM
BC	BEGIN HORIZONTAL CURVE	MH	MANHOLE
BLDG	BUILDING	MIN	MINIMUM
BM	BENCH MARK	NTS	NOT TO SCALE
BW	BOTTOM OF WALL	OH	OVERHEAD
BSBL	BUILDING SET BACK LINE	PB	PULL BOX
C&G	CURB AND GUTTER	PCC	POINT OF COMPOUND CURVE
C.G&S	CURB, GUTTER AND SIDEWALK	PI	POINT OF INTERSECTION
CONC	CONCRETE	PL, ℄	PROPERTY LINE
CL ℄	CENTERLINE	PP	POWER POLE
CO	CLEANOUT OR COUNTY	PRC	POINT OF REVERSE CURVE
CONST	CONSTRUCT	PT	POINT OF TANGENCY
COTG	CLEANOUT TO GRADE	PUE	PUBLIC UTILITY EASEMENT
CR	CURB RETURN	PVMT	PAVEMENT
△	INCLUDED ANGLE	R	RADIUS OR RIDGE
D	STORM DRAIN	RAD	RADIAL
DI	DRAIN INLET	RP	REDUCED PRESSURE BACKFLOW PREVENTER
DIA Ø	DIAMETER		
DIP	DUCTILE IRON PIPE	RT	RIGHT
DMH	STORM DRAIN MANHOLE	R/W	RIGHT OF WAY
DTL	DETAIL	S	SLOPE OR SEWER
DWG	DRAWING	SD	STORM DRAIN
DWY	DRIVEWAY	SMH	SEWER MANHOLE
(E), EXIST	EXISTING	SS	SANITARY SEWER
EC	END HORIZONTAL CURVE	STA	STATION
EP	EDGE OF PAVEMENT	STD	STANDARD
ESMT	EASEMENT	SW	SIDEWALK
FL, ℄	FLOWLINE	TB	TOP OF BANK
G	GAS	TC	TOP OF CURB
GB	GRADE BREAK	TEL	TELEPHONE
GFL	GUTTER FLOWLINE	TEMP	TEMPORARY
GR	INLET GRATE	TMH	TELEPHONE MANHOLE
HGL	HYDRAULIC GRADE LINE	TP	TELEPHONE POLE
INTX	INTERSECTION	TRANS	TRANSITION
INV	PIPE INVERT	TS	TRAFFIC SIGNAL
IRR	IRRIGATION	TW	TOP OF WALL
L	LENGTH	TYP	TYPICAL
LIP	EDGE OF GUTTER PAN	UG	UNDERGROUND
LSCP	LANDSCAPE	W	WATER
		WS	WATER SERVICE

OWNER/DEVELOPER
COASTAL PARTNERS, LLC
3001 DOUGLAS BLVD., SUITE 340
ROSEVILLE, CA 95661
(916) 773-0550

ENGINEER
MORTON & PITALO INC.
75 IRON POINT CIR,. SUITE 120
FOLSOM, CA 95630
(916) 984-7621

ASSESSOR'S PARCEL NUMBERS
017-230-014 & 15

AREA
59.8± AC.

EXISTING ZONING
NC AND M-1

EXISTING GENERAL PLAN
NEIGHBORHOOD COMMERICAL (NC)
LIGHT INDUSTRIAL (LI)

EXISTING SPECIFIC PLAN
NEIGHBORHOOD COMMERCIAL (NC)
LIGHT INDUSTRIAL (LI)

GAS
PACIFIC GAS & ELECTRIC

TELEPHONE
SUREWEST TELEPHONE

SCHOOL DISTRICT
ROSEVILLE CITY ELEMENTARY SCHOOL DIST.
ROSEVILLE HIGH SCHOOL DIST.

CITY OF ROSEVILLE
STORM DRAINAGE
SANITARY SEWER
WATER
ELECTRICITY
PARKS & RECREATION
FIRE PROTECTION
POLICE PROTECTION

EARTHWORK QUANTITIES:
CUT: 130,000 C.Y.
FILL: 130,000 C.Y.
NET: 0 C.Y.

REVISIONS NO.	DESCRIPTION	APP'D ENGR	DATE	APP'D E.U.	DATE

SCALE:
HORIZ. 1" = 100'
VERT. 1" = N/A

BENCH MARK

COMPUTED
DESIGNED GJB
DRAWN
PROJ. ENGR. GJB

REGISTERED PROFESSIONAL ENGINEER
GREGORY J. BARATTINI
No. 50725
Exp. 09-30-2013
CIVIL
STATE OF CALIFORNIA

MORTON & PITALO, INC.
CIVIL ENGINEERING • LAND PLANNING • LAND SURVEYING
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survey email: staking@mpengr.com • web: www.mpengr.com

PRELIMINARY GRADING PLAN

FOOTHILL BLVD - 60 ACRES

PARCELS 5 & 6 PER PARCEL MAP, 19 PM 23
FOR THE PURPOSE OF WETLAND GRADING

ROSEVILLE CALIFORNIA

DATE AUGUST 2012
SHEET 1
OF 1

JOB NO. 12-0042-00

FOOTHILL BOULEVARD - 60 ACRES

Morton & Pitalo, Inc.

Dwg: X:\2012\12-0042-00\CIVIL\MM\CROKING\12042-PH-RGD1.DWG | Saved: 08-30-12 09:28am CSAKSON | Plotted: 08-30-12 09:28am CSAKSON

ATTACHMENT 2

Special-Status Species Assessment

For

Foothills Corporate Center

Placer County, California

29 June 2012

Prepared For:
Coastal Partners, LLC

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

CONTENTS

Special-Status Species Assessment

Foothills Corporate Center

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Special-Status Species Assessment 3

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Attachment A – California Natural Diversity Database (CNDDB) Occurrences for the Roseville, California 7.5-minute Quadrangle

Attachment B – USFWS Query of Listed Species: Roseville Quad

INTRODUCTION

On behalf of Coastal Partners, LLC., ECORP Consulting, Inc.(ECORP) has conducted a special-status species assessment of the 60±-acre Foothills Corporate Center site, located south of Blue Oaks Boulevard, east of Foothills Boulevard, and west of Industrial Avenue in Placer County, California (Figure 1. *Project Site and Vicinity*). The site corresponds to a portion of Section 21, Township 11 North, and Range 6 East (MDBM) of the "Roseville, California" 7.5-minute quadrangle (U.S. Department of the Interior, Geological Survey, 1992). The approximate center of the site is located at 38° 47' 15" North and 121° 18' 35" West within the Lower Sacramento River Watershed (HUC #18020109, U.S. Department of the Interior, Geological Survey, 1978).

The purpose of this special-status species assessment is to assess the potential for the occurrence of special-status plant and wildlife species or their habitat within the project site. The conclusions presented in this report are based upon previous work conducted by ECORP, and limited site reconnaissance conducted 27 June, 2012. A formal survey was performed for special-status plants in 2006 (ECORP 2006) and the results of that report are incorporated herein for reference only. Similarly, a wetland delineation was performed by ECORP Consulting Inc. in 2005 (ECORP 2005) and verified by the Army Corps of Engineers (ACOE) in 2006. The ACOE verification expired in March 2011. A Biological Assessment for federally listed species was prepared for the site and submitted to U.S. Fish and Wildlife Service (USFWS) on June 16, 2006. A subsequent Biological Opinion issued by USFWS on August 15, 2006 (USFWS 2006) determined that two species, vernal pool fairy shrimp (*Branchinecta lynchi*) and vernal pool tadpole shrimp (*Lepidurus packardi*), would likely be adversely affected by the project.

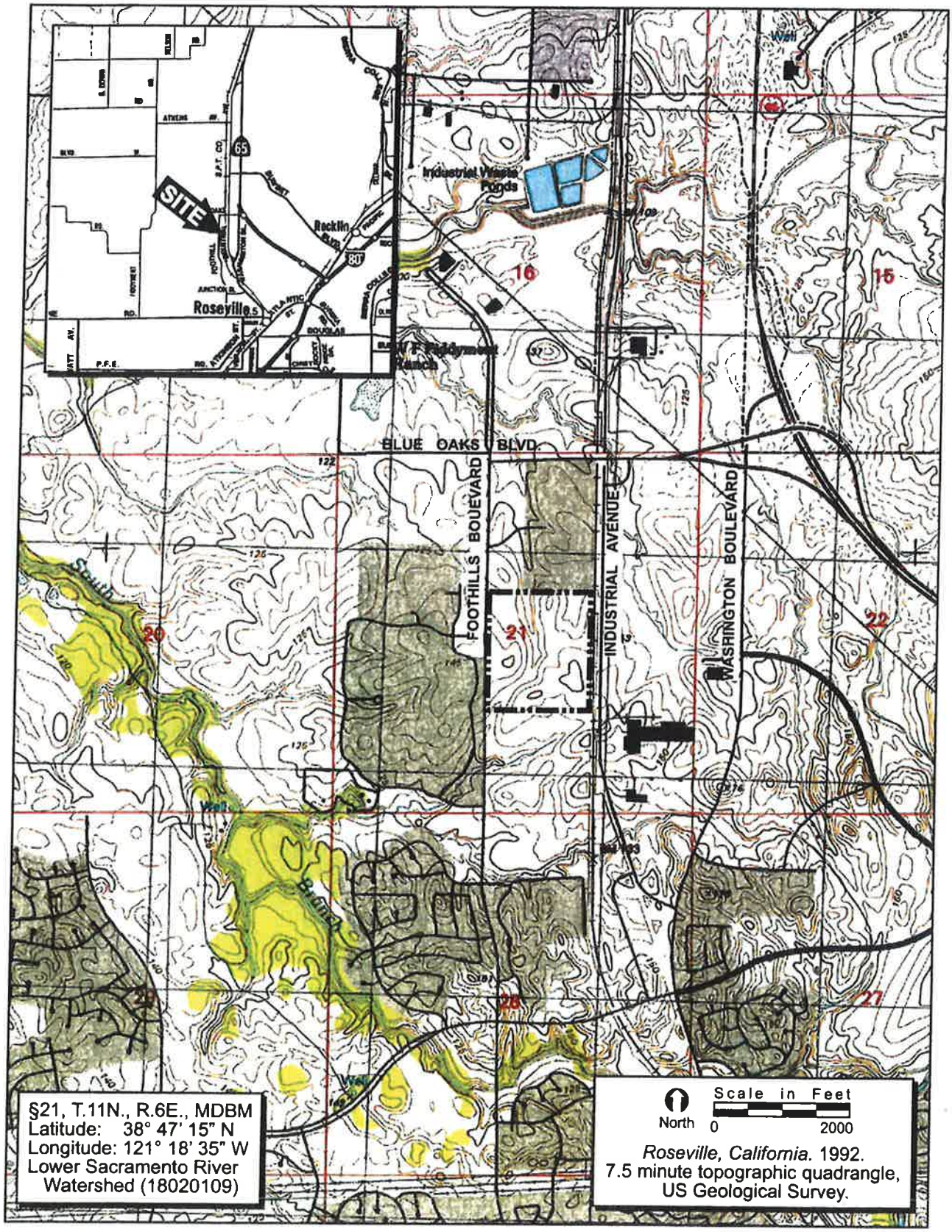


Figure 1. Project Site and Vicinity

Foothills Corporate Center

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Special-Status Species Assessment

For the purposes of this assessment, "special-status species" refers to those plant and animal species which:

- Are listed, proposed for listing, or candidates for future listing as threatened or endangered under the federal Endangered Species Act;
- Are listed or candidates for future listing as threatened or endangered under the California Endangered Species Act;
- Meet the definitions of endangered or rare under Section 15380 of the CEQA Guidelines;
- Are identified as a species of special concern by the California Department of Fish and Game (CDFG);
- Plants considered by the California Native Plant Society (CNPS) to be "rare, threatened, or endangered in California" (Lists 1B and 2);
- Plants listed as rare under the California Native Plant Protection Act (Fish and Game Code of California, Section 1900 et seq.); or
- Fully protected in California in accordance with the Fish and Game Code of California, Sections 3511 (birds), 4700 (mammals), 5050 (amphibians and reptiles), and 5515 (fishes).

Background information was collected on the potential existence of the special-status species within or near the project site from a variety of sources including:

- California Department of Fish and Game's Natural Diversity Database (CNDDB) record search for the "Roseville" 7.5-minute quadrangles (CDFG 2003);
- Species List for the "Roseville, California" 7.5-minute quadrangle created by the USFWS (USFWS 2012);
- *Status of Rare, Threatened, and Endangered Animal and Plants of California 2000-2004* (CDFG 2005);
- *Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2001);
- *California Bird Species of Special Concern* (Shuford and Gardali 2008);

- *Amphibian and Reptile Species of Special Concern in California* (Jennings and Hayes 1994);
- *Mammalian Species of Special Concern in California* (Williams 1986);
- *California's Wildlife*, Volumes I-III (Zeiner, *et al.* 1988, 1990a, 1990b); and
- *A Guide to Wildlife Habitats of California* (Mayer and Laudenslayer, eds. 1988).
- *Special-status Plant Survey, Foothills Corporate Center, Placer County (ECORP 2006a);*
- *Wetland Delineation Map, Foothills Corporate Center. ECORP Consulting, Inc. Dated March 16, 2005 (ECORP 2006b)*

The special-status species assessment included a review of resource agency species lists, taxa-specific literature review, California Natural Diversity Database (CNDDB) query, previous surveys conducted for the project, and a reconnaissance-level site visit. Special-status species considered for this site are those that have a reasonable probability of occurring on-site under current conditions. This assessment does not constitute determinate field surveys conducted according to agency-approved protocols.

SITE CONDITIONS

The project area is comprised of gently rolling terrain, and is situated at an elevational range of approximately 130 to 150 feet above mean sea level. The site is currently undeveloped and appears to have been historically used for agriculture and/or livestock grazing. Surrounding land uses include commercial and industrial development to the west, north and east; urban development to the southwest; and undeveloped land to the south. A railroad easement runs along the eastern edge of the property, and an electrical utility line runs along the southern edge together with a two-track access road. The site appears to be regularly mowed and/or disked.

Annual grasslands dominate the plant community throughout the site. Dominant plant species present include non-native grasses such wild oat (*Avena fatua*), medusahead grass (*Elymus caput-medusae*), ripgut brome (*Bromus diandrus*), and mannagrass (*Glyceria declinata*). Other herbaceous species frequently observed include yellow star thistle (*Centaurea solstitialis*), sticky tarweed (*Holocarpha virgata*), Spanish clover (*Lotus purshianus*), cut-leaved geranium

(*Geranium dissectum*), and turkey mullien (*Croton setigerus*). Trees observed on-site consist of a row of ornamental trees (sycamore (*Plananus* sp.) and California redwood (*Sequoia sempervirens*)), one black willow (*Salix gooddingii*), and two Fremont's cottonwoods (*Populus fremontii*) along the northern boundary. All trees appear to occur in off-site locations.

Aquatic features on-site include vernal pools, seasonal wetlands, seasonal wetland swales, and a small ephemeral drainage, comprising approximately 0.284 acre of wetlands (Figure 2. *Wetland Delineation*). Culverts drain the property at the north central boundary and in the southwest corner. According to the *Soil Survey of Placer County, California* (U.S. Department of Agriculture, Soil Conservation Service, 1980), a single soil unit has been mapped within the site (Figure 3. *Natural Resources Conservation Service Soil Types*), (141) Cometa-Fiddyment complex 1-5% slopes. This soil unit does not contain hydric components, but may contain hydric inclusions of Alamo soils in depressions.

A site reconnaissance was conducted on June 27, 2012. The wetland delineation map of the site with a color aerial photograph (1" = 300' scale) background was used for orientation during the field survey. ECORP biologist Eric Stitt walked meandering transects throughout the project area while recording on-site conditions, searching for special-status species, evidence of their presence or use of the area, and/or the occurrence of potential habitat for these species. A disced firebreak had recently been graded along the east, south, and western perimeter, and the rest of the site had recently been mowed.

RESULTS AND DISCUSSION

A list of potentially occurring special-status species was developed for the Foothills Corporate Center site, based on vegetation communities and current conditions observed on-site, known distribution data, and various reference sources (Table 1. Potentially Occurring Special-Status Species).

WATERS OF THE U.S. ACREAGE

CLASSIFICATION	PARCEL 017-230-015 EXISTING ACREAGE	PARCEL 017-230-014 EXISTING ACREAGE	PROJECT TOTAL
WETLANDS:			
Vernal Pool	0.038	0.000	0.038
Seasonal Wetland	0.000	0.006	0.006
Seasonal Wetland Swale	0.062	0.166	0.228
OTHER WATERS:			
Ephemeral Drainage	0.012	0.000	0.012
TOTAL:	0.112	0.172	0.284

SCALE IN FEET
0 150 300
SCALE: 1"=300'

FIGURE 2. Wetland Delineation

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

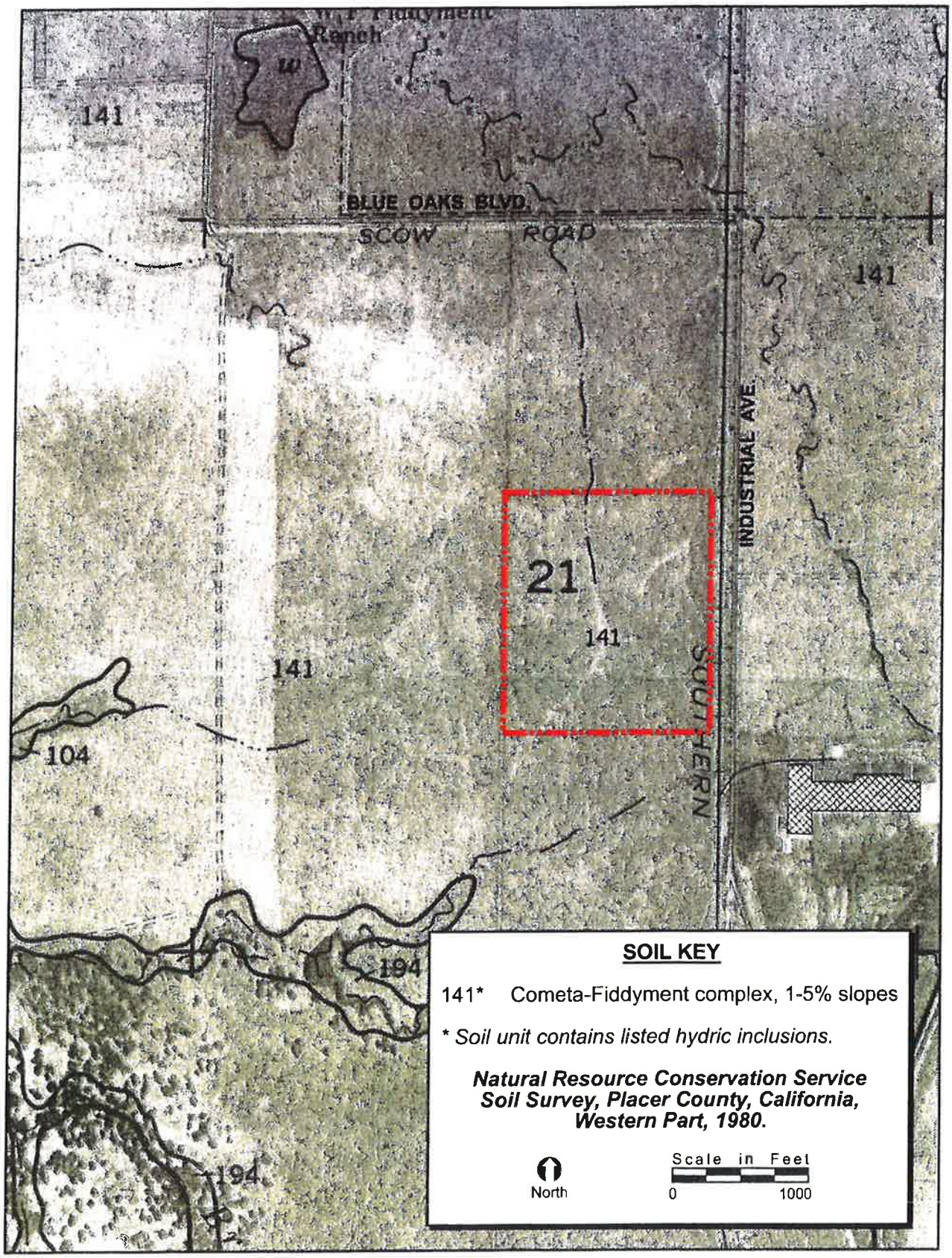


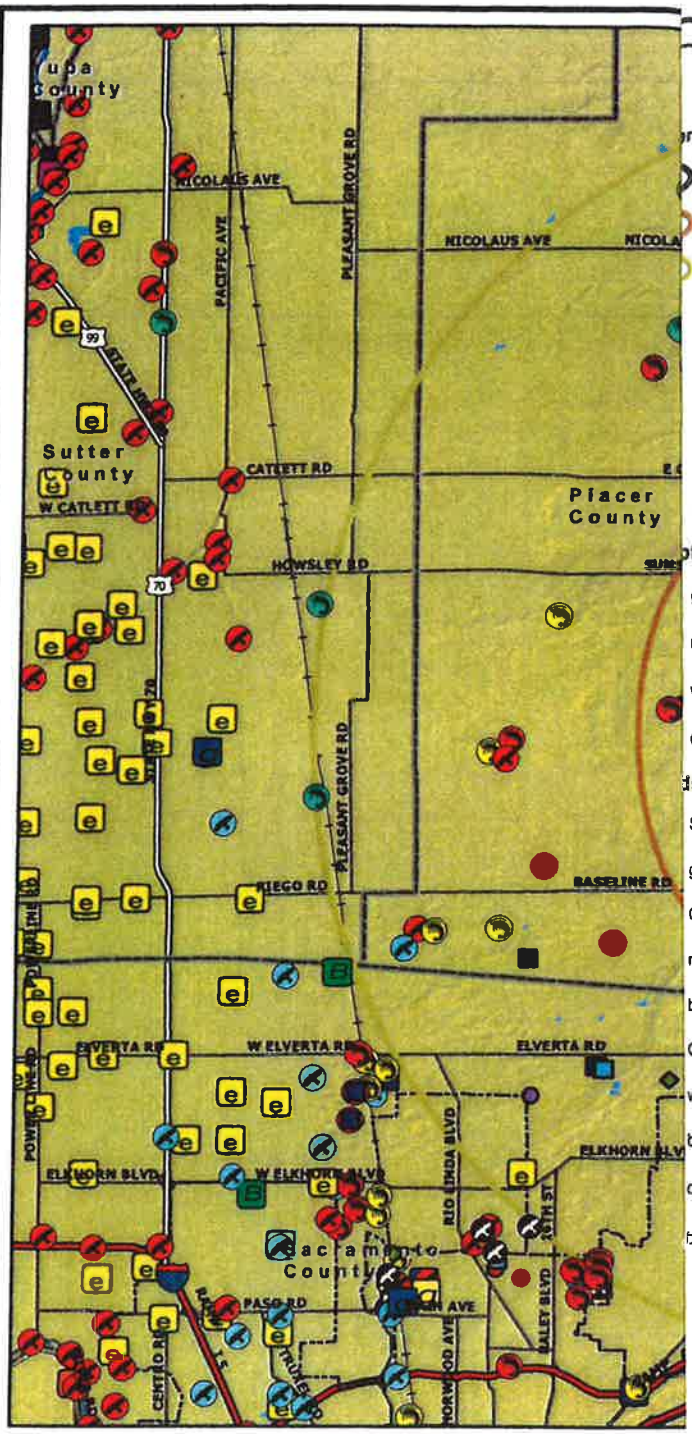
Figure 3. Natural Resource Conservation Service Soil Types

Table 1 - Special-Status Species with Potential to Occur On-Site: Foothills Corporate Center

Common Name	Scientific Name	Federal ESA Status	California ESA Status	Other Status	Habitat Description	Approximate Survey Dates
Plants						
Ahart's dwarf rush	*Juncus leiospermus* var. *ahartii*	-	-	1B	mesic areas in valley and foothill grassland (100' - 3300	March-May
Big-scale balsamroot	*Balsamorhiza macrolepis* var. *macrolepis*	-	-	1B	chaparral, cismontane woodland, and valley and foothill grassland, sometimes on serpentine soils (300' - 5,000')	March-June
Boggs Lake hedge-hyssop	*Gratiola heterosepala*	-	CE	1B	clay soils in vernal pools and in marshes and swamps on lake margins (30' - 7,790')	April-August
Dwarf downingia	*Downingia pusilla*	-	-	2	vernal polols and mesic areas in valley and foothill grassland (3' - 1,460')	March-May
Hispid bird's-beak	*Cordylanthus mollis* ssp. *hispidus*	-	-	1B	alkaline meadows and seeps, playas, and valley and foothill grassland (3' - 510')	June-September
Legenere	*Legenere limosa*	-	-	1B	vernal pools (3' - 2,900')	April-June
Pincushion navarretia	*Navarretia myersii* ssp. *myersii*	-	-	1B	vernal pools, often on acidic soils (65' - 1,080')	May
Sacramento Orcutt grass	*Orcuttia viscida*	FE	CE	1B	vernal pools (100' - 330')	April-July
Sanford's arrowhead	*Sagittaria sanfordii*	-	-	1B	assorted shallow freshwater marshes and swamps (0' - 2,130')	May-October
Slender Orcutt grass	*Orcuttia tenuis*	FT	CE	1B	vernal pools (115' - 5,775')	May-September
Invertebrates						
Conservancy fairy shrimp	*Branchinecta conservatio*	FE	-	-	vernal pools/wetlands	November-April
Vernal pool fairy shrimp	*Branchinecta lynchi*	FT	-	-	vernal pools/wetlands	November-April
Vernal pool tadpole shrimp	*Lepidurus packardi*	FE	-	-	vernal pools/wetlands	November-April
California linderiella	*Linderiella occidentalis*	-	-	CNDDB	vernal pools/wetlands	November-April
Amphibians						
Western spadefoot toad	*Spea hammondii*	-	-	CSC	vernal pools, wetlands/adjacent grassland	March-May
Birds						
White-tailed kite (nesting)	*Elanus leucurus*	-	-	CFP	woodland, grassland	March-June
Cooper's hawk (nesting)	*Accipiter cooperii*	-	-	CNDDB	woodland	April-July
Northern harrier (nesting)	*Circus cyaneus*	-	-	CSC	marsh, grassland	April-September
Swainson's hawk (nesting)	*Buteo swainsoni*	-	CT	BCC	grassland, riparian	March-August
Ferruginous hawk (wintering)	*Buteo regalis*	-	-	CNDDB	grassland	November-February
Golden eagle (nesting and wintering)	*Aquila chrysaetos*	-	-	BCC, CFP	grassland	nest (February-August); winter CV (October-February)
Merlin (wintering)	*Falco columbarius*	-	-	CNDDB	woodland, grassland	September-April
Burrowing owl (burrow sites)	*Athene cunicularia*	-	-	BCC, CSC	grassland	February-August
Loggerhead shrike	*Lanius ludovicianus*	-	-	BCC, CSC	grassland, woodland	March-July

Status Codes:

FE - Federal ESA listed, Endangered.
FT - Federal ESA listed, Threatened.
FPE - Formally Proposed for federal ESA listing as Endangered.
FPT - Formally Proposed for federal ESA listing as Threatened.
FPD - Listed under Federal ESA, but formally proposed for delisting.
Fd - Formally Delisted (delisted species are monitored for 5 years).
FC - Candidate for federal ESA listing as Threatened or Endangered.
NMFS - NOAA/NMFS species of concern
BCC - U. S. Fish and Wildlife Service Bird of Conservation Concern (USFWS, 2002).
CE - California ESA or Native Plant Protection Act listed, Endangered.
CT - California ESA or Native Plant Protection Act listed, Threatened.
CR - California ESA or Native Plant Protection Act listed, Rare.
CC - Candidate for California ESA listing as Endangered or Threatened.
CFP - Fish and Game Code of California Fully Protected Species (§3511-birds, §4700-mammals, §5050-reptiles/amphibians).
CSC - California Department of Fish and Game Species of Special Concern (CDFG, updated August 2004).
1A - California Native Plant Society/Presumed extinct.
1B - California Native Plant Society/Rare or Endangered in California and elsewhere.
2 - California Native Plant Society/Rare or Endangered in California, more common elsewhere.
4 - California Native Plant Society/Plants of Limited Distribution.
CNDDB - Species that is tracked by CDFG's Natural Diversity Database but does not have any of the above special-status designations otherwise.



rs

- 1 mile
- 5 mile
- 10 mile

Transportation Network

- Interstate
- State Highway
- Roads
- Railroads

Hydrologic Features

- Lakes and Reservoirs
- Rivers

- California linderiella
- vernal pool tadpole shrimp
- vernal pool fairy shrimp

otiles / Amphibians

- giant garter snake
- northwestern pond turtle
- western spadefoot toad
- California red-legged frog

ds

- Swainson's hawk
- grasshopper sparrow
- California black rail
- merlin
- bald eagle
- Cooper's hawk
- white-tailed kite
- burrowing owl
- osprey
- black-crowned night heron
- double-crested cormorant
- great blue heron
- great egret
- western yellow-billed cuckoo
- bank swallow
- tricolored blackbird
- purple martin

Mammals

- pallid bat
- Townsend's big-eared bat
- silver-haired bat

Insects

- vernal pool andrenid bee
- Sacramento Valley tiger beetle
- valley elderberry longhorn beetle
- Ricksecker's water scavenger beetle
- Antioch Dunes anthicid beetle
- Sacramento anthicid beetle

NOTES

[1] Project Boundary: ECORP CAD Wetland Delineation

[2] CDFG California Natural Diversity Database (CNDDB), June 2012 Update

Map Projection: California State Plane Zone II (NAD83) feet

LLS CORPORATE CENTER

CNDDB Special-Status Species Map

	Map Name: FoothillsCorp_CNDDB.mxd	Project Manager: JOHNSONC
	Revision: 6/25/2012	GIS Specalist: JDS
	Scale: 1 " = 3 miles	

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Redlands Office
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Redlands, CA 92373
Ph: 909.307.0046

There are no previously documented occurrences of special-status species within the project site (CDFG 2003). However, several special-status species have been documented within 10 miles of the project site (Figure 4, Attachment A). Ten special-status plant species have the potential to occur (Table 1). Big-scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*), hispid bird's beak (*Cordylanthus mollis* ssp. *hispidus*), dwarf downingia (*Downingia pusilla*), Boggs Lake hedge-hyssop (*Gratiola heterosepala*), Ahart's dwarf rush (*Juncus leiospermus* var. *ahartii*), legenere (*Legenere limosa*), pincushion navarretia (*Navarretia myersii* ssp. *myersii*),

slender Orcutt grass (*Orcuttia tenuis*), Sacramento Orcutt grass (*Orcuttia viscida*), and Sanford's arrowhead (*Sagittaria sanfordii*) are rare plants of valley and foothill grasslands, most of which occur in vernal pools and other ephemeral wetlands. Big-scale balsamroot (a CNPS List 1B species) and dwarf downingia (CNPS List 2 species) have been documented from sites within one mile of the proposed project, and big-scale balsamroot, Boggs Lake hedge-hyssop, hispid bird's beak, and legenere have been found within five miles of the project. No rare plants were observed during May and June 2006 protocol-level rare plant surveys (ECORP 2006).

Two federally listed branchiopod species, vernal pool tadpole shrimp (*Lepidurus packardi*-federally endangered) and vernal pool fairy shrimp (*Branchinecta lynchi*-federally threatened), have been documented from vernal pools within five miles of the site, and California linderiella (*Linderiella occidentalis*, tracked by CDFG in their CNDDB but which has no regulatory status), has also been reported from the nearby vicinity. There are three records for vernal pool fairy shrimp from within one mile of the proposed project site and one record for the federally endangered vernal pool tadpole shrimp from 1.2 miles southwest of the site. Determinate-level field surveys conducted according to the *Interim Survey Guidelines to Permittees for Recovery Permits Under Section 10(a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods* (USFWS 1996a) would be necessary to establish the presence/absence of vernal pool branchiopods on-site. Previously, a Section 404 permit was obtained and consultation with USFWS was completed, resulting in a Biological Opinion for the project. However, the permits have expired and a new Nationwide permit will need to be obtained.

Five records exist for valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*- federally threatened) with 10 miles of the project boundaries. However, elderberry shrubs (*Sambucus mexicanus*), the obligate host tree for this species, do not presently occur on the project site, and the elderberry longhorn beetle is considered highly unlikely due to the absence of suitable habitat.

Among amphibians, there are four documented occurrences of western spadefoot toad (*Spea hammondii*), considered a species of special concern by CDFG, within five miles of the site. Western spadefoots are a vernal-pool breeding amphibian which generally uses longer-duration pools and ephemeral drainages in which to breed. Suitable habitat does not appear to be present on-site, although the Lead Agency may request surveys to verify their absence.

Numerous special-status birds have been documented from near the project site. The lack of trees and permanent water, combined with the industrial/commercial nature of surrounding lands, render the site unsuitable for nesting by most bird species. Ornamental trees along the north edge may provide nesting habitat for birds such as Cooper's hawk (*Accipiter cooperii*), white-tailed kite (*Elanus leucurus*), and loggerhead shrike (*Lanius ludovicianus*). Northern harrier (*Circus cyaneus*) may nest in the grassland community on-site. Further, the site may provide foraging habitat for the state-threatened Swainson's hawk (*Buteo swainsoni*), and as such, may require mitigation by CDFG. Other potentially occurring special-status birds include wintering species, such as ferruginous hawk (*Buteo reglalis*), golden eagle (*Aquila chrysaetos*), and merlin (*Falco columbarius*).

The open, rolling topography on-site favors western burrowing owls (*Athene cunicularia*- California species of special concern, USFWS bird of conservation concern), which is a ground nesting owl that tends to inhabit edge areas in grasslands and disturbed areas, particularly (but not exclusively) where California ground squirrels (*Otospermophilus beecheyi*) are common. Two CNDDB records exist for this species within five miles of the site, but no sign of burrowing owls or California ground squirrels were noted during the site visit. Burrowing owls are not listed or protected under either the State or Federal Endangered Species Acts, but the species is considered during the CEQA review process. Determinate-level field surveys conducted

according to the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012) would be necessary to establish the presence/absence of burrowing owls on-site.

It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by California Fish and Game Code (Code) § 3503. In addition, all raptors or birds of prey (owls, hawks, falcons) including common species, and their nests, are protected from take pursuant to §3503.5 of the Code. In accordance with this code, it is unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes or to take, possess, or destroy the nest or eggs of any such birds.

Take of ground- or tree-nesting birds can be avoided through timing construction activities to avoid the nesting season or by conducting pre-construction surveys and implementing appropriate avoidance measures in the event an active nest is located. If construction or tree removal is to occur between February 1 and August 31, a qualified biologist shall conduct pre-construction nesting bird surveys or all potential nest sites within a 500 foot (150 meter) radius of the project site. Surveys shall be conducted no more than 14 days prior to the initiation of construction activities. If an active nest is found, a no-disturbance buffer zone is typically established around the nest. The size of the buffer shall be determined through consultation with the appropriate resource agencies (e.g., CDFG). The no-disturbance buffer zone is maintained until it is determined that the young have fledged. If a nest tree must be removed, the removal shall occur outside of the nesting season (February through August), or after a qualified biologist verifies that the nest is unoccupied and the young have fledged.

Other special-status birds reported from within 10 miles of the site have specific habitat requirements that are not met on-site. There are no special status mammals that are considered likely to occur on the project.

Critical Habitat

The site is not situated within designated or proposed Critical Habitat by the USFWS for any listed species. The nearest designated critical habitat is approximately 6.5 miles to the north, and has been designated critical habitat for USFWS-listed vernal pool branchiopods (critical habitat unit 11C; Figure 4).

CONCLUSION

ECORP Consulting, Inc. conducted a special-status species assessment for the Foothills Corporate Center site in Placer County, California. Based upon plant communities, habitats, current site conditions, and nearby records there are several special-status species with potential to use the site. Vernal pools and seasonal wetlands may provide habitat for special status plants and/or freshwater branchiopods. Prior special-status plant surveys conducted in 2006 failed to document any special-status plants on-site. Determinate-level field surveys conducted according to the *Interim Survey Guidelines to Permittees for Recovery Permits Under Section 10(a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods* (USFWS 1996a) would be necessary to establish the presence/absence of vernal pool branchiopods on-site. It is potential but unlikely that western spadefoots occur on-site. The Lead Agency may require a habitat assessment and/or survey to fulfill CEQA obligations.

Ornamental trees along the north edge and grasslands throughout the site may provide nesting habitat for birds. It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by California Fish and Game Code (Code) § 3503. In addition, all raptors or birds of prey (owls, hawks falcons) including common species, and their nests, are protected from take pursuant to §3503.5 of the Code. Take of nesting birds can be avoided through timing construction activities to avoid the nesting season or by conducting pre-construction surveys with a qualified avian ecologist, and implementing appropriate avoidance measures in the event an active nest is located. The site may provide foraging habitat for the state-threatened Swainson's hawk (*Buteo swainsoni*), and as such, may require mitigation by CDFG. The open, rolling topography on-site favors western burrowing owls. Determinate-level field surveys conducted according to the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012) would be necessary to establish the presence/absence of burrowing owls on-site.

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LIST OF ATTACHMENTS

Attachment A – California Natural Diversity Database Occurrences for the Roseville, California 7.5-minute Quadrangle

Attachment B – USFWS Query of Listed Species: Roseville Quad

ATTACHMENT A

California Natural Diversity Database Plant Occurrences for the Roseville, California 7.5-minute Quadrangle

Agelaius tricolor

tricolored blackbird

Element Code: ABPBXB0020

Status
Federal: None
State: None

NDDB Element Ranks
Global: G2G3
State: S2

Other Lists
CDFG Status: SC

Habitat Associations
General: HIGHLY COLONIAL SPECIES, MOST NUMBEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.
Micro: REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

Occurrence No. 242 Map Index: 23971 EO Index: 4277
Occ Rank: Excellent
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2000-04-22
Site: 2000-04-22
Record Last Updated: 2004-05-06

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.86043° / -121.31575°
UTM: Zone-10 N4302636 E646132
Area: 4.2 acres
Elevation: 125 ft
Mapping Precision: SPECIFIC
Symbol Type: POLYGON
Township: 12N
Range: 06E
Section: 28 Qtr: SW
Meridian: M

Location: WEST OF INDUSTRIAL BLVD, 1 MILE SOUTHWEST OF LINCOLN RODEO GROUNDS.

Ecological: NESTING SUBSTRATE CONSISTS OF SCIRPUS ACUTUS (BULRUSH) GROWING IN A SHALLOW FARM POND.

Threat: THREATENED BY FUTURE DEVELOPMENT.

General: 25 ADULTS OBSERVED NESTING IN JULY 1992. ~1000 BIRDS OBSERVED NESTING DURING 20-30 APRIL 1994. EST OF 5000 (3:2 RATIO OF M:F) NESTING IN BULRUSHES ON 22 APR 2000. ABOUT 4000 FORAGING IN GRASSLAND 0.2 - 0.5 MI AWAY.

Owner/Manager: UNKNOWN

Alkali Meadow

Element Code: CTT45310CA

Status
Federal: None
State: None

NDDB Element Ranks
Global: G3
State: S2.1

Other Lists

Habitat Associations
General:
Micro:

Occurrence No. 1 **Map Index:** 11773 **EO Index:** 22568

Dates Last Seen
Element: 1982-08-23
Site: 1982-08-23
Record Last Updated: 1998-07-15

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.81323° / -121.25662°
UTM: Zone-10 N4297494 E651363
Radius: 1/5 mile
Elevation: 150 ft
Mapping Precision: NON-SPECIFIC
Symbol Type: POINT
Township: 11N
Range: 06E
Section: 12 **Qtr:** S
Meridian: M

Location: NORTH OF ROSEVILLE ON HWY 65, EAST ON PLACER BLVD, EAST ON PRIVATE DIRT ROAD.

Ecological: LOW DISTICHLIS MEADOWS W/PATCHES OF BARE WHITE SALT ENCRUSTED SOIL. OCCURS BETWEEN SEEPS DOMINATED BY OLNEY BULLRUSH. MOSAIC OF DIFF COVER TYPES. SPECIES LIST ON FILE AT CNDDB.

Threat: GRAZED IN WINTER. DEVEL PLANNED FOR THE AREA.

General: SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: UNKNOWN

Alkali Seep

Element Code: CTT45320CA

Status
Federal: None
State: None

NDDB Element Ranks
Global: G3
State: S2.1

Other Lists

Habitat Associations
General:
Micro:

Occurrence No. 2 **Map Index:** 11773 **EO Index:** 13316

Dates Last Seen
Element: 1982-08-23
Site: 1989-04-19

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Record Last Updated: 1998-07-20

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.81323° / -121.25662°
UTM: Zone-10 N4297494 E651363
Radius: 1/5 mile
Elevation: 150 ft

Mapping Precision: NON-SPECIFIC
Symbol Type: POINT

Township: 11N
Range: 06E
Section: 12 **Qtr:** S
Meridian: M

Location: 0.5 MILE EAST OF PLEASANT GROVE CREEK, APPROX 2.5 MILES NORTH OF ROCKLIN. ACCESS VIA HWY 65.

Ecological: SEEPS AND OLNEY BULLRUSH DOM. OCCURS IN PATCHES W/ALKALI MEADOW BTWN A HOMOGENEOUS STAND OF VEG APPROX 1 M TALL. FRESHWATER SEEP OCCURS ABOVE ALKALINE-SEEP. FILL HAS BEEN ILLEGALLY DISCHARGED INTO SITE AS OF 1989.

Threat: GRAZED IN WINTER. DEVELOPMENT PLANS FOR SITE.

General: ARMY CORPS INVOLVED IN RESTORATION AND MITIGATION. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: UNKNOWN

Ammodramus savannarum

grasshopper sparrow

Element Code: ABPBXA0020

Status
Federal: None
State: None

NDDB Element Ranks
Global: G5
State: S2

Other Lists
CDFG Status: SC

Habitat Associations
General: DENSE GRASSLANDS ON ROLLING HILLS, LOWLAND PLAINS, IN VALLEYS & ON HILLSIDES ON LOWER MOUNTAIN SLOPES.
Micro: FAVORS NATIVE GRASSLANDS WITH A MIX OF GRASSES, FORBS & SCATTERED SHRUBS. LOOSELY COLONIAL WHEN NESTING.

Occurrence No. 8 Map Index: 69480 EO Index: 70259
Occ Rank: Good
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1998-05-08
Site: 1998-05-08
Record Last Updated: 2007-06-12

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.86479° / -121.28821°
UTM: Zone-10 N4303165 E648512
Radius: 80 meters
Elevation: 155 ft
Mapping Precision: SPECIFIC
Symbol Type: POINT
Township: 12N
Range: 06E
Section: 27 Qtr: NE
Meridian: M

Location: 0.6 MILE ESE OF THE LINCOLN RODEO GROUNDS, EAST OF HIGHWAY 65, SOUTH OF LINCOLN.
Location Detail: SITE IS LOCATED ON A VERNAL POOL PRESERVE; DEVELOPMENT TO SURROUND PRESERVE.
Ecological: HABITAT CONSISTS OF ROLLING VERNAL POOL GRASSLAND.
Threat: THREATENED BY LOSS OF AREA AND HIGH PROBABILITY OF INVASION BY STAR THISTLE AND OTHER WEEDY PLANTS (BY LOSS OF GRAZING).
General: 1 ADULT OBSERVED ON 8 MAY 1998; LIKELY BREEDING AREA.
Owner/Manager: UNKNOWN

Andrena subapasta

A vernal pool andrenid bee

Element Code: IIHYM35050

Status
Federal: None
State: None

NDDB Element Ranks
Global: G1G3
State: S1S3

Other Lists
CDFG Status:

Habitat Associations
General: COLLECTS POLLEN PRIMARILY FROM ARENARIA CALIFORNICA BUT ALSO ORTHOCARPUS ERIANTHUS & LASTHENIA SP.
Micro: NESTS IN UPLANDS NEAR VERNAL POOLS.

Occurrence No. 3 Map Index: 59353 EO Index: 59389

Dates Last Seen
Element: 19XX-XX-XX
Site: 19XX-XX-XX

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Record Last Updated: 2005-01-14

Quad Summary: Roseville (3812173/528D), Citrus Heights (3812163/512A)
County Summary: Placer

Lat/Long: 38.74985° / -121.28555°
UTM: Zone-10 N4290414 E648982
Radius: 1 mile
Elevation: 160 ft

Mapping Precision: NON-SPECIFIC
Symbol Type: POINT

Township: 10N
Range: 06E
Section: 02 Qtr: XX
Meridian: M

Location: ROSEVILLE.
Location Detail: RECORD DATES FROM NO LATER THAN LATE 1960S, SO OLDER AREA OF ROSEVILLE MAPPED.
Ecological: FEMALES OF THIS SPECIES COLLECT POLLEN PRIMARILY FROM ARENARIA, BUT ALSO ORTHOCARPUS ERIANTHUS AND LASTHENIA SP.
General: AN UNKNOWN NUMBER OF FEMALES COLLECTED, DATE UNKNOWN.
Owner/Manager: UNKNOWN

Andrena subapasta

A vernal pool andrenid bee

Element Code: IIHYM35050

Status
Federal: None
State: None

NDDB Element Ranks
Global: G1G3
State: S1S3

Other Lists
CDFG Status:

Habitat Associations
General: COLLECTS POLLEN PRIMARILY FROM ARENARIA CALIFORNICA BUT ALSO ORTHOCARPUS ERIANTHUS & LASTHENIA SP.
Micro: NESTS IN UPLANDS NEAR VERNAL POOLS.

Occurrence No. 3 **Map Index:** 59353 **EO Index:** 59389

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 19XX-XX-XX
Site: 19XX-XX-XX

Record Last Updated: 2005-01-14

Quad Summary: Roseville (3812173/528D), Citrus Heights (3812163/512A)
County Summary: Placer

Lat/Long: 38.74985° / -121.28555°
UTM: Zone-10 N4290414 E648982
Radius: 1 mile
Elevation: 160 ft

Mapping Precision: NON-SPECIFIC
Symbol Type: POINT

Township: 10N
Range: 06E
Section: 02 **Qtr:** XX
Meridian: M

Location: ROSEVILLE.
Location Detail: RECORD DATES FROM NO LATER THAN LATE 1960S, SO OLDER AREA OF ROSEVILLE MAPPED.
Ecological: FEMALES OF THIS SPECIES COLLECT POLLEN PRIMARILY FROM ARENARIA, BUT ALSO ORTHOCARPUS ERIANTHUS AND LASTHENIA SP.
General: AN UNKNOWN NUMBER OF FEMALES COLLECTED, DATE UNKNOWN.
Owner/Manager: UNKNOWN

Athene cunicularia

burrowing owl

Element Code: ABNSB10010

Status
Federal: None
State: None

NDDB Element Ranks
Global: G4
State: S2

Other Lists
CDFG Status: SC

Habitat Associations
General: OPEN, DRY ANNUAL OR PERENIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.
Micro: SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

Occurrence No. 339 **Map Index:** 42028 **EO Index:** 42028

Occ Rank: Good
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1998-05-08
Site: 2003-05-05
Record Last Updated: 2003-08-21

Quad Summary: Roseville (3812173/528D), Pleasant Grove (3812174/528C)
County Summary: Placer

Lat/Long: 38.78190° / -121.37308°
UTM: Zone-10 N4293831 E641313
Area:
Elevation: 100 ft

Mapping PrecisionNON-SPECIFIC
Symbol Type:POLYGON

Township: 11N
Range: 05E
Section: 24 **Qtr:** XX
Meridian: M

Location: NORTH SIDE OF PHILIP ROAD, APPROXIMATELY 0.75 MILE WEST OF FIDDYMENT ROAD, NW OF ROSEVILLE.

Ecological: HABITAT CONSISTS OF MODERATELY-GRAZED, ROLLING GRASSLAND, WITH NO EVIDENCE OF HISTORIC SOIL DISTURBANCE. SITE WOULD BE BETTER IF MORE BURROWS WERE PRESENT; HARD SOILS AND LACK OF GROUND SQUIRRELS MAY BE THE CAUSE.

Threat: THREATS INCLUDE POSSIBLE FUTURE DEVELOPMENT OR LOSS OF GRAZERS.

General: OWLS (NEVER MORE THAN 2) OBSERVED YEAR-ROUND DURING 1998. HABITAT APPEARS EXTANT, BUT NO OWLS WERE OBSERVED ON 5 MAY 2003 - DATE OF SITE VISIT LIKELY TO EARLY.

Owner/Manager: PVT

Occurrence No. 1177 **Map Index:** 71623 **EO Index:** 72527

Occ Rank: Good
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2008-02-18
Site: 2008-02-18
Record Last Updated: 2008-07-01

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.84685° / -121.35702°
UTM: Zone-10 N4301064 E642578
Radius: 80 meters
Elevation: 110 ft

Mapping PrecisionSPECIFIC
Symbol Type:POINT

Township: 12N
Range: 06E
Section: 31 **Qtr:** XX
Meridian: M

Location: 250 FT NORTH OF EAST CATLETT RD, 0.4 MI WEST OF FIDDYMENT RD, SW OF LINCOLN.

Location Detail: LOCATED ON MOORE RANCH WETLAND RESTORATION PROJECT PROPERTY.

Ecological: HABITAT CONSISTS OF MIXED NATIVE AND NON-NATIVE GRASSLAND, WHICH IS WITHIN A VERNAL POOL RESTORATION PROJECT AREA. SURROUNDED BY GRAZED AND UNGRAZED PASTURES.

Threat: THREATENED BY ENCROACHING URBAN DEVELOPMENT FROM BOTH LINCOLN & ROSEVILLE.

General: 1 ADULT OBSERVED AT BURROW SITE ON 30 JAN, 1 FEB AND 18 FEB 2008. GULLS ATTRACTED BY NEARBY WASTEWATER & GARBAGE COLLECTION FACILITIES COULD POSSIBLY PREY UPON BUOW CHICKS IF NESTING OCCURS.

Owner/Manager: MOORE RANCH CONSERVANCY

Balsamorhiza macrolepis var. macrolepis

big-scale balsamroot

Element Code: PDAST11061

Status
Federal: None
State: None

NDDB Element Ranks
Global: G3G4T2
State: S2

Other Lists
CNPS List: 1B.2

Habitat Associations
General: VALLEY AND FOOTHILL GRASSLAND, CISMONTANE WOODLAND.
Micro: SOMETIMES ON SERPENTINE. 35-1000M.

Occurrence No. 9 **Map Index:** 32045 **EO Index:** 3757

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1958-07-07
Site: 1958-07-07

Record Last Updated: 2011-07-26

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.79393° / -121.30792°
UTM: Zone-10 N4295269 E646948
Area: 98.3 acres
Elevation: 125 ft

Mapping Precision: SPECIFIC
Symbol Type: POLYGON

Township: 11N
Range: 06E
Section: 21 **Qtr:** XX
Meridian: M

Location: UNCULTIVATED STRIP ALONG RAILROAD AND US HIGHWAY 99E, 3.2 MILES NORTH OF ROSEVILLE.

Location Detail: US HWY 99E WAS REPLACED BY CA HWY 65. HWY 65 WAS BUILT PARALLEL TO THE ROUTE OF HWY 99E, ABOUT 0.4 MILE EAST OF THE RAILROAD. MAPPED BY CNDDB NON-SPECIFICALLY ALONG INDUSTRIAL AVE AND THE RAILROAD TRACKS AS A BEST GUESS.

Ecological: OPEN VALLEY PLAIN.

Threat: MUCH OF THIS AREA HAS BEEN DEVELOPED SINCE THE COLLECTIONS WERE MADE.

General: MAIN SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1957 CRAMPTON COLLECTION FROM 3.2 MILES NORTH OF ROSEVILLE ALONG HWY 99E. 1958 FULLER COLLECTIONS FROM 2 MILES NORTH OF ROSEVILLE ALONG HWY 99E ALSO ATTRIBUTED HERE. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Branchinecta lynchi

vernal pool fairy shrimp

Element Code: ICBRA03030

Status
Federal: Threatened
State: None

NDDB Element Ranks
Global: G3
State: S2S3

Other Lists
CDFG Status:

Habitat Associations
General: ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.
Micro: INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

Occurrence No. 29 Map Index: 33250 EO Index: 2571

Occ Rank: Good
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1994-12-28
Site: 1994-12-28
Record Last Updated: 1996-02-23

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.86173° / -121.29715°
UTM: Zone-10 N4302810 E647744
Radius: 80 meters
Elevation: 140 ft
Mapping Precision: SPECIFIC
Symbol Type: POINT
Township: 12N
Range: 06E
Section: 27
Qtr: NW
Meridian: M

Location: EAST SIDE OF HWY 65, 0.4 MILE SOUTH OF THE LINCOLN RODEO GROUNDS, 2 MILES SOUTH OF LINCOLN.

Ecological: HABITAT CONSISTS OF VERNAL POOLS IN ROLLING GRASSLAND.

Threat: THREATENED BY PROPOSED DEVELOPMENT.

General: MANY SHRIMP OBSERVED/COLLECTED (DEPOSITED AT CAS) ON 28 DECEMBER 1994.

Owner/Manager: PVT

Occurrence No. 30 Map Index: 33251 EO Index: 2570

Occ Rank: Good
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1994-12-28
Site: 1994-12-28
Record Last Updated: 1995-06-30

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.84669° / -121.26971°
UTM: Zone-10 N4301186 E650156
Radius: 80 meters
Elevation: 195 ft
Mapping Precision: SPECIFIC
Symbol Type: POINT
Township: 12N
Range: 06E
Section: 35
Qtr: NE
Meridian: M

Location: 2 MILES SE OF THE LINCOLN RODEO GROUNDS, ~3 MILES SSE OF LINCOLN.

Ecological: HABITAT CONSISTS OF VERNAL POOLS WITHIN ROLLING GRASSLAND.

Threat: THREATENED BY PROPOSED DEVELOPMENT.

General: MANY SHRIMP OBSERVED/COLLECTED (DEPOSITED AT CAS) ON 28 DECEMBER 1994.

Owner/Manager: PVT

Occurrence No. 41 Map Index: 32449 EO Index: 1022

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2003-01-29
Site: 2005-01-21
Record Last Updated: 2005-10-18

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.78926° / -121.29294°
UTM: Zone-10 N4294775 E648259
Area: 12.9 acres
Elevation: 150 ft
Mapping Precision: SPECIFIC
Symbol Type: POLYGON
Township: 11N
Range: 06E
Section: 22
Qtr: XX
Meridian: M

Location: 0.8 KM E OF HWY 65; 1.5 MILES SSW OF INTERSECTION PLEASANT GROVE CREEK AND PLACER BLVD/SUNSET BLVD; N OF ROSEVILLE.

Location Detail: HIGHLAND RESERVE SOUTH; POOL NUMBERS N10, N42, N8, NA & NB. THE ECORP 2000 SURVEY LAT/LONG GIVEN ARE NOT AT THE LOCATION THEY MAPPED; REPORT HAS TEMP, DEPTH, & SURFACE AREA OF POOLS. NONE OBSERVED IN THE POOLS SURVEYED DURING 2005.

Ecological: CONSTRUCTED & HISTORIC VERNAL POOLS WITHIN A NON-NATIVE ANNUAL GRASSLAND; WETLAND COMPENSATION/MITIGATION PRESERVE. 2/6/95: POOL HAD SURFACE AREA OF 94 SQUARE METERS & DEPTH OF 17 CM. SURROUNDING AREA COMPRISED OF URBAN/DEVELOPMENT.

General: POOL #NB: 50+ ADULTS OBS, 1995; 1 ADULT COLL. & DEP. IN CAS. 10'S OBS IN 2000, POOL #VPN10; LINDERIELLA OCCIDENTALIS IN 2 POOLS NOT IDENT IN PRESERVE. 100'S IN POOLS NA, N8, N42 4 JAN 2002. 100'S IN POOL NA 29 JAN 2003. NOT PRESENT JAN 2005

Owner/Manager: PVT-ROSEVILLE PROPERTIES

Branchinecta lynchi

vernal pool fairy shrimp

Element Code: ICBRA03030

Status
Federal: Threatened
State: None

NDDB Element Ranks
Global: G3
State: S2S3

Other Lists
CDFG Status:

Habitat Associations
General: ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.
Micro: INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

Occurrence No. 42 **Map Index:** 47451 **EO Index:** 17819

Occ Rank: Fair
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Fluctuating

Dates Last Seen
Element: 2001-02-16
Site: 2005-01-21

Record Last Updated: 2011-07-08

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.77346° / -121.28207°
UTM: Zone-10 N4293039 E649236
Area: 28.7 acres
Elevation: 160 ft

Mapping PrecisionSPECIFIC
Symbol Type:POLYGON

Township: 11N
Range: 06E
Section: 26 **Qtr:** SW
Meridian: M

Location: HIGHLAND RESERVE SOUTH OPEN SPACE JUST N & E OF DIAMOND OAKS MUNINCIPAL GOLF COURSE, ROSEVILLE.

Location Detail: HIGHLAND RESERVE SOUTH. BOTH NATURAL AND MANMADE VERNAL POOLS PRESENT. 2005: SELECT POOLS FROM NORTHERN PORTION OF FEATURE SURVEYED. MAPPED TO PROVIDED MAPS.

Ecological: HARDPAN VERNAL POOLS IN ANNUAL GRASSLAND; WETLAND COMPENSATION/MITIGATION PRESERVE SURROUNDED BY DEVELOPMENT AS OF 2002. ON 31 JAN 1995 THE SURFACE AREA WAS 59 (U22) & 94 (U26) SQUARE METERS & THE DEPTH WAS 35 (U22) & 14 (U26) CM.

General: OBSERVED IN 5 OF 32 SURVEYED POOLS 11 FEB 1993. 50+ OBS IN 2 POOLS 31 JAN 1995; 2 AD DEPOSITED IN CAS. 0 OBS APR 1996. 10S IN 4 POOLS, 100S IN 1 POOL 9 JAN 1997. 0 OBS FEB 1998. 100S IN 1 POOL 16 FEB 2001. 0 OBS FEB 2004. 0 OBS JAN 2005.

Owner/Manager: CITY OF ROSEVILLE

Occurrence No. 44 **Map Index:** 32456 **EO Index:** 1903

Occ Rank: Fair
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1995-03-XX
Site: 1997-02-25

Record Last Updated: 2011-07-08

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.76087° / -121.33772°
UTM: Zone-10 N4291553 E644427
Area: 44.0 acres
Elevation: 120 ft

Mapping PrecisionSPECIFIC
Symbol Type:POLYGON

Township: 11N
Range: 06E
Section: 32 **Qtr:** NW
Meridian: M

Location: SILVERADO OAKS MITIGATION SITE, NW OF THE WOODCREEK OAKS BLVD & JUNCTION BLVD JCT, ABOUT 3 MI WNW OF ROSEVILLE PO.

Location Detail: 1995: 15 WETLANDS SAMPLED AMONG PARCELS 72 (EO#44, THIS OCCURRENCE) & 32 (EO#635). 1996: 10 SAMPLED. 1997: 13 SAMPLED. PROVIDED MAP GRAPHIC APPEARED SHIFTED WEST OF TRUE LOCATION; MAPPED TO AERIAL IMAGE MATCHING PRESERVED HABITAT.

Ecological: CONSTRUCTED AND SEASONAL HARDPAN VERNAL POOLS WITH NON-NATIVE ANNUAL GRASSLAND. PROTECTED WETLAND SURROUNDED BY RESIDENTIAL DEVELOPMENT.

General: 1995: BRANCHINECTA LYNCHI OBSERVED IN CONSTRUCTED VERNAL POOLS. 1996: NO B. LYNCHI OBSERVED, BUT LINDERIELLA OCCIDENTALIS PRESENT. 1997: NO B. LYNCHI OBSERVED, BUT L. OCCIDENTALIS PRESENT.

Owner/Manager: CITY OF ROSEVILLE

Branchinecta lynchi

vernal pool fairy shrimp

Element Code: ICBRA03030

Status
Federal: Threatened
State: None

NDDB Element Ranks
Global: G3
State: S2S3

Other Lists
CDFG Status:

Habitat Associations
General: ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.
Micro: INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

Occurrence No. 45 Map Index: 32457 EO Index: 1899
Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1995-03-14
Site: 1995-03-14
Record Last Updated: 1995-10-11

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.76950° / -121.32354°
UTM: Zone-10 N4292533 E645642
Radius: 1/5 mile
Elevation: 130 ft
Mapping Precision: NON-SPECIFIC
Symbol Type: POINT
Township: 11N
Range: 06E
Section: 29 Qtr: SE
Meridian: M

Location: BETWEEN KASEBERG CREEK & SOUTH BRANCH PLEASANT GROVE CREEK; 1.8 KM WEST OF SOUTHERN PACIFIC RR X HWY 65.

Location Detail: WOODCREEK OAKS MITIGATION SITES. 14 WATER BODIES WERE SAMPLED ON FEB 9, 10, 27 & MARCH 14, 1995. B. LYNCHI FOUND IN ONLY 1 POOL & ONLY ON 3/14/95.

Ecological: HARDPAN VERNAL POOL IN ANNUAL NON-NATIVE GRASSLAND. ON 3/14 THE SURFACE AREA WAS 129 SQ METERS & THE DEPTH WAS 18 CM. WETLAND COMPENSATION/MITIGATION PRESERVE.

General: POOL #C2: 50+ ADULTS OBSERVED; 1 ADULT COLLECTED & DEPOSITED IN CAS. THE INFORMATION PROVIDED BY THE CONSULTANT HAS CONFLICTING DATA ON THE LOCATION OF THIS POOL; THIS SITE WAS MAPPED ACCORDING TO THE MAP THEY PROVIDED, NOT THE T-R-S GIVEN.

Owner/Manager: PVT-SARES REGIS GROUP

Occurrence No. 46 Map Index: 32458 EO Index: 9535
Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1996-01-29
Site: 1996-01-29
Record Last Updated: 2008-04-29

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.85840° / -121.31539°
UTM: Zone-10 N4302411 E646168
Area: 19.0 acres
Elevation: 130 ft
Mapping Precision: SPECIFIC
Symbol Type: POLYGON
Township: 12N
Range: 06E
Section: 28 Qtr: SW
Meridian: M

Location: INGRAM SLOUGH; 3.2 KM ESE OF MOORE ROAD X FIDDYMENT ROAD; SSW OF LINCOLN.

Location Detail: LINCOLN CROSSING MITIGATION SITE. 1995: 10 TOTAL WETLANDS SAMPLED, THE INFORMATION FROM CONSULTANT HAD DISCREPANCIES BETWEEN FIELD SURVEY FORMS & MAP - MAPPED ACCORDING TO THEIR MAP. 1996: 42 TOTAL WATERBODIES WERE SURVEYED.

Ecological: CONSTRUCTED HARDPAN VERNAL POOL IN ANNUAL NON-NATIVE GRASSLAND. WETLAND COMPENSATION/MITIGATION PRESERVE.

General: 1995: <50 ADULTS OBSERVED IN POOL #211. 1996: <50 ADULTS OBSERVED IN 5 POOLS (101, 204, 206, 216 & 220). LINDERIELLA OCCIDENTALIS ALSO PRESENT IN MOST OF SITE DURING 1995 & 1996.

Owner/Manager: PVT-STERLING PACIFIC ASSETS

Branchinecta lynchi

vernal pool fairy shrimp

Element Code: ICBRA03030

Status
Federal: Threatened
State: None

NDDB Element Ranks
Global: G3
State: S2S3

Other Lists
CDFG Status:

Habitat Associations
General: ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.
Micro: INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

Occurrence No. 91 **Map Index:** 32516 **EO Index:** 1892

Dates Last Seen
Element: 1998-02-04
Site: 1998-02-04
Record Last Updated: 1998-09-29

Occ Rank: Excellent
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.86505° / -121.29394°
UTM: Zone-10 N4303184 E648015
Area:
Elevation: 140 ft
Mapping PrecisionNON-SPECIFIC
Symbol Type:POLYGON
Township: 12N
Range: 06E
Section: 27 **Qtr:** NW
Meridian: M

Location: EASTRIDGE SOUTHERN WETLAND PRESERVE, JUST EAST OF HWY 65 (AT THE LINCOLN RODEO GROUNDS), 0.5 MILE SE OF LINCOLN.

Ecological: NORTHERN HARDPAN VERNAL POOL HABITAT WITH CONSTRUCTED VERNAL POOLS (3.95 ACRES), CONSTRUCTED SEASONAL WETLANDS (1.95 ACRES), AND REFERENCE VERNAL POOLS IN ANNUAL GRASSLAND.

Threat: FUTURE RESIDENTIAL DEVELOPMENT PLANNED IN ADJACENT AREA; DIRT ROADS BISECT PRESERVE; GRAZING; RODEO GROUNDS TO THE NW.

General: 1995 (SECOND MONITORING YEAR): OBS IN 7 REFERENCE VERNAL POOLS, IN 17 CONSTRUCTED VERNAL POOLS, IN 2 1996 (THIRD YEAR): OBS IN 21 OF 45 CONSTRUCTED POOLS, 6 OF 10 REFERENCE POOLS. PRESENT ON-SITE IN 1997 AND 1998.

Owner/Manager: PVT-PLACER HOLDINGS

Occurrence No. 139 **Map Index:** 34813 **EO Index:** 1874

Dates Last Seen
Element: 1996-01-30
Site: 1996-03-11
Record Last Updated: 2002-03-22

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.80312° / -121.30397°
UTM: Zone-10 N4296295 E647273
Area: 33.4 acres
Elevation: 105 ft
Mapping PrecisionSPECIFIC
Symbol Type:POLYGON
Township: 11N
Range: 06E
Section: 16 **Qtr:** NE
Meridian: M

Location: NORTH OF ROSEVILLE; BETWEEN HWY 65 AND INDUSTRIAL AVENUE; 0.3 KM WSW OF HWY 65 X PLEASANT GROVE CREEK.

Location Detail: FOOTHILL BUSINESS PARK MITIGATION SITE, PARCEL 1. 1995: 12 WATERBODIES SURVEYED. 1996: 14 WATERBODIES SURVEYED. 1997: 29 WATERBODIES SURVEYED.

Ecological: CONSTRUCTED VERNAL POOLS WITHIN NON-NATIVE ANNUAL GRASSLAND. POOL #VP32-1995: SURFACE AREA WAS 0, DEPTH WAS 39.0 CM; 1996: SURFACE AREA WAS 461 SQ METERS, DEPTH WAS 19.0 CM.

General: 1/14/1997: 10'S SEEN IN 2 POOLS (VP12 & 29). 1/30/1996: >50 FAIRY SHRIMP OBSERVED IN POOL #VP32; LINDERIELLA OCCIDENTALIS ALSO PRESENT.

Owner/Manager: PVT-STANFORD RANCH

Branchinecta lynchi

vernal pool fairy shrimp — **Element Code:** ICBRA03030

Status	NDDB Element Ranks	Other Lists
Federal: Threatened	**Global:** G3	**CDFG Status:**
State: None	**State:** S2S3	

Habitat Associations

General: ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

Micro: INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

Occurrence No. 141 **Map Index:** 34819 **EO Index:** 17500

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1996-01-30
Site: 1996-01-30
Record Last Updated: 1996-07-17

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.86474° / -121.30580°
UTM: Zone-10 N4303130 E646987
Radius: 80 meters
Elevation: 140 ft
Mapping Precision: SPECIFIC
Symbol Type: POINT
Township: 12N
Range: 06E
Section: 28 **Qtr:** NE
Meridian: M

Location: NNW OF ROSEVILLE IN INGRAM SLOUGH; 0.4 KM WEST OF HWY 65 X INDUSTRIAL BLVD.

Location Detail: LICOLN CROSSING MITIGATION SITE. 1996: 42 TOTAL WATERBODIES SURVEYED.

Ecological: CONSTRUCTED HARDPAN VERNAL POOL WITHIN NON-NATIVE ANNUAL GRASSLAND. WETLAND COMPENSATION/MITIGATION PRESERVE.

General: 1996: <50 ADULTS OBSERVED IN POOL #222; SURFACE AREA=574 SQ METERS, WATER DEPTH=32.0 CM, TEMPERATURE= 11.5 DEGREES C, CONDUCTIVITY=75.80, TURBIDITY WAS LOW. LINDERIELLA ALSO PRESENT IN POOL AND IN SURROUNDING AREAS.

Owner/Manager: PVT-STERLING PACIFIC ASSETS

Occurrence No. 154 **Map Index:** 33672 **EO Index:** 30807

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2005-XX-XX
Site: 2005-XX-XX
Record Last Updated: 2006-03-23

Quad Summary: Roseville (3812173/528D), Pleasant Grove (3812174/528C)
County Summary: Placer

Lat/Long: 38.80163° / -121.37194°
UTM: Zone-10 N4296023 E641373
Area: 1,972.8 acres
Elevation: 95 ft
Mapping Precision: SPECIFIC
Symbol Type: POLYGON
Township: 11N
Range: 05E
Section: 13 **Qtr:** XX
Meridian: M

Location: NORTH OF PHILLIP ROAD IN THE VICINITY OF PLEASANT GROVE CREEK. NORTHWEST OF ROSEVILLE.

Location Detail: VERNAL POOLS ARE FOUND IN T11N, R05E, SECTIONS 13, 14 & 24 & IN T11N, R06E, SECTION 18. THIS AREA IS IN THE WEST ROSEVILLE SPECIFIC PLAN. PART OF THE AREA IS BEING DEVELOPED & PART IS AN OPEN SPACE PRESERVE.

Ecological: NATURAL VERNAL POOLS.

Threat: AREA IS BEING DEVELOPED.

General: 1993: OBS IN 16 OF 52 POOLS IN SEC 13, IN 4 OF 9 POOLS IN SEC 14. & IN 3 POOLS IN SEC 18. NO LEPIDURUS PACKARDI OBS. SUGNET RECORD #'S 87, 88 & 91. 2005: OBS IN NW 1/4 OF SEC 24 IN POOLS #273, 277, 287 & 291 & IN SEC 13 POOL #15.

Owner/Manager: UNKNOWN

Occurrence No. 155 **Map Index:** 33674 **EO Index:** 30808

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1993-01-27
Site: 1993-01-27
Record Last Updated: 2006-03-23

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.77370° / -121.36736°
UTM: Zone-10 N4292930 E641825
Area: 610.4 acres
Elevation: 110 ft
Mapping Precision: SPECIFIC
Symbol Type: POLYGON
Township: 11N
Range: 05E
Section: 25 **Qtr:** XX
Meridian: M

Location: SOUTH OF PHILLIP ROAD AND WEST OF FIDDYMENT ROAD. WNW OF ROSEVILLE.

Location Detail: VERNAL POOLS LOCATED SOMEWHERE IN SECTION 25.

Ecological: NATURAL VERNAL POOLS.

General: B. LYNCHI OBSERVED IN 5 OF 31 FEATURES INSPECTED. NO LEPIDURUS PACKARDI OBSERVED. SUGNET RECORD NUMBER 89.

Owner/Manager: UNKNOWN

Branchinecta lynchi

vernal pool fairy shrimp — Element Code: ICBRA03030

Status
Federal: Threatened
State: None

NDDB Element Ranks
Global: G3
State: S2S3

Other Lists
CDFG Status:

Habitat Associations
General: ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.
Micro: INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

Occurrence No. 156 **Map Index:** 33673 **EO Index:** 30806

Dates Last Seen
Element: 1993-02-18
Site: 1993-02-18

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Record Last Updated: 1997-04-07

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.80298° / -121.31236°
UTM: Zone-10 N4296266 E646544
Radius: 3/5 mile
Elevation: 100 ft
Mapping Precision: NON-SPECIFIC
Symbol Type: POINT
Township: 11N
Range: 06E
Section: 16 Qtr: XX
Meridian: M

Location: WEST OF HWY 65 & NORTH OF SCOW ROAD. NNW OF ROSEVILLE.
Location Detail: VERNAL POOLS LOCATED SOMEWHERE IN SECTION 16.
Ecological: NATURAL VERNAL POOLS.
General: B. LYNCHI WAS FOUND IN 5 OF 54 FEATURES INSPECTED. NO LEPIDURUS PACKARDI OBSERVED. SUGNET RECORD #90.
Owner/Manager: UNKNOWN

Occurrence No. 157 **Map Index:** 33676 **EO Index:** 30431

Dates Last Seen
Element: 1993-01-18
Site: 1993-01-18

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Record Last Updated: 1997-03-12

Quad Summary: Lincoln (3812183/528A), Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.87538° / -121.29395°
UTM: Zone-10 N4304331 E647993
Radius: 3/5 mile
Elevation: 150 ft
Mapping Precision: NON-SPECIFIC
Symbol Type: POINT
Township: 12N
Range: 06E
Section: 22 Qtr: XX
Meridian: M

Location: SOUTH OF AUBURN RAVINE, ON BOTH SIDES OF HWY 65, SOUTH OF LINCOLN.
Location Detail: VERNAL POOLS LOCATED SOMEWHERE IN SECTION 22.
Ecological: NATURAL VERNAL POOLS.
General: B. LYNCHI OBSERVED IN 2 OF 5 FEATURES INSPECTED. NO LEPIDURUS PACKARDI OBSERVED. SUGNET RECORD #95.
Owner/Manager: UNKNOWN

Occurrence No. 191 **Map Index:** 36947 **EO Index:** 31944

Dates Last Seen
Element: 1997-01-17
Site: 1997-01-17

Occ Rank: Good
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Record Last Updated: 2008-04-29

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.84424° / -121.31478°
UTM: Zone-10 N4300841 E646250
Radius: 1/5 mile
Elevation: 115 ft
Mapping Precision: NON-SPECIFIC
Symbol Type: POINT
Township: 12N
Range: 06E
Section: 33 Qtr: SW
Meridian: M

Location: ORCHARD CREEK AREA, 0.25 MILE NORTH OF ATHENS AVENUE (PLEASANT GROVE BLVD) AND WEST OF SPRR TRACKS, NORTH OF ROSEVILLE.
Location Detail: SITE IS LOCATED ON A 632-ACRE MITIGATION BANK PRESERVE. THIS UNDEVELOPED PASTURELAND IS BEING ESTABLISHED AS A MITIGATION BANK.
Ecological: HABITAT CONSISTS OF NORTHERN HARDPAN VERNAL POOLS.
Threat: DEVELOPMENT
General: AN UNSPECIFIED NUMBER OF FAIRY SHRIMP WERE OBSERVED ON 17 JAN 1997.
Owner/Manager: PVT-WILDLANDS INC

Branchinecta lynchi

vernal pool fairy shrimp

Element Code: ICBRA03030

Status
Federal: Threatened
State: None

NDDB Element Ranks
Global: G3
State: S2S3

Other Lists
CDFG Status:

Habitat Associations
General: ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.
Micro: INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

Occurrence No. 195 **Map Index:** 38256 **EO Index:** 33263
Occ Rank: Good
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1997-01-16
Site: 1997-01-16
Record Last Updated: 1998-03-02

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.78083° / -121.34926°
UTM: Zone-10 N4293749 E643384
Area:
Elevation: 120 ft
Mapping Precision: NON-SPECIFIC
Symbol Type: POLYGON
Township: 11N
Range: 06E
Section: 30 **Qtr:** XX
Meridian: M

Location: EAST OF FIDDYMENT ROAD, WEST OF FOOTHILLS BLVD, AND NORTH OF BASELINE ROAD, NW OF ROSEVILLE.

Ecological: HABITAT CONSISTS OF SEASONAL WETLANDS, REFERENCE VERNAL POOLS, AND CONSTRUCTED VERNAL POOLS WITHIN A DESIGNATED WETLAND MITIGATION AREA. SURROUNDING UPLAND CONSISTS OF NON-NATIVE ANNUAL GRASSLAND/MIXED OAK WOODLAND.

Threat: THREATENED BY SURROUNDING DEVELOPMENT (GOLF COURSES AND RESIDENTIAL DEVELOPMENT).

General: VERNAL POOL FAIRY SHRIMP WERE IDENTIFIED WITHIN 71 CONSTRUCTED VERNAL POOLS AND SEASONAL WETLANDS. LINDERIELLA OCCIDENTALIS ALSO OBSERVED.

Owner/Manager: PVT

Occurrence No. 196 **Map Index:** 38629 **EO Index:** 33636
Occ Rank: Fair
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1997-11-06
Site: 1997-11-06
Record Last Updated: 1998-04-20

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.85775° / -121.37303°
UTM: Zone-10 N4302249 E641167
Radius: 80 meters
Elevation: 100 ft
Mapping Precision: SPECIFIC
Symbol Type: POINT
Township: 12N
Range: 05E
Section: 25 **Qtr:** SW
Meridian: M

Location: MOORE RANCH PROPERTY, 0.8 MILE NORTH OF PLEASANT VALLEY ROAD, SOUTH OF AUBURN RAVINE, 7 MILES NNW OF ROSEVILLE.

Ecological: HABITAT CONSISTS OF A VERNAL POOL IN GRAZED ANNUAL GRASSLAND.

General: SITE WAS HISTORICALLY (SINCE AT LEAST 1937) DISKED; HAS ONLY BEEN GRAZED OVER THE PAST SEVERAL YEARS. 6 CYSTS FOUND IN POOL #3 (PRESUMED TO BE BRANCHINESTA LYNCHI, SINCE THAT IS THE ONLY MEMBER OF THAT GENUS KNOWN TO OCCUR IN THIS AREA).

Owner/Manager: UNKNOWN

Occurrence No. 235 **Map Index:** 42745 **EO Index:** 42745
Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1997-01-17
Site: 1997-01-17
Record Last Updated: 2000-04-12

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.84578° / -121.30899°
UTM: Zone-10 N4301021 E646749
Radius: 80 meters
Elevation: 120 ft
Mapping Precision: SPECIFIC
Symbol Type: POINT
Township: 12N
Range: 06E
Section: 33 **Qtr:** SE
Meridian: M

Location: 0.5 MILE N OF PLEASANT GROVE RD & SP RR, 1.7 MILES ESE OF ORCHARD CREEK & INGRAM SLOUGH CONFLUENCE, NNW OF ROSEVILLE.

Location Detail: FOUND IN THE SOUTHEAST PORTION OF THE ORCHARD CREEK MIDIGATION BANK. MAJORITY OF VERNAL POOLS ARE ON SAN JOAQUIN SANDY LOAM AND ALAMO-FIDDYMENT COMPLEX SOILS.

Ecological: VERNAL POOLS ENDEMIC VEGETATION: RANUNCULUS ALVEOLATUS, ERYNGIUM VASEYI, PLAGIOBOTHRYS STIPITAUS, PSILICARPHUS ZIZYPHOROIDES, DESCHAMPSIA DAMTHONIOIDES, NAVARRETIA LEUCOCEPHALA

General: OBSERVED SHRIMP IN 2 OF THE 170 SURVEY POOLS SAMPLED. THIS POOL WAS RATED AS LOW IN ABUNDANCE (LESS THAN ONE INDIVIDUAL PER PULL).

Owner/Manager: UNKNOWN

Branchinecta lynchi

vernal pool fairy shrimp — **Element Code:** ICBRA03030

Status
Federal: Threatened
State: None

NDDB Element Ranks
Global: G3
State: S2S3

Other Lists
CDFG Status:

Habitat Associations
General: ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.
Micro: INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

Occurrence No. 236 **Map Index:** 42746 **EO Index:** 42746

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1997-01-17
Site: 1997-01-17
Record Last Updated: 2000-04-12

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.84043° / -121.32009°
UTM: Zone-10 N4300410 E645796
Radius: 80 meters
Elevation: 115 ft
Mapping Precision: SPECIFIC
Symbol Type: POINT
Township: 12N
Range: 06E
Section: 33 **Qtr:** SW
Meridian: M

Location: 0.7 MILE W OF PLEASANT GROVE RD & SP RR, 1.3 MILES SE OF ORCHARD CREEK & INGRAM SLOUGH CONFLUENCE, NNW OF ROSEVILLE.

Location Detail: FOUND IN THE SOUTHWEST PORTION OF THE ORCHARD CREEK MIDIGATION BANK. MAJORITY OF VERNAL POOLS ARE ON SAN JOAQUIN SANDY LOAM AND ALAMO-FIDDYMENT COMPLEX SOILS.

Ecological: VERNAL POOLS ENDEMIC VEGETATION: RANUNCULUS ALVEOLATUS, ERYNGIUM VASEYI, PLAGIOBOTHRYS STIPITAUS, PSILICARPHUS ZIZYPHOROIDES, DESCHAMPSIA DAMTHONIOIDES, NAVARRETIA LEUCOCEPHALA

General: OBSERVED SHRIMP IN 2 OF THE 170 SURVEY POOLS SAMPLED. THIS POOL WAS RATED MEDIUM IN ABUNDANCE (1 TO 5 INDIVIDUALS PER PULL).

Owner/Manager: UNKNOWN

Occurrence No. 247 **Map Index:** 43395 **EO Index:** 43395

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2001-03-08
Site: 2001-03-08
Record Last Updated: 2004-06-22

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.82671° / -121.29569°
UTM: Zone-10 N4298927 E647942
Radius: 80 meters
Elevation: 150 ft
Mapping Precision: SPECIFIC
Symbol Type: POINT
Township: 11N
Range: 06E
Section: 03 **Qtr:** SW
Meridian: M

Location: STANFORD RANCH NORTH, 0.75 MILES NNE JCT OF SUNSET BLVD & HWY 65, 1.8 MILES WSW OF TELEGRAPH HILL, ~4 MILES N OF ROCKLIN

Location Detail: VERNAL POOL AT THIS SITE NUMBERED VP42, MAX SURFACE AREA ~10 METERS BY 13 METERS & 35 CM DEEP. B. LYNCHI FOUND IN 1 OF 65 SEASONAL WATERBODIES SURVEYED BETWEEN 28 JAN & 24 MAR 2000.

Ecological: HABITAT CONSISTS OF FORMERLY GRAZED, NON-NATIVE ANNUAL GRASSLAND, INTERSPERSED WITH VERNAL POOLS.

Threat: DISTURBED FIELD (SOURCE OF DISTURBANCE NOT GIVEN)

General: VPFS NUMBERING IN THE 10'S OBSERVED ON 11 FEB 2000 (2 FEMALES) AND ON 25 FEB 2000 (2 MALES) IN VERNAL POOL #VP42. 8 MAR 2001: 1 MALE OBSERVED WITHIN POOL #42.

Owner/Manager: PVT

Branchinecta lynchi

vernal pool fairy shrimp

Element Code: ICBRA03030

Status
Federal: Threatened
State: None

NDDB Element Ranks
Global: G3
State: S2S3

Other Lists
CDFG Status:

Habitat Associations
General: ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.
Micro: INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

Occurrence No. 293 Map Index: 45435 EO Index: 45435

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2006-01-10
Site: 2006-01-10
Record Last Updated: 2006-03-22

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.77040° / -121.27237°
UTM: Zone-10 N4292715 E650085
Area: 13.3 acres
Elevation: 185 ft

Mapping Precision:SPECIFIC
Symbol Type:POLYGON

Township: 11N
Range: 06E
Section: 26 Qtr: SE
Meridian: M

Location: HIGHLAND RESERVE SOUTH OPEN SPACE, ON THE WEST SIDE OF EAST ROSEVILLE PARKWAY, ROSEVILLE.

Location Detail: FOUND IN POOLS #5, #8, AND #27 IN 2003; IN POOL LVP IN 2006.

Ecological: HABITAT CONSISTS OF ANNUAL GRASSLAND INTERSPERSED WITH BOTH CONSTRUCTED AND HISTORIC VERNAL POOLS.

General: 10'S OBSERVED IN POOL #8 AND 100'S OBSERVED IN POOL #27 ON 16 FEB 2001. ONLY 2 FEMALES OBSERVED IN POOL #5 ON 4 JAN 2002. 10'S OF ADULTS OBSERVED 24 JAN 2003 IN POOL #5.

Owner/Manager: CITY OF ROSEVILLE

Occurrence No. 304 Map Index: 46034 EO Index: 46034

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2003-01-17
Site: 2003-01-17
Record Last Updated: 2004-10-28

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.76449° / -121.34970°
UTM: Zone-10 N4291935 E643379
Radius: 80 meters
Elevation: 125 ft

Mapping Precision:SPECIFIC
Symbol Type:POINT

Township: 11N
Range: 06E
Section: 31 Qtr: NW
Meridian: M

Location: WOODCREEK WEST WETLAND COMPENSATION AREA. 2.7 MILES NW OF WEST EDGE OF ROSEVILLE.

Location Detail: 0.9 MILES NORTH OF THE INTERSECTION OF FIDDYMENT ROAD AND BASE LINE ROAD AND THEN NEAR 0.8 MILES DIRECTLY EAST.

Ecological: HABITAT CONSISTS OF ANNUAL GRASSLAND INTERSPERSED WITH CONSTRUCTED AND HISTORIC VERNAL POOLS.

General: MORE THAN 10 ADULTS OBSERVED IN POOL 55 ON 15 FEB 2001. 10'S OF ADULTS OBSERVED IN POOLS 49 AND 55 ON 17 JAN 2003.

Owner/Manager: CITY OF ROSEVILLE

Occurrence No. 307 Map Index: 46096 EO Index: 46096

Occ Rank: Fair
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2001-03-09
Site: 2001-03-09
Record Last Updated: 2001-10-10

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.87145° / -121.32514°
UTM: Zone-10 N4303844 E645295
Radius: 80 meters
Elevation: 120 ft

Mapping Precision:SPECIFIC
Symbol Type:POINT

Township: 12N
Range: 06E
Section: 20 Qtr: SE
Meridian: M

Location: SW OF LINCOLN; 0.15 MILES SOUTH OF MOORE ROAD AND 0.25 MILES NW OF INGRAM SLOUGH.

Ecological: HABITAT CONSISTS OF LAND WHICH HAS BEEN DRY-FARMED (DISKED ETC.)

Threat: AGRICULTURE - DRY-FARMING.

General: 10'S OF ADULTS OBSERVED. 5 INDIVIDUALS COLLECTED TO BE DEPOSITED AT CAL ACADEMY OF SCIENCES.

Owner/Manager: UNKNOWN

Branchinecta lynchi

vernal pool fairy shrimp

Element Code: ICBRA03030

Status
Federal: Threatened
State: None

NDDB Element Ranks
Global: G3
State: S2S3

Other Lists
CDFG Status:

Habitat Associations
General: ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.
Micro: INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

Occurrence No. 308 **Map Index:** 46098 **EO Index:** 46098

Occ Rank: Fair
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2001-03-09
Site: 2001-03-09
Record Last Updated: 2001-10-10

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.85475° / -121.32838°
UTM: Zone-10 N4301986 E645048
Radius: 80 meters
Elevation: 120 ft

Mapping Precision: SPECIFIC
Symbol Type: POINT

Township: 12N
Range: 06E
Section: 29 **Qtr:** SE
Meridian: M

Location: SW OF LINCOLN. 1.1 MILES EAST FIDDYMENT RD & 1.1 MILES NORTH PLEASANT GROVE RD BETWEEN INGRAM SLOUGH & ORCHARD CREEK.

Location Detail: 375 FT SOUTH OF POND.

Ecological: HABITAT CONSISTS OF GRAZED NON-NATIVE GRASSLAND. LINDERIELLA OCCIDENTALIS ALSO FOUND HERE.

General: 10'S OF ADULTS OBSERVED. 6 COLLECTED TO BE DEPOSITED AT CAL ACADEMY OF SCIENCES.

Owner/Manager: UNKNOWN

Occurrence No. 309 **Map Index:** 46106 **EO Index:** 46106

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2001-03-07
Site: 2005-01-07
Record Last Updated: 2005-10-17

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.78973° / -121.33683°
UTM: Zone-10 N4294757 E644445
Area:
Elevation: 115 ft

Mapping Precision: NON-SPECIFIC
Symbol Type: POLYGON

Township: 11N
Range: 06E
Section: 20 **Qtr:** NW
Meridian: M

Location: 1 MILE SW OF THE INTERSECTION OF FIDDYMENT ROAD AND PLEASANT GROVE CREEK, ROSEVILLE

Location Detail: WOODCREEK NORTH OPEN SPACE PRESERV/WETLAND COMPENSATION AREA; POOL #6.

Ecological: HABITAT CONSISTS OF ANNUAL GRASSLAND WITH CONSTRUCTED AND HISTORIC VERNAL POOLS SURROUNDED BY OAK WOODLAND. LINDERIELLA OCCIDENTALIS ALSO FOUND HERE.

General: MORE THAN 100 INDIVIDUALS OBSERVED IN POOL #6 ON 7 MAR 2001. NONE OBSERVED DURING A SURVEY CONDUCTED ON 28 FEB 2002. NONE OBSERVED 7 JAN 2005.

Owner/Manager: CITY OF ROSEVILLE

Occurrence No. 315 **Map Index:** 64299 **EO Index:** 47900

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2005-03-02
Site: 2005-03-02
Record Last Updated: 2011-04-25

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.84960° / -121.35768°
UTM: Zone-10 N4301369 E642515
Area:
Elevation: 100 ft

Mapping Precision: NON-SPECIFIC
Symbol Type: POLYGON

Township: 12N
Range: 06E
Section: 31 **Qtr:** NW
Meridian: M

Location: IN THE GENERAL AREA NW OF FIDDYMENT RD AT E CATLETT RD, S OF ORCHARD CREEK, 4.5 MILES SW OF LINCOLN PO.

Location Detail: IN 2002, B. LYNCHI FOUND IN POOLS #49 & 135. IN 2003, B. LYNCHI FOUND IN POOLS #31, 156, 161 & 210. IN 2005, B. LYNCHI FOUND IN POOLS #116 & 210. LOCATED IN NW1/4 SEC 31 & NE1/4 SEC 36.

Ecological: HABITAT CONSISTS OF A GRASSLAND/VERNAL POOL RESTORATION SITE. LINDERIELLA OCCIDENTALIS ALSO FOUND AT THIS SITE.

General: NONE OBSERVED IN 1997. 10'S - 100'S OBSERVED ON 14 JAN 2002. 10'S OBSERVED IN EACH POOL DURING SURVEYS ON 17 & 23 JAN 2003. 10'S OBSERVED 2 MAR 2005.

Owner/Manager: MOORE RANCH CONSERVANCY

Branchinecta lynchi

vernal pool fairy shrimp — Element Code: ICBRA03030

Status
Federal: Threatened
State: None

NDDB Element Ranks
Global: G3
State: S2S3

Other Lists
CDFG Status:

Habitat Associations
General: ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.
Micro: INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

Occurrence No. 320 **Map Index:** 48242 **EO Index:** 48242

Dates Last Seen
Element: 2002-01-10
Site: 2002-01-10

Occ Rank: Excellent
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Record Last Updated: 2002-07-15

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.84871° / -121.31724°
UTM: Zone-10 N4301333 E646027
Area:
Elevation: 120 ft

Mapping Precision: NON-SPECIFIC
Symbol Type: POLYGON

Township: 12N
Range: 06E
Section: 33 Qtr: XX
Meridian: M

Location: ORCHARD CREEK CONSERVATION SITE; 6 MILES NORTH OF ROSEVILLE.

Location Detail: 0.8 MILE SOUTH OF MOORE ROAD AND 1.2 MILES EAST OF FIDDYMENT ROAD. BORDERED TO THE SOUTH BY PLEASANT GROVE BLVD AND TO THE EAST BY RAILROAD TRACKS.

Ecological: HABITAT CONSISTS OF NATURALLY OCCURRING VERNAL POOLS, SEASONAL WET SWALES, EMERGENT MARSH, SEASONAL WETLANDS AND INTERMITTANT/SEASONAL STREAMS. MAJORITY OF VERNAL POOLS LOCATED ON SAN JOAQUIN SANDY LOAM AND ALAMO-FIDDYMENT COMPLEX SOILS.

General: 100'S OF ADULTS OBSERVED WITHIN UNKNOWN NUMBER OF POOLS ON 10 JAN 2002. VERNAL POOLS CONCENTRATED THROUGHOUT THIS SITE.

Owner/Manager: PVT-WILDLANDS INC

Occurrence No. 329 **Map Index:** 48419 **EO Index:** 48419

Dates Last Seen
Element: 2005-01-10
Site: 2005-01-10

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Record Last Updated: 2005-12-28

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.76501° / -121.35644°
UTM: Zone-10 N4291982 E642792
Radius: 80 meters
Elevation: 130 ft

Mapping Precision: SPECIFIC
Symbol Type: POINT

Township: 11N
Range: 06E
Section: 31 Qtr: NW
Meridian: M

Location: 3.5 MILES WNW OF ROSEVILLE; JUST NORTH OF POWER LINES, 0.1 MILE EAST OF FIDDYMENT ROAD.

Location Detail: WOODCREEK WEST WETLAND COMPENSATION AREA, POOLS #17 (2002), #8, #22 (2003), #22 (2005) .

Ecological: HABITAT CONSISTS OF CONSTRUCTED AND HISTORIC VERNAL POOLS WITHIN AN ANNUAL GRASSLAND HABITAT; WETLAND COMPENSATION AREA. POOL DEPTH: 15CM. SURROUNDING LAND IS DEVELOPMENT.

General: 10'S OBSERVED ON 18 JAN 2002 IN A POOL CONSTRUCTED IN 1990. ON 17 JAN 2003 10'S OBSERVED IN POOL #8 AND HUNDREDS OBSERVED IN POOL #22. 10 JAN 2005: 10'S OBS IN POOL #22 (FOUND IN 1 OF 22 POOLS SAMPLED).

Owner/Manager: CITY OF ROSEVILLE

Branchinecta lynchi

vernal pool fairy shrimp

Element Code: ICBRA03030

Status
Federal: Threatened
State: None

NDDB Element Ranks
Global: G3
State: S2S3

Other Lists
CDFG Status:

Habitat Associations
General: ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.
Micro: INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

Occurrence No. 412 Map Index: 64328 EO Index: 64407
Occ Rank: Good
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2005-02-10
Site: 2005-02-10
Record Last Updated: 2006-03-23

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.78444° / -121.36823°
UTM: Zone-10 N4294120 E641729
Radius: 80 meters
Elevation: 90 ft

Mapping Precision:SPECIFIC
Symbol Type:POINT

Township: 11N
Range: 05E
Section: 24 Qtr: XX
Meridian: M

Location: ABOUT 0.6 MILES WNW OF INTERSECTION OF FIDDYMENT AND PHILLIPS ROADS.

Location Detail: POOL #590

Ecological: IN AGRICULTURAL AND RESIDENTIAL AREA.

General: 10S OBSERVED.

Owner/Manager: PVT

Occurrence No. 635 Map Index: 82419 EO Index: 83441
Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1995-02-06
Site: 1995-03-02
Record Last Updated: 2011-04-29

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.76601° / -121.31850°
UTM: Zone-10 N4292153 E646086
Area: 14.0 acres
Elevation: 130 ft

Mapping Precision:SPECIFIC
Symbol Type:POLYGON

Township: 11N
Range: 06E
Section: 33 Qtr: NW
Meridian: M

Location: OPEN AREA BETWEEN RESIDENTIAL HOUSING NE OF COUNTRY CLUB DR AT ACTON WAY, CENTERED ABOUT 2.2 MI NW OF ROSEVILLE PO.

Location Detail: 1995: 15 TOTAL WETLANDS SAMPLED BETWEEN PARCELS 32 (EO#635, THIS OCCURRENCE) & 72 (EO#44). PROVIDED MAP GRAPHIC APPEARED SHIFTED WEST OF TRUE LOCATION; MAPPED TO AERIAL IMAGE MATCHING PRESERVED HABITAT.

Ecological: CONSTRUCTED AND SEASONAL HARDPAN VERNAL POOLS WITH NON-NATIVE ANNUAL GRASSLAND.

General: BRANCHINECTA LYNCHI OBSERVED IN CONSTRUCTED VERNAL POOLS SOMETIME BETWEEN 6 FEB AND 2 MAR 1995.

Owner/Manager: CITY OF ROSEVILLE

Buteo swainsoni

Swainson's hawk — Element Code: ABNKC19070

Status
Federal: None
State: Threatened

NDDB Element Ranks
Global: G5
State: S2

Other Lists
CDFG Status:

Habitat Associations
General: BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS
Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence No. 791 **Map Index:** 42026 **EO Index:** 42026

Dates Last Seen
Element: 1996-07-01
Site: 1997-XX-XX

Occ Rank: Fair
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Record Last Updated: 1999-12-14

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.77076° / -121.34480°
UTM: Zone-10 N4292639 E643792
Radius: 80 meters
Elevation: 125 ft

Mapping Precision: SPECIFIC
Symbol Type: POINT

Township: 11N
Range: 06E
Section: 30 Qtr: SE
Meridian: M

Location: KASEBERG CREEK, 0.75 MILE EAST OF FIDDYMENT ROAD AND 0.25 MILE NORTH OF PLEASANT GROVE BOULEVARD, EAST SIDE OF ROSEVILLE

Location Detail: NEST TREE IS LOCATED IN WHAT IS NOW THE NORTH EDGE OF AN OPEN SPACE CORRIDOR.

Ecological: HABITAT CONSISTS OF A WOODLAND CORRIDOR ALONG THE CREEK DRAINAGE.

Threat: THREATENED BY THE CONSTRUCTION OF A SUBDIVISION AND GOLF COURSE.

General: NESTING WAS INITIATED IN 1996, DURING GRADING, BUT PRIOR TO CONSTRUCTION, OF HOUSING; 2 YOUNG PRODUCED IN 1996. NEST SITE WAS UNUSED IN 1997, ALTHOUGH NEST TREE IS WITHIN AN OPEN SPACE CORRIDOR.

Owner/Manager: UNKNOWN

Occurrence No. 952 **Map Index:** 46025 **EO Index:** 46025

Dates Last Seen
Element: 2001-06-XX
Site: 2001-06-27

Occ Rank: Good
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Record Last Updated: 2001-10-03

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.79509° / -121.34800°
UTM: Zone-10 N4295334 E643465
Radius: 80 meters
Elevation: 110 ft

Mapping Precision: SPECIFIC
Symbol Type: POINT

Township: 11N
Range: 06E
Section: 19 Qtr: N
Meridian: M

Location: ALONG PLEASANT GROVE CREEK, BETWEEN FIDDYMENT ROAD AND BLUE OAKS BOULEVARD, WEST SIDE OF ROSEVILLE

Ecological: NEST TREE WAS A BLUE OAK; SURROUNDING HABITAT CONSISTS OF BLUE OAK WOODLAND GROWING ALONG PLEASANT GROVE CREEK.

Threat: THREATENED BY DEVELOPMENT JUST WEST OF THE NEST SITE.

General: DARK-PHASE ADULT SWHA OBSERVED ON 26 APR 2001; NO NEST FOUND. NEST FOUND BY THOMAS LEEMAN (ESA), AND HE REPORTED THAT AT 2 YOUNG HAD BEEN PRODUCED. BY 27 JUN 2001, WHEN WE RETURNED TO GPS THE NEST, THE YOUNG HAD FLEDGED.

Owner/Manager: UNKNOWN

Occurrence No. 1484 **Map Index:** 62615 **EO Index:** 62652

Dates Last Seen
Element: 2001-07-02
Site: 2001-07-02

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Record Last Updated: 2005-09-20

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.86491° / -121.37009°
UTM: Zone-10 N4303048 E641408
Radius: 80 meters
Elevation: 50 ft

Mapping Precision: SPECIFIC
Symbol Type: POINT

Township: 12N
Range: 05E
Section: 25 Qtr: XX
Meridian: M

Location: 0.2 MILE SOUTH OF MOORE ROAD AND 0.4 MILE EAST OF SOUTH DOWD AVENUE, AUBURN RAVINE, SW OF LINCOLN

Ecological: NEST TREE IS A VALLEY OAK; SURROUNDED BY PASTURE TO THE NE AND NW, AND RIPARIAN TO THE SE AND SW.

General: ACTIVE NEST OBSERVED ON 2 JUL 2001; UNABLE TO SEE INTO NEST TO COUNT CHICKS.

Owner/Manager: UNKNOWN

Chloropyron molle ssp. hispidum

hispid bird's-beak

Element Code: PDSCR0J0D1

Status
Federal: None
State: None

NDDB Element Ranks
Global: G2T2
State: S2.1

Other Lists
CNPS List: 1B.1

Habitat Associations
General: MEADOWS, PLAYAS, VALLEY AND FOOTHILL GRASSLAND.
Micro: IN DAMP ALKALINE SOILS, ESPECIALLY IN ALKALINE MEADOWS AND ALKALI SINKS WITH DISTICHLIS. 10-155M.

Occurrence No. 11 Map Index: 11763 EO Index: 17846

Occ Rank: Good
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1997-06-18
Site: 1997-06-18

Record Last Updated: 2011-08-04

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.81335° / -121.26006°
UTM: Zone-10 N4297502 E651064
Area: 25.4 acres
Elevation: 150 ft

Mapping Precision: SPECIFIC
Symbol Type: POLYGON

Township: 11N
Range: 06E
Section: 12 Qtr: SW
Meridian: M

Location: APPROXIMATELY 4 MILES NE OF ROSEVILLE.

Location Detail: WITHIN STANFORD RANCH ALKALI SEEP PRESERVE, SPRING VALLEY. SITE IS NEAR PARK DRIVE AND STANFORD RANCH ROAD INTERSECTION. IN THE SW 1/4 SECTION 12. NEAR 3 SEEPS.

Ecological: SPRING FED ALKALI MEADOW WITH DISTICHLIS SPICATA, SCIRPUS OLNEYI, FRANKENIA GRANDIFOLIA VAR. CAMPESTRIS, CRESSA TRUXILLENSIS, MONERMA CYLINDRICA, AND LIPPIA NODIFLORA. AREA SURROUNDED BY ALAMO VARIANT CLAY, BUT SOIL AT SITE IS UNCLASSIFIED.

Threat: GRAZING REMOVED BY 1991, FILL HAD BEEN DUMPED ON SITE IN 1989; SUBSEQUENTLY REMOVED TO RESOLVE WETLANDS VIOLATIONS.

General: OVER 10,000 PLANTS SEEN IN 1982, 2000-5000 SEEN IN 1989, AND ~2500 IN 1991. ACCORDING TO DAINS, DECLINE IN POP PROBABLY DUE TO WEATHER, NOT MANAGEMENT. SITE FENCED, HABITAT LOOKED GOOD IN LATE SEASON (JUNE) 1997 WINDSHIELD SURVEY.

Owner/Manager: PVT

Downingia pusilla

dwarf downingia

Element Code: PDCAM060C0

Status
Federal: None
State: None

NDDB Element Ranks
Global: G2
State: S2

Other Lists
CNPS List: 2.2

Habitat Associations
General: VALLEY AND FOOTHILL GRASSLAND (MESIC SITES), VERNAL POOLS.
Micro: VERNAL LAKE AND POOL MARGINS WITH A VARIETY OF ASSOCIATES. IN SEVERAL TYPES OF VERNAL POOLS. 1-485M.

Occurrence No. 33 Map Index: 11696 EO Index: 17398
Occ Rank: Good
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1985-04-19
Site: 1985-04-19
Record Last Updated: 1989-08-11

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.82711° / -121.28884°
UTM: Zone-10 N4298982 E648536
Radius: 1/5 mile
Elevation: 145 ft
Mapping Precision: NON-SPECIFIC
Symbol Type: POINT
Township: 11N
Range: 06E
Section: 03
Meridian: M
Qtr: SE

Location: 0.75 MILE SOUTH OF THE INTERSECTION OF HIGHWAY 65 AND PLEASANT GROVE ROAD, EAST OF HIGHWAY 65.
Ecological: VERNAL POOL ON CLAYPAN SUBSTRATE. ASSOCIATED WITH DOWNINGIA BICORNUTA, D. ORNATISSIMA, ALLOCARYA STIPITATA MICRANTHA.
Threat: AREA GRAZED, BUT LITTLE DISTURBANCE. PARCEL TO EAST BEING DEVELOPED.
General: MORE THAN 30 PLANTS OBSERVED IN 1985.
Owner/Manager: PVT, CALTRANS

Occurrence No. 36 Map Index: 11732 EO Index: 13217
Occ Rank: None
Origin: Natural/Native occurrence
Presence: Possibly Extirpated
Trend: Decreasing

Dates Last Seen
Element: 1987-04-15
Site: 1997-06-18
Record Last Updated: 1997-08-11

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.76878° / -121.26884°
UTM: Zone-10 N4292541 E650396
Radius: 1/5 mile
Elevation: 210 ft
Mapping Precision: NON-SPECIFIC
Symbol Type: POINT
Township: 11N
Range: 06E
Section: 26
Meridian: M
Qtr: SE

Location: NE OF ROSEVILLE AND SW OF ROCKLIN POWER LINE.
Ecological: VERNAL POOL ON INKS-EXCHEQUER SOILS. ASSOCIATED WITH ALLOCARYA STIPITATA MICRANTHA, ALOPECURUS HOWELLII, LASTHENIA CHRYSOSTOMA, AND ERYNGIUM VASEYI.
Threat: SITE GRAZED AND RUTTED BY VEHICLE TRACKS. ROSEVILLE PLANS TO RETAIN AS URBAN RESERVE, BUT DEVELOPMENT SURROUNDS.
General: 1000-1500 PLANTS IN 1987. THIS AREA WAS GRADED WHEN VISITED IN 1997. SITE IS NOW LOCATED SOUTH OF ROSEVILLE PARKWAY AT DIAMOND OAKS ROAD.
Owner/Manager: UNKNOWN

Occurrence No. 37 Map Index: 11676 EO Index: 17396
Occ Rank: None
Origin: Natural/Native occurrence
Presence: Extirpated
Trend: Unknown

Dates Last Seen
Element: 1987-04-15
Site: 1997-06-18
Record Last Updated: 1997-08-11

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.78878° / -121.29828°
UTM: Zone-10 N4294713 E647796
Radius: 1/5 mile
Elevation: 135 ft
Mapping Precision: NON-SPECIFIC
Symbol Type: POINT
Township: 11N
Range: 06E
Section: 22
Meridian: M
Qtr: NW

Location: NORTH OF ROSEVILLE, EAST OF HIGHWAY 65, 2500 FEET EAST OF HIGHWAY 65 / HIGHWAY 65 BYPASS JUNCTION.
Ecological: SHALLOW VERNAL POOLS ON COMETA-FIDDYMENT SOILS COMPLEX. ASSOCIATED WITH ALLOCARYA STIPITATA MICRANTHA, CRASULA AQUATICA, DOWNINGIA ORNATISSIMA, AND GRATIOLA EBRACTEATA.
Threat: SITE GRAZED. THREATENED BY INDUSTRIAL PARK DEVELOPMENT TO SOUTHEAST.
General: MORE THAN 7000 PLANTS IN THREE VERNAL POOLS IN 1987. SITE WAS GRADED WHEN VISITED IN 1997. PLANTS PRESUMED EXTIRPATED.
Owner/Manager: UNKNOWN

Downingia pusilla

dwarf downingia

Element Code: PDCAM060C0

Status
Federal: None
State: None

NDDB Element Ranks
Global: G2
State: S2

Other Lists
CNPS List: 2.2

Habitat Associations
General: VALLEY AND FOOTHILL GRASSLAND (MESIC SITES), VERNAL POOLS.
Micro: VERNAL LAKE AND POOL MARGINS WITH A VARIETY OF ASSOCIATES. IN SEVERAL TYPES OF VERNAL POOLS. 1-485M.

Occurrence No. 60 **Map Index:** 26041 **EO Index:** 5230

Occ Rank: Excellent
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1990-04-14
Site: 1990-04-14
Record Last Updated: 1994-08-08

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.85815° / -121.30393°
UTM: Zone-10 N4302402 E647162
Area: 10.1 acres
Elevation: 130 ft
Mapping Precision: SPECIFIC
Symbol Type: POLYGON
Township: 12N
Range: 06E
Section: 28 **Qtr:** SE
Meridian: M

Location: BETWEEN HIGHWAY 65 AND INDUSTRIAL BLVD NORTH OF ORCHARD CREEK, 2.2 MILES SOUTH OF LINCOLN.

Location Detail: MAPPED ABOUT 0.6 AIR MILE SSW OF THE LINCOLN RODEO GROUNDS. WITHIN THE NE 1/4 OF THE SE 1/4 OF SECTION 28 AND THE NW 1/4 OF THE SW 1/4 OF SECTION 27.

Ecological: NORTHERN CLAYPAN VERNAL POOLS ON SAN JOAQUIN SOIL SERIES AND NORTHERN VOLCANIC MUDFLOW VERNAL POOLS ON EXCHEQUER SERIES SOILS. ASSOCIATED WITH PLAGIOBOTHRYS STIPITATUS, DOWNINGIA BICORNUTA, LASTHENIA FREMONTII, NAVARRETIA LEUCOCEPHALA, ETC.

Threat: SITE IS CURRENTLY GRAZED BY CATTLE. GENERAL AREA IS BEING DEVELOPED RAPIDLY.

General: MORE THAN 1000 PLANTS OBSERVED IN 1989. 237 PLANTS OBSERVED IN 1990. SITE HAS MANY LARGE POOLS, SWALES AND VERNAL FLATS. SAN JOAQUIN SERIES AND MUDFLOW POOLS BOTH PRESENT. AREA SHOULD BE EVALUATED FOR REGIONAL POOL PRESERVE.

Owner/Manager: PVT

Occurrence No. 97 **Map Index:** 43402 **EO Index:** 43402

Occ Rank: Good
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2000-04-12
Site: 2000-04-12
Record Last Updated: 2000-08-10

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.79212° / -121.36556°
UTM: Zone-10 N4294977 E641946
Area: 1.8 acres
Elevation: 95 ft
Mapping Precision: SPECIFIC
Symbol Type: POLYGON
Township: 11N
Range: 05E
Section: 24 **Qtr:** NE
Meridian: M

Location: JUST WEST OF CONFLUENCE OF KASEBERG CREEK AND PLEASANT GROVE CREEK, NORTHWEST OF ROSEVILLE.

Location Detail: MAPPED IN SINGLE POOL ABOUT 0.35 MILE WEST OF ELBOW IN FIDDYMENT ROAD. WITHIN THE NW 1/4 NE 1/4 SECTION 24.

Ecological: VERNAL POOLS DOMINATED BY PLAGIOBOTHRYS STIPITATUS, POGOGYNE ZIZIPHOROIDES, PSILOCARPHUS BREVISSIMUS, NAVARETTIA LEUCOCEPHALA, AND HORDEUM MURINUM SSP. GOSSONEANUM.

Threat: SITE IS GRAZED AND RECEIVES RUNOFF FROM ADJACENT HOUSING. AREA IS SLATED FOR DEVELOPMENT.

General: UNKNOWN NUMBER OF PLANTS OBSERVED IN SINGLE POOL IN 2000.

Owner/Manager: PVT

Downingia pusilla

dwarf downingia

Element Code: PDCAM060C0

Status
Federal: None
State: None

NDDB Element Ranks
Global: G2
State: S2

Other Lists
CNPS List: 2.2

Habitat Associations
General: VALLEY AND FOOTHILL GRASSLAND (MESIC SITES), VERNAL POOLS.
Micro: VERNAL LAKE AND POOL MARGINS WITH A VARIETY OF ASSOCIATES. IN SEVERAL TYPES OF VERNAL POOLS. 1-485M.

Occurrence No. 98 **Map Index:** 43406 **EO Index:** 43406

Occ Rank: Good
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2000-04-12
Site: 2000-04-12

Record Last Updated: 2000-08-10

Quad Summary: Roseville (3812173/528D), Pleasant Grove (3812174/528C)
County Summary: Placer

Lat/Long: 38.79160° / -121.37589°
UTM: Zone-10 N4294903 E641050
Area: 7.1 acres
Elevation: 90 ft

Mapping PrecisionSPECIFIC
Symbol Type:POLYGON

Township: 11N
Range: 05E
Section: 24 **Qtr:** NW
Meridian: M

Location: ABOUT 0.7 MILE WEST OF CONFLUENCE OF KASEBERG CREEK AND PLEASANT GROVE CREEK, NORTHWEST OF ROSEVILLE.

Location Detail: FOUR POOLS MAPPED WITHIN THREE POLYGONS AT CNDDB, ABOUT 1 MILE WEST OF ELBOW IN FIDDYMENT ROAD. POOLS ARE WITHIN THE WEST HALF OF THE NW 1/4 OF SECTION 24.

Ecological: VERNAL POOLS DOMINATED BY PLAGIOBOTHRYS STIPITATUS, POGOGYNE ZIZIPHOROIDES, PSILOCARPHUS BREVISSIMUS, NAVARETTIA LEUCOCEPHALA, AND HORDEUM MURINUM SSP. GOSSONEANUM.

Threat: SITE IS GRAZED AND RECEIVES RUNOFF FROM ADJACENT HOUSING. AREA IS SLATED FOR DEVELOPMENT.

General: UNKNOWN NUMBER OF PLANTS OBSERVED IN FOUR POOLS IN 2000.

Owner/Manager: PVT

Occurrence No. 99 **Map Index:** 43407 **EO Index:** 43407

Occ Rank: Good
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2000-04-12
Site: 2000-04-12

Record Last Updated: 2011-09-14

Quad Summary: Roseville (3812173/528D), Pleasant Grove (3812174/528C)
County Summary: Placer

Lat/Long: 38.78170° / -121.37450°
UTM: Zone-10 N4293806 E641190
Area: 3.8 acres
Elevation: 100 ft

Mapping PrecisionSPECIFIC
Symbol Type:POLYGON

Township: 11N
Range: 05E
Section: 24 **Qtr:** SW
Meridian: M

Location: ABOUT 1 MILE SOUTHWEST OF CONFLUENCE OF KASEBERG CREEK AND PLEASANT GROVE CREEK, NORTHWEST OF ROSEVILLE.

Location Detail: TWO POOLS MAPPED BY CNDDB; JUST NORTH OF PHILIP ROAD ABOUT 0.9 MILE WEST OF FIDDYMENT ROAD. POOLS ARE WITHIN THE SW 1/4 SW 1/4 SECTION 24.

Ecological: VERNAL POOLS DOMINATED BY PLAGIOBOTHRYS STIPITATUS, POGOGYNE ZIZYPHOROIDES, PSILOCARPHUS BREVISSIMUS, NAVARRETIA LEUCOCEPHALA, AND HORDEUM MURINUM SSP. GOSSONEANUM.

Threat: SITE IS GRAZED AND RECEIVES RUNOFF FROM ADJACENT HOUSING. AREA IS SLATED FOR DEVELOPMENT.

General: UNKNOWN NUMBER OF PLANTS OBSERVED IN 2000. 2010 AERIAL PHOTO SHOWS DEVELOPMENT AT SOUTHERN POOL; SOUTHERN COLONY IS PROBABLY EXTIRPATED.

Owner/Manager: PVT

Downingia pusilla

dwarf downingia

Element Code: PDCAM060C0

Status	NDDB Element Ranks	Other Lists
Federal: None	**Global:** G2	**CNPS List:** 2.2
State: None	**State:** S2	

Habitat Associations

General: VALLEY AND FOOTHILL GRASSLAND (MESIC SITES), VERNAL POOLS.

Micro: VERNAL LAKE AND POOL MARGINS WITH A VARIETY OF ASSOCIATES. IN SEVERAL TYPES OF VERNAL POOLS. 1-485M.

Occurrence No. 110 **Map Index:** 50379 **EO Index:** 50379

Occ Rank: Excellent
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2002-05-03
Site: 2002-05-03

Record Last Updated: 2011-09-14

Quad Summary: Roseville (3812173/528D)

County Summary: Placer

Lat/Long: 38.85082° / -121.32974°
UTM: Zone-10 N4301547 E644938
Radius: 80 meters
Elevation: 118 ft

Mapping Precision: SPECIFIC
Symbol Type: POINT

Township: 12N
Range: 06E
Section: 32 **Qtr:** NE
Meridian: M

Location: NORTH SIDE OF ORCHARD CREEK, 3 MILES SW OF LINCOLN, 1.4 MILES NW OF INDUSTRIAL AVE AT ATHENS AVE, NORTH OF ROSEVILLE.

Location Detail: MAPPED WITHIN THE NW 1/4 OF THE NE 1/4 OF SECTION 32.

Ecological: LARGE VERNAL POOLS WITH DOWNINGIA BICORNUTA, LASTHENIA FREMONTII, PSILOCARPHUS BREVISSIMUS, GRATIOLA EBRACTEATA, AND PLAGIOBOTHRYS STIPITATUS. LEGENERE LIMOSA ALSO PRESENT.

Threat: LIGHT GRAZING.

General: FEWER THAN 100 PLANTS OBSERVED IN 2002 IN TWO POOLS, LIKELY TO OCCUR IN OTHER ADJACENT POOLS AS WELL. WITHIN CONSERVATION BANK.

Owner/Manager: PVT-WILDLANDS INC

Elanus leucurus

white-tailed kite

Element Code: ABNKC06010

Status
Federal: None
State: None

NDDB Element Ranks
Global: G5
State: S3

Other Lists
CDFG Status:

Habitat Associations
General: ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS & RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.
Micro: OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.

Occurrence No. 56 Map Index: 42671 EO Index: 42671

Occ Rank: Good
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1998-07-XX
Site: 1999-XX-XX

Record Last Updated: 2000-03-30

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.78150° / -121.32739°
UTM: Zone-10 N4293858 E645282
Radius: 80 meters
Elevation: 125 ft

Mapping Precision:SPECIFIC
Symbol Type:POINT

Township: 11N
Range: 06E
Section: 20 Qtr: SE
Meridian: M

Location: ON THE WEST SIDE OF THE SOUTH BRANCH OF PLEASANT GROVE CREEK, BETWEEN FOOTHILLS BLVD AND WOODCREEK OAKS BLVD, ROSEVILLE.

Location Detail: SITE IS LOCATED ALONG THE BORDER BETWEEN WOODCREEK GOLF COURSE AND HEWLETT-PACKARD.

Ecological: HABITAT CONSISTS OF RIPARIAN/OAK WOODLAND, DOMINATED BY BLUE OAKS AND INTERIOR LIVE OAKS.

Threat: THREATENED BY ENCROACHING DEVELOPMENT ALONG WOODCREEK OAKS BLVD.

General: SITE WAS VISITED WEEKLY, MAR-JUL 1998; ADULT COURTSHIP TO 5 BEGGING FLEDGLINGS OBSERVED. KITES DID NOT NEST AT THIS LOCATION IN 1999, POSSIBLY DUE TO BOTH GREAT HORNED OWLS AND AMERICAN KESTRELS NESTING NEARBY.

Owner/Manager: PVT-HEWLETT PACKARD

Gratiola heterosepala

Boggs Lake hedge-hyssop

Element Code: PDSCR0R060

Status
Federal: None
State: Endangered

NDDB Element Ranks
Global: G2
State: S2

Other Lists
CNPS List: 1B.2

Habitat Associations
General: MARSHES AND SWAMPS (FRESHWATER), VERNAL POOLS.
Micro: CLAY SOILS; USUALLY IN VERNAL POOLS, SOMETIMES ON LAKE MARGINS. 5-2400M.

Occurrence No. 16 **Map Index:** 11749 **EO Index:** 7258

Occ Rank: None
Origin: Natural/Native occurrence
Presence: Extirpated
Trend: Unknown

Dates Last Seen
Element: 1987-04-22
Site: 1997-06-18
Record Last Updated: 2011-01-18

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.76720° / -121.26365°
UTM: Zone-10 N4292374 E650850
Area: 6.4 acres
Elevation: 230 ft

Mapping Precision: SPECIFIC
Symbol Type: POLYGON

Township: 11N
Range: 06E
Section: 25 **Qtr:** SW
Meridian: M

Location: NORTH OF ROSEVILLE, WEST OF ANTELOPE CREEK, WSW OF ROCKLIN.

Location Detail: THIS VERNAL POOL COMPLEX IS THE BEST EXAMPLE OF VOLCANIC MUDFLOW VERNAL POOLS IN ROSEVILLE (STROMBERG 1987). INCLUDES FORMER OCCURRENCE #17.

Ecological: NORTHERN HARDPAN VERNAL POOL ON EXCHEQUER VERY STONY LOAM SOIL. ASSOCIATED VEGETATION INCLUDES ERYNGIUM VASEYI, ALLOCARYA STIPATATA MICRANTHA, CALLITRICHE LONGIPEDUNCULATA, DOWNINGIA ORNATISSIMA, ISOETES SP, GRATIOLA EBRACTEATA, ETC.

Threat: AREA GRAZED AND PROPOSED FOR REGIONAL SHOPPING CENTER. 2009 AERIAL IMAGERY SHOWS SITE EXTIRPATED BY DEVELOPMENT.

General: OVER 40 PLANTS IN 2 SUBPOPULATIONS IN 1987. NOT OBSERVED IN 1997 (TOO LATE IN YEAR?). DEVELOPMENT IMMINENT IN 1997; ROSEVILLE BLVD EXPANSION HAS/WILL PROBABLY WIPE OUT MOST OF THIS OCCURRENCE. 2009 AERIAL IMAGERY SHOWS SITE EXTIRPATED.

Owner/Manager: PVT

Hydrochara rickseckeri

Ricksecker's water scavenger beetle

Element Code: IICOL5V010

Status
Federal: None
State: None

NDDB Element Ranks
Global: G1G2
State: S1S2

Other Lists
CDFG Status:

Habitat Associations
General: AQUATIC.
Micro:

Occurrence No. 11 Map Index: 60753 EO Index: 60789

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: XXXX-XX-XX
Site: XXXX-XX-XX

Record Last Updated: 2005-03-30

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.85443° / -121.28928°
UTM: Zone-10 N4302013 E648441
Radius: 4/5 mile
Elevation: 140 ft

Mapping Precision: NON-SPECIFIC
Symbol Type: POINT

Township: 12N
Range: 06E
Section: 27 Qtr: XX
Meridian: M

Location: TWELVE BRIDGES PRESERVE, SOUTH OF LINCOLN.

Location Detail: PRESERVE IS WEST AND SOUTH OF TWELVE BRIDGES HOUSING DEVELOPMENTS; MAPPED FROM APPROXIMATE LOCATION OF TWELVE BRIDGES ROAD.

General: ROGERS SAYS THAT THE POOL THE BEETLE WAS COLLECTED IN WAS DESTROYED WHEN THE DEVELOPMENT WAS BUILT, BUT THAT THE SPECIES ALSO OCCURS IN THE ADJACENT PRESERVE.

Owner/Manager: UNKNOWN

Juncus leiospermus var. leiospermus

Red Bluff dwarf rush — **Element Code:** PMJUN011L2

Status	NDDB Element Ranks	Other Lists
Federal: None	**Global:** G2T2	**CNPS List:** 1B.1
State: None	**State:** S2.2	

Habitat Associations

General: CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, CISMONTANE WOODLANDS, VERNAL POOLS.

Micro: VERNALLY MESIC SITES. SOMETIMES ON EDGES OF VERNAL POOLS. 30-1020M.

Occurrence No. 10 **Map Index:** 11642 **EO Index:** 22188

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1982-04-28
Site: 1997-06-18

Record Last Updated: 2003-04-08

Quad Summary: Roseville (3812173/528D)

County Summary: Placer

Lat/Long: 38.80377° / -121.31189°
UTM: Zone-10 N4296354 E646583
Radius: 1/5 mile
Elevation: 110 ft

Mapping Precision: NON-SPECIFIC
Symbol Type: POINT

Township: 11N
Range: 06E
Section: 16 **Qtr:** NE
Meridian: M

Location: APPROX 0.5 MI N OF SCOW RD INDUSTRIAL BLVD, ROSEVILLE.

Location Detail: WEST OF RR TRACKS, SOUTH OF INDUSTRIAL WASTE PONDS AND EAST OF A POWERLINE.

Ecological: MARGINS OF VERNAL POOLS, LARGELY ON KILAGA LOAM SOILS.

Threat: THREATS INCLUDE HOUSING OR LIGHT INDUSTRY DEVELOPMENT.

General: NO PLANTS SEEN IN 1997 WINDSHIELD SURVEY; HABITAT APPEARED INTACT. WITHAM CONSIDERS THIS SITE TO BE ERROUNEOUS; IT IS WELL OUTSIDE THE REPORTED RANGE OF THIS SPECIES. IT MAY BE VAR. AHARTII OR A MISIDENTIFICATION. NEEDS FIELDWORK.

Owner/Manager: PVT

Legenere limosa

legenere

Element Code: PDCAM0C010

Status	NDDB Element Ranks	Other Lists
Federal: None	**Global:** G2	**CNPS List:** 1B.1
State: None	**State:** S2.2	

Habitat Associations

General: VERNAL POOLS. MANY HISTORICAL OCCURRENCES ARE EXTIRPATED.

Micro: IN BEDS OF VERNAL POOLS. 1-880M.

Occurrence No. 11 **Map Index:** 11680 **EO Index:** 28357

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Decreasing

Dates Last Seen
Element: 1984-04-XX
Site: 1997-06-18

Record Last Updated: 1997-08-11

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.81155° / -121.29521°
UTM: Zone-10 N4297245 E648016
Area: 58.7 acres
Elevation: 120 ft

Mapping Precision: SPECIFIC
Symbol Type: POLYGON

Township: 11N
Range: 06E
Section: 10 **Qtr:** SW
Meridian: M

Location: N TRIBUTARY OF PLEASANT GROVE CREEK, N OF PLEASANT GROVE CREEK, S OF PLACER BLVD, E OF HWY 65.

Ecological: VERNAL POOL AREA ON FLOODPLAIN OF INTERMITTENT STREAM.

Threat: PART OF AREA PLANNED FOR INDUSTRIAL PARK USE (AREA GRADED IN 1983). GRAVEL PIT TO SOUTH.

General: ABOUT 200 PLANTS IN 1984. NONE FOUND IN 1997 (TOO LATE IN SEASON). THE NORTHERN POOLS WHICH WERE MAPPED HERE IN 1984 APPEAR TO BE EXTIRPATED. S POOLS UNDISTURBED IN 1997.

Owner/Manager: PVT

Occurrence No. 14 **Map Index:** 11739 **EO Index:** 17380

Occ Rank: None
Origin: Natural/Native occurrence
Presence: Extirpated
Trend: Unknown

Dates Last Seen
Element: 1984-04-05
Site: 1997-06-18

Record Last Updated: 1997-08-11

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.81156° / -121.26800°
UTM: Zone-10 N4297290 E650379
Radius: 1/5 mile
Elevation: 150 ft

Mapping Precision: NON-SPECIFIC
Symbol Type: POINT

Township: 11N
Range: 06E
Section: 11 **Qtr:** SE
Meridian: M

Location: FLOODPLAIN OF PLEASANT GROVE CREEK, APPROX 2.2 AIR MILES E OF JCT PLACER BLVD & SPRR TRACKS.

Location Detail: WHEN VISITED IN 1997, WHAT APPEARS TO BE DEDICATED OPEN SPACE WAS SEEN JUST TO THE EAST OF MAPPED LOCATION FOR THIS SITE. FUTURE SURVEYS SHOULD TARGET THIS AREA.

Ecological: VERNAL POOL AREA IN FLOODPLAIN OF INTERMITTENT STREAM. ASSOCIATED WITH RANUNCULUS BONARIENSIS TRISEPALUS.

General: ABOUT 100 PLANTS IN 1984. WINDSHIELD SURVEY CONDUCTED IN 1997 TO CONFIRM PRESENCE OR ABSENCE OF HABITAT; IF MAPS ARE ACCURATE, THIS SITE IS NOW UNDER THE PAVEMENT AT DEVON DR, FARRIER RD & RACHEL CT IN THE STANFORD RANCH SUBDIVISION.

Owner/Manager: PVT

Occurrence No. 58 **Map Index:** 48978 **EO Index:** 48978

Occ Rank: Good
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2002-05-03
Site: 2002-05-03

Record Last Updated: 2010-04-29

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.85079° / -121.32824°
UTM: Zone-10 N4301546 E645068
Area: 7.3 acres
Elevation: 118 ft

Mapping Precision: SPECIFIC
Symbol Type: POLYGON

Township: 12N
Range: 06E
Section: 32 **Qtr:** NE
Meridian: M

Location: NORTH SIDE OF ORCHARD CREEK, 1.4 MILES NW OF INTERSECTION OF INDUSTRIAL AND ATHENS AVE, 3 MILES SOUTHWEST OF LINCOLN.

Location Detail: MAPPED WITHIN THE NW 1/4 OF THE NE 1/4 OF SECTION 32.

Ecological: SCATTERED MARGINS OF LARGE VERNAL POOL WITH PLAGIOBOTHRYS UNDULATUS, P. STIPITATUS, LASTHENIA FREMONTII, L. GLABERRIMA, DOWNINGIA BICORNUTA, NAVARRETIA LEUCOCEPHALA, AND CALLITRICHE MARGINATA.

Threat: LIGHT DISTURBANCE FROM GRAZING.

General: IN 2002 HUNDREDS OF PLANTS OBSERVED IN FOUR POOLS; LIKELY TO OCCUR IN OTHER ADJACENT POOLS.

Owner/Manager: PVT-WILDLANDS INC

Lepidurus packardi

vernal pool tadpole shrimp — Element Code: ICBRA10010

Status
Federal: Endangered
State: None

NDDB Element Ranks
Global: G3
State: S2S3

Other Lists
CDFG Status:

Habitat Associations
General: INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.
Micro: POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID.

Occurrence No. 24 Map Index: 32457 EO Index: 1900

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1995-02-09
Site: 1995-02-09
Record Last Updated: 1997-03-04

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.76950° / -121.32354°
UTM: Zone-10 N4292533 E645642
Radius: 1/5 mile
Elevation: 130 ft
Mapping Precision: NON-SPECIFIC
Symbol Type: POINT
Township: 11N
Range: 06E
Section: 29 Qtr: SE
Meridian: M

Location: BETWEEN KASEBERG CREEK & SOUTH BRANCH PLEASANT GROVE CREEK; 1.8 KM WEST OF SOUTHERN PACIFIC RR X HWY 65.

Location Detail: WOODCREEK OAKS MITIGATION SITES. 14 WATER BODIES WERE SAMPLED ON FEB 9, 10, 27 & MARCH 14, 1995. LEPIDURUS PACKARDI FOUND IN ONLY 1 POOL & ONLY ON 2/9/95. SUGNET OBSERVED TADPOLE SHRIMP IN A MANMADE VERNAL POOL SOMEWHERE IN SEC 29 ON 2/4/93

Ecological: HARDPAN VERNAL POOL IN ANNUAL NON-NATIVE GRASSLAND. ON 2/9/95 THE SURFACE AREA WAS 129 SQ METERS & THE WATER DEPTH WAS 16 CM. WETLAND COMPENSATION/MITIGATION PRESERVE. ALSO, A MANMADE VERNAL POOL SOMEWHERE IN SEC 29.

General: POOL #C2: 50+ ADULTS OBSERVED; 3 ADULTS COLLECTED & DEPOSITED IN CAS. THE INFORMATION PROVIDED BY THE CONSULTANT HAS CONFLICTING DATA ON THE LOCATION OF THIS POOL; THIS SITE WAS MAPPED ACCORDING TO THE MAP THEY PROVIDED, NOT THE T-R-S GIVEN

Owner/Manager: PVT-SARES REGIS GROUP

Linderiella occidentalis

California linderiella

Element Code: ICBRA06010

Status
Federal: None
State: None

NDDB Element Ranks
Global: G3
State: S2S3

Other Lists
CDFG Status:

Habitat Associations
General: SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.
Micro: WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

Occurrence No. 90 **Map Index:** 32457 **EO Index:** 1898

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1995-02-09
Site: 1995-02-09
Record Last Updated: 1995-10-11

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.76950° / -121.32354°
UTM: Zone-10 N4292533 E645642
Radius: 1/5 mile
Elevation: 130 ft

Mapping PrecisionNON-SPECIFIC
Symbol Type:POINT

Township: 11N
Range: 06E
Section: 29 **Qtr:** SE
Meridian: M

Location: BETWEEN KASEBERG CREEK & SOUTH BRANCH PLEASANT GROVE CREEK; 1.8 KM WEST OF SOUTHERN PACIFIC RR X HWY 65.

Location Detail: 14 WATER BODIES WERE SAMPLED ON 2/9,10,27 & 3/14/95. LINDERIELLA WAS FOUND IN THIS POOL & 2 OTHERS ON 2/9/95. IN 5 POOLS ON 2/10, IN 1 POOL ON 2/27 & 1 POOL ON 3/14/95. THE LOCATIONS OF THE OTHER POOLS WAS NOT GIVEN.

Ecological: HARDPAN VERAL POOL IN ANNUAL NON-NATIVE GRASSLAND. ON 2/9/95 THE SURFACE AREA WAS 129 SQ METERS & THE DEPTH WAS 16 CM. WETLAND COMPENSATION/MITIGATION PRESERVE.

General: POOL #C2: >50 ADULTS OBSERVED. ALSO FOUND IN POOLS 49, C1, 06, 26, E2, N2, 102, 15, & 30. THE INFORMATION PROVIDED BY THE CONSULTANT HAS CONFLICTING DATA ON LOCATION OF THIS POOL; SITE WAS MAPPED ACCORDING TO THEIR MAP, NOT THEIR T-R-S.

Owner/Manager: PVT-SARES REGIS GROUP

Occurrence No. 111 **Map Index:** 32456 **EO Index:** 4988

Occ Rank: Fair
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1997-02-25
Site: 1997-02-25
Record Last Updated: 2011-07-08

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.76087° / -121.33772°
UTM: Zone-10 N4291553 E644427
Area: 44.0 acres
Elevation: 120 ft

Mapping PrecisionSPECIFIC
Symbol Type:POLYGON

Township: 11N
Range: 06E
Section: 32 **Qtr:** NW
Meridian: M

Location: SILVERADO OAKS MITIGATION SITE, NW OF THE WOODCREEK OAKS BLVD & JUNCTION BLVD JCT, ABOUT 3 MI WNW OF ROSEVILLE PO.

Location Detail: 1995: 15 TOTAL WETLANDS SAMPLED BETWEEN PARCELS 32 (EO#390) & 72 (EO#111, THIS OCCURRENCE). 1996: 10 SAMPLED. 1997: 13 SAMPLED. PROVIDED MAP GRAPHIC APPEARED SHIFTED WEST OF TRUE LOCATION; MAPPED TO AERIAL IMAGE MATCHING PRESERVED HABITAT.

Ecological: CONSTRUCTED AND SEASONAL HARDPAN VERNAL POOLS WITHIN NON-NATIVE ANNUAL GRASSLAND. BRANCHINECTA LYNCHI ALSO OBSERVED IN AREA IN 1995, BUT NOT IN 1996 OR 1997.

General: 1995: UNKNOWN NUMBERS OF LINDERIELLA OBSERVED IN CONSTRUCTED POOLS IN PARCELS 32 & 72. 1996: >50 ADULTS OBSERVED IN CONSTRUCTED POOLS (VP106 & VP108). 1997: 10'S OBSERVED IN HVE & VP107, 1000'S OBSERVED IN VP106.

Owner/Manager: CITY OF ROSEVILLE

Linderiella occidentalis

California linderiella — **Element Code:** ICBRA06010

Status
Federal: None
State: None

NDDB Element Ranks
Global: G3
State: S2S3

Other Lists
CDFG Status:

Habitat Associations
General: SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.
Micro: WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

Occurrence No. 142 **Map Index:** 34814 **EO Index:** 1863
Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2005-01-26
Site: 2005-01-26
Record Last Updated: 2006-03-27

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.80283° / -121.30587°
UTM: Zone-10 N4296259 E647108
Area:
Elevation: 100 ft
Mapping Precision: NON-SPECIFIC
Symbol Type: POLYGON
Township: 11N
Range: 06E
Section: 16 **Qtr:** XX
Meridian: M

Location: NORTH OF ROSEVILLE; WEST OF HWY 65, SOUTH OF PLEASANT GROVE CREEK AND 0.8 KM NORTH OF SCOW ROAD.

Location Detail: FOOTHILL BUSINESS PARK MITIGATION SITE, PARCELS 1, 6. POOL LOCATIONS NOT GIVEN FOR LINDERIELLA OCCIDENTALIS. 1995:12 POOLS SURVEYED. 1996:14 POOLS SURVEYED. 1998:13 POOLS SAMPLED. 2003:4 POOLS SAMPLED,OBS IN POOL 8. 2005: 10 POOLS SAMPLED

Ecological: CONSTRUCTED AND HISTORIC WETLANDS (VERNAL POOLS, SEASONAL WETLANDS) ARE INTERSPERSED WITHIN NON-NATIVE ANNUAL GRASSLAND.

General: 1995:NONE OBS. 1/30/1996: 50+ ADULTS IN 4 POOLS. 3/11/1996: 50+ ADULTS IN 2 POOLS. 1/14/97:OBS IN 12 POOLS. 1/13/98:100S IN 2 POOLS. 3/2/98:1000S IN 5 POOLS. 01/27/05:1000'S IN POOL 16, 100'S IN POOL 26. 2006:1000S IN POOL 18.

Owner/Manager: PVT-STANFORD RANCH

Occurrence No. 143 **Map Index:** 34815 **EO Index:** 29309
Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1996-02-05
Site: 1996-04-29
Record Last Updated: 1996-09-06

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.79360° / -121.32161°
UTM: Zone-10 N4295210 E645760
Area:
Elevation: 125 ft
Mapping Precision: NON-SPECIFIC
Symbol Type: POLYGON
Township: 11N
Range: 06E
Section: 21 **Qtr:** NW
Meridian: M

Location: NNW OF ROSEVILLE; 1.8 KM SOUTHWEST OF SOUTHERN PACIFIC RR X PLEASANT GROVE CREEK.

Location Detail: HEWLETT PACKARD-90 ACRE PARCEL. 1995 AND 1996: TOTAL OF 103 WATERBODIES SURVEYED EACH YEAR.

Ecological: SEASONAL WATERBODIES WITHIN NON-NATIVE ANNUAL GRASSLAND.

General: 1995: LINDERIELLA OBSERVED IN 8 POOLS (#10, 16, 29, 59, 65, 69, 76 & 78) BETWEEN 12/22/1994 AND 3/7/1995. 1996: LINDERIELLA OBSERVED IN 3 POOLS (#10, 16 & 29) BETWEEN 12/26/1995 AND 2/5/1996.

Owner/Manager: PVT-HEWLETT PACKARD

Occurrence No. 145 **Map Index:** 34816 **EO Index:** 5003
Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1996-04-02
Site: 1996-04-29
Record Last Updated: 1996-07-16

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.78594° / -121.32498°
UTM: Zone-10 N4294354 E645483
Area:
Elevation: 115 ft
Mapping Precision: NON-SPECIFIC
Symbol Type: POLYGON
Township: 11N
Range: 06E
Section: 20 **Qtr:** SE
Meridian: M

Location: NORTHWEST OF ROSEVILLE; 2.0 KM NORTHWEST OF HWY 65 X INDUSTRIAL BLVD.

Location Detail: HEWLETT PACKARD-210 ACRE PROPERTY. 1996: TOTAL OF 43 WATERBODIES SURVEYED.

Ecological: SEASONAL WATERBODIES (VERNAL POOLS, SEASONAL WETLANDS) WITHIN NON-NATIVE ANNUAL GRASSLAND.

General: 1996: 50+ ADULTS OBSERVED IN 6 POOLS (148, 149, 150, 151, 152 & 153), AND <50 ADULTS OBSERVED IN POOL #129.

Owner/Manager: PVT-HEWLETT PACKARD

Linderiella occidentalis

California linderiella

Element Code: ICBRA06010

Status
Federal: None
State: None

NDDB Element Ranks
Global: G3
State: S2S3

Other Lists
CDFG Status:

Habitat Associations
General: SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.
Micro: WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

Occurrence No. 146 Map Index: 34817 EO Index: 3450

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1998-03-02
Site: 1998-03-02
Record Last Updated: 2011-04-22

Quad Summary: Lincoln (3812183/528A), Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.86272° / -121.32379°
UTM: Zone-10 N4302877 E645430
Area: 218.8 acres
Elevation: 125 ft
Mapping Precision: SPECIFIC
Symbol Type: POLYGON
Township: 12N
Range: 06E
Section: 29 Qtr: XX
Meridian: M

Location: LARGE AREA W OF HWY 65 (NOW BISECTED BY NEW HWY 65 ROUTE) AND S OF AUBURN RAVINE, CENTERED 1.7 MI SW LINCOLN PO.

Location Detail: LINCOLN CROSSING MITIGATION SITE. COVERS PORTIONS OF SEVERAL SECTIONS. 1995: 10 TOTAL WATERBODIES SURVEYED. 1996: 42 TOTAL WATERBODIES SURVEYED. 1997: 49 TOTAL WATERBODIES SURVEYED. 1998: 20 TOTAL WATERBODIES SURVEYED.

Ecological: SEASONALLY INUNDATED WATERBODIES (VERNAL POOLS, SEASONAL WETLANDS) W/IN NON-NATIVE ANNUAL GRASSLAND. WETLAND COMPENSATION/MITIGATION PRESERVE. ADJACENT AREAS HAVE BEEN DEVELOPED FOR RESIDENTIAL HOUSING BY 2010.

General: 1995: UNKNOWN NUMBER OBS. 1996: 50+ ADULTS OBS IN 28 POOLS, LESS THAN 50 OBS IN 4 POOLS; B. LYNCHI IN SOME POOLS. 1997: 10-100 OBS IN 27 POOLS. 1998: 1000S OBS IN 13 POOLS AND 100S OBS IN 1 POOL.

Owner/Manager: PVT-STERLING PACIFIC ASSETS

Occurrence No. 150 Map Index: 32516 EO Index: 1882

Occ Rank: Excellent
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1996-02-09
Site: 1996-03-13
Record Last Updated: 1996-09-05

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.86505° / -121.29394°
UTM: Zone-10 N4303184 E648015
Area:
Elevation: 140 ft
Mapping Precision: NON-SPECIFIC
Symbol Type: POLYGON
Township: 12N
Range: 06E
Section: 27 Qtr: NW
Meridian: M

Location: EASTRIDGE PROJECT SOUTHERN WETLAND PRESERVE; 1.0 KM EAST OF HWY 65; 2.2 KM SOUTH OF LINCOLN.

Ecological: NORTHERN HARDPAN VERNAL POOL HABITAT WITH CONSTRUCTED VERNAL POOLS (3.95 ACRES), CONSTRUCTED SEASONAL WETLANDS (1.95 ACRES), AND REFERENCE VERNAL POOLS IN ANNUAL GRASSAND.

Threat: FUTURE RESIDENTIAL DEVELOPMENT PLANNED IN ADJACENT AREA; DIRT ROADS BISECT PRESERVE; GRAZING; RODEO GROUNDS TO THE NW.

General: 1996 (THIRD MONITORING YEAR): 1/11-LOW DENSITIES OF LINDERIELLA OBSERVED IN POOL #SW4, B. LYNCHI ALSO PRESENT. 2/9-LOW DENSITIES OF LINDERIELLAS OBSERVED IN POOLS #7 AND 8.

Owner/Manager: PVT-PLACER HOLDINGS

Linderiella occidentalis

California linderiella

Element Code: ICBRA06010

Status	NDDB Element Ranks	Other Lists
Federal: None	Global: G3	CDFG Status:
State: None	State: S2S3	

Habitat Associations

General: SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

Micro: WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

Occurrence No. 157 **Map Index:** 38256 **EO Index:** 33921

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1997-01-16
Site: 1997-01-16
Record Last Updated: 1998-06-10

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.78083° / -121.34926°
UTM: Zone-10 N4293749 E643384
Area:
Elevation: 120 ft
Mapping Precision: NON-SPECIFIC
Symbol Type: POLYGON
Township: 11N
Range: 06E
Section: 30 **Qtr:** XX
Meridian: M

Location: EAST OF FIDDYMENT ROAD, WEST OF FOOTHILLS BLVD, AND NORTH OF BASELINE ROAD, NW OF ROSEVILLE.

Ecological: HABITAT CONSISTS OF SEASONAL WETLANDS, REFERENCE VERNAL POOLS, AND CONSTRUCTED VERNAL POOLS WITHIN A DESIGNATED WETLAND MITIGATION AREA. SURROUNDING UPLAND CONSISTS OF NON-NATIVE ANNUAL GRASSLAND/MIXED OAK WOODLAND.

Threat: THREATENED BY SURROUNDING DEVELOPMENT (GOLF COURSES AND RESIDENTIAL DEVELOPMENT).

General: CALIFORNIA LINDERIELLA WERE IDENTIFIED WITHIN 83 (44%) OF THE CONSTRUCTED VERNAL POOLS & SEASONAL WETLANDS AND 4 (21%) OF THE REFERENCE VERNAL POOLS SEASONAL WETLANDS. BRANCHINECTA LYNCHI ALSO OBSERVED.

Owner/Manager: PVT

Occurrence No. 184 **Map Index:** 42742 **EO Index:** 42742

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1997-02-12
Site: 1997-02-12
Record Last Updated: 2000-04-12

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.85091° / -121.31974°
UTM: Zone-10 N4301573 E645806
Area: 224.1 acres
Elevation: 120 ft
Mapping Precision: SPECIFIC
Symbol Type: POLYGON
Township: 12N
Range: 06E
Section: 33 **Qtr:** XX
Meridian: M

Location: 1 MILE NW OF PLEASANT GROVE ROAD & SP RAILROAD, 1 MILE E OF ORCHARD CREEK & INGRAM SLOUGH CONFLUENCE, NNW OF

Location Detail: MOST OF THE NW AND BOTTOM HALF NE PORTIONS OF ORCHARD CREEK MIDIGATION BANK. MAJORITY OF VERNAL POOLS ARE ON SAN JOAQUIN SANDY LOAM AND ALAMO-FIDDYMENT COMPLEX SOILS. MORE MAP DETAIL IN REPORT. 170 OF THE 694 EXISTING POOLS WERE SAMPLED.

Ecological: ENDEMIC VEGETATION: RANUNCULUS ALVEOLATUS, ERYNGIUM VASEYI, PLAGIOBOTHRYS STIPITAUS, PSILICARPHUS ZIZYPHOROIDES, DESCHAMPSIA DAMTHONIOIDES, NAVARRETIA LEUCOCEPHALA

General: OBSERVED LINDERIELLA IN 82 OF THE 170 POOLS SAMPLED, 81 AT THIS LOCATION, FOR AN APPROXIMATE OCCURRANCE RATE OF 48 PERCENT, WITH ABUNDANCE RANGING FROM LOW TO HIGH.

Owner/Manager: UNKNOWN

Linderiella occidentalis

California linderiella

Element Code: ICBRA06010

Status	NDDB Element Ranks	Other Lists
Federal: None	**Global:** G3	**CDFG Status:**
State: None	**State:** S2S3	

Habitat Associations

General: SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

Micro: WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

Occurrence No. 185 **Map Index:** 42747 **EO Index:** 42747

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1997-02-12
Site: 1997-02-12
Record Last Updated: 2000-04-12

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.84478° / -121.31588°
UTM: Zone-10 N4300899 E646153
Radius: 80 meters
Elevation: 115 ft
Mapping Precision: SPECIFIC
Symbol Type: POINT
Township: 12N
Range: 06E
Section: 33 **Qtr:** SW
Meridian: M

Location: 0.6 MILE NW OF PLEASANT GROVE RD & SP RR, 1.4 MILE ESE OF ORCHARD CREEK & INGRAM SLOUGH CONFLUENCE, NNW OF ROSEVILLE.

Location Detail: JUST SOUTH OF ORCHARD CREEK, ORCHARD CREEK MIDIGATION BANK. MAJORITY OF VERNAL POOLS ARE ON SAN JOAQUIN SANDY LOAM AND ALAMO-FIDDYMENT COMPLEX SOILS. MORE MAP DETAIL IN REPORT.

Ecological: ENDEMIC VEGETATION: RANUNCULUS ALVEOLATUS, ERYNGIUM VASEYI, PLAGIOBOTHRYS STIPITAUS, PSILICARPHUS ZIZYPHOROIDES, DESCHAMPSIA DAMTHONIOIDES, NAVARRETIA LEUCOCEPHALA

General: OBSERVED LINDERIELLA THIS POOL WAS RATED HIGH IN ABUNDANCE.

Owner/Manager: UNKNOWN

Occurrence No. 187 **Map Index:** 46106 **EO Index:** 46109

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2006-01-09
Site: 2006-01-09
Record Last Updated: 2006-03-27

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.78973° / -121.33683°
UTM: Zone-10 N4294757 E644445
Area:
Elevation: 115 ft
Mapping Precision: NON-SPECIFIC
Symbol Type: POLYGON
Township: 11N
Range: 06E
Section: 20 **Qtr:** NW
Meridian: M

Location: 1 MILE SW OF THE INTERSECTION OF FIDDYMENT ROAD AND PLEASANT GROVE CREEK, ROSEVILLE

Location Detail: WOODCREEK NORTH OPEN SPACE PRESERV/WETLAND COMPENSATION AREA.

Ecological: HABITAT CONSISTS OF ANNUAL GRASSLAND WITH CONSTRUCTED AND HISTORIC VERNAL POOLS SURROUNDED BY OAK WOODLAND. BRANCHINECTA LYNCHI ALSO FOUND HERE.

General: UNKNOWN # OBS 7 MAR 2001. 1000'S OBS 28 FEB 2002 IN POOL C. FOUND IN POOLS 2, 3, 5, & 7 IN JAN 2003. 1000'S OBS. 17 FEB 2004 IN POOL #5. 7 JAN 2005: 1000'S IN POOLS SWB, SWC, SWE; 100'S IN POOL SWF. JAN 2006:10S-1000S IN 7 POOLS.

Owner/Manager: CITY OF ROSEVILLE

Occurrence No. 194 **Map Index:** 47451 **EO Index:** 47451

Occ Rank: Good
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Stable

Dates Last Seen
Element: 2005-01-11
Site: 2005-01-11
Record Last Updated: 2011-07-08

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.77346° / -121.28207°
UTM: Zone-10 N4293039 E649236
Area: 28.7 acres
Elevation: 160 ft
Mapping Precision: SPECIFIC
Symbol Type: POLYGON
Township: 11N
Range: 06E
Section: 26 **Qtr:** SW
Meridian: M

Location: ALONG CREEK ON N EDGE OF DIAMOND OAKS MUNICIPAL GOLF COURSE, 1.7 MI N OF ROSEVILLE PO.

Location Detail: 1997: SPECIES OBS IN 9 OF 17 POOLS SAMPLED. 1998: SP OBS IN 2 OF 9 POOLS SAMPLED. 1999: SP OBS IN 2 OF 11 POOLS SAMPLED. 2004: SP OBS IN 1 OF 11 POOLS SAMPLED. 2005: SP OBS IN 2 OF 10 POOLS SAMPLED. 2006: SP OBS IN 1 OF 12 POOLS SAMPLED.

Ecological: CONSTRUCTED VERNAL POOLS (1.5 ACRES) WITHIN AREA DOMINATED BY NON-NATIVE ANNUAL GRASSLAND SURROUNDED BY DEVELOPMENT. 1/8/98: VP7 SURFACE AREA 4X12M, DEPTH 10CM; VP10 SURFACE AREA 4X8M, DEPTH 10CM. 2/27/98: VP7 SURFACE AREA 4X16M, DEPTH 16.

General: JAN 1997: 10S OBS IN 3 POOLS, 100S IN 3 POOLS, 1000S IN 3 POOLS. JAN & FEB 1998: 100S IN VP77, VP10 & VP7. MAR 1999: 1000S IN VP7 & VP16. FEB 2004: 100S IN POOL U15. JAN 2005: 100S IN POOL U18, 10S IN POOL U47. JAN 2006: 100S IN POOL U80.

Linderiella occidentalis

California linderiella

Element Code: ICBRA06010

Status
Federal: None
State: None

NDDB Element Ranks
Global: G3
State: S2S3

Other Lists
CDFG Status:

Habitat Associations
General: SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.
Micro: WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

Owner/Manager: PVT, CITY OF ROSEVILLE

Occurrence No. 199 **Map Index:** 64299 **EO Index:** 48405

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2005-03-02
Site: 2005-03-02

Record Last Updated: 2011-04-25

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.84960° / -121.35768°
UTM: Zone-10 N4301369 E642515
Area:
Elevation: 100 ft

Mapping Precision: NON-SPECIFIC
Symbol Type: POLYGON

Township: 12N
Range: 06E
Section: 31 **Qtr:** NW
Meridian: M

Location: IN THE GENERAL AREA NW OF FIDDYMENT RD AT E CATLETT RD, S OF ORCHARD CREEK, 4.5 MILES SW OF LINCOLN PO.

Location Detail: MOORE RANCH. LOCATED IN NW1/4 SEC 31 & NE1/4 SEC 36.

Ecological: HABITAT CONSISTS OF VERNAL POOLS (WITHIN A VERNAL POOL COMPLEX) SURROUNDED BY ANNUAL GRASSLAND. POOL DEPTH AT SAMPLING: 13CM. SURFACE AREA AT SAMPLING: 30M X 7M. AREA IS A WETLAND MITIGATION SITE.

General: 10'S OBS IN 1 POOL 13 FEB 1997. 10'S OBS IN ONE POOL IN THE WESTERN AREA 28 FEB 2002. OBS IN 2 OF 46 SAMPLED POOLS IN EASTERN AREA JAN & FEB 2002. OBS IN 3 OF 47 SAMPLED POOLS JAN & MAR 2003. 10'S TO 1000'S OBS IN 16 POOLS FEB & MAR 2005.

Owner/Manager: MOORE RANCH CONSERVANCY

Occurrence No. 200 **Map Index:** 48410 **EO Index:** 48410

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2005-01-21
Site: 2005-01-21

Record Last Updated: 2005-10-17

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.78679° / -121.29375°
UTM: Zone-10 N4294499 E648193
Area: 20.1 acres
Elevation: 130 ft

Mapping Precision: SPECIFIC
Symbol Type: POLYGON

Township: 11N
Range: 06E
Section: 22 **Qtr:** NE
Meridian: M

Location: 2.5 MILES NORTH ROSEVILLE; 0.4 MILES EAST OF INTERSECTION OF EAST ROSEVILLE PARKWAY & WASHINGTON BLVD, W OF HWY 65.

Location Detail: HIGHLAND RESERVE SOUTH

Ecological: HABITAT CONSISTS OF PRESERVE WITH CONSTRUCTED & HISTORIC VERNAL POOLS WITHIN A NON-NATIVE ANNUAL GRASSLAND. SURROUNDED BY URBAN AREAS & DEVELOPMENT.

General: 100'S OF INDIVIDUALS OBSERVED WITHIN POOL #ND ON 4 JAN 2002, AND AN UNKNOWN NUMBER WERE OBSERVED IN POOLS #N92, N108, AND NL ON 12 AND 16 FEB 2004. 10'S OBS IN POOLS ND, N82, N87 ON 21JAN 2005.

Owner/Manager: CITY OF ROSEVILLE

Linderiella occidentalis

California linderiella

Element Code: ICBRA06010

Status
Federal: None
State: None

NDDB Element Ranks
Global: G3
State: S2S3

Other Lists
CDFG Status:

Habitat Associations
General: SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.
Micro: WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

Occurrence No. 201 **Map Index:** 48420 **EO Index:** 48420

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2006-01-09
Site: 2006-01-09
Record Last Updated: 2006-03-27

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.76474° / -121.35109°
UTM: Zone-10 N4291961 E643258
Area: 46.9 acres
Elevation: 125 ft

Mapping PrecisionSPECIFIC
Symbol Type:POLYGON

Township: 11N
Range: 06E
Section: 31 **Qtr:** N
Meridian: M

Location: 3 MILES NW OF ROSEVILLE; ALONG POWER LINES, 0.1 TO 0.8 MILE EAST OF FIDDYMENT ROAD.

Location Detail: WOODCREEK WEST WETLAND COMPENSATION AREA. ABOUT 25% OF THE POOLS WERE SAMPLED (22 IN 2001, 23 IN 2002, 22 IN 2005, 25 IN 2006 - BOTH CONSTRUCTED & HISTORIC). L.O. FOUND IN 14 OF 23 POOLS IN 2002 & 13 OF 22 POOLS IN 2005.

Ecological: HABITAT CONSISTS OF CONSTRUCTED AND HISTORIC VERNAL POOLS WITHIN AN ANNUAL GRASSLAND HABITAT; WETLAND COMPENSATION AREA. SITE IS UNDER POWER LINES.

General: 2001: 10'S OBS IN POOLS 45 AND 55. 2002: 10'S OBS IN POOLS 21, 48, 51 AND 85; 100'S OBS IN POOLS 44, 70, 74 AND 86; 1000'S OBS IN POOLS 10, 17, 28, 46, 82 AND N2. 2005: 10'S-1000'S OBS IN 13 POOLS. 2006: 10'S-100'S OBS IN 19 POOLS.

Owner/Manager: CITY OF ROSEVILLE

Occurrence No. 227 **Map Index:** 56433 **EO Index:** 56449

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2001-02-20
Site: 2001-02-20
Record Last Updated: 2004-08-19

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.78164° / -121.28371°
UTM: Zone-10 N4293944 E649077
Radius: 80 meters
Elevation: 160 ft

Mapping PrecisionSPECIFIC
Symbol Type:POINT

Township: 11N
Range: 06E
Section: 23 **Qtr:** SW
Meridian: M

Location: LOCATED BETWEEN HWY 65 AND ROSEVILLE PARKWAY, NW OF GIBSON DRIVE, ROSEVILLE.

Location Detail: HIGHLAND RESERVE SOUTH OPEN SPACE AREAS. POOLS LOCATED 0.28 MILE NORTH OF THE INTERSECTION OF ROSEVILLE PARKWAY AND GIBSON DRIVE, SOUTH SIDE OF DRAINAGE.

Ecological: HABITAT CONSISTS OF A COMPENSATION (CONSTRUCTED) VERNAL POOL.

General: 10'S OBSERVED IN POOL E16 ON 20 FEB 2001.

Owner/Manager: UNKNOWN

Occurrence No. 246 **Map Index:** 62823 **EO Index:** 62877

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2005-01-21
Site: 2005-01-21
Record Last Updated: 2005-10-18

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.78029° / -121.28908°
UTM: Zone-10 N4293785 E648613
Radius: 80 meters
Elevation: 150 ft

Mapping PrecisionSPECIFIC
Symbol Type:POINT

Township: 11N
Range: 06E
Section: 27 **Qtr:** NE
Meridian: M

Location: NW THE JUNCTION OF PLEASANT GROVE BLVD AND ROSEVILLE PKWY, SOUTH OF HWY 65, ROSEVILLE

Location Detail: HIGHLAND RESERVE SOUTH

Ecological: HABITAT CONSISTS OF A HISTORIC VERNAL POOL.

General: 100'S OBSERVED IN POOL WRR ON 21 JAN 2005

Owner/Manager: UNKNOWN

Linderiella occidentalis

California linderiella

Element Code: ICBRA06010

Status	NDDB Element Ranks	Other Lists
Federal: None	**Global:** G3	**CDFG Status:**
State: None	**State:** S2S3	

Habitat Associations

General: SEASONAL POOLS IN UNPLOWED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.

Micro: WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.

Occurrence No. 257 **Map Index:** 64342 **EO Index:** 64421

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2006-01-31
Site: 2006-01-31
Record Last Updated: 2006-03-27

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.78714° / -121.37134°
UTM: Zone-10 N4294415 E641453
Radius: 80 meters
Elevation: 95 ft
Mapping Precision: SPECIFIC
Symbol Type: POINT
Township: 11N
Range: 05E
Section: 24 **Qtr:** SW
Meridian: M

Location: NEAR UNNAMED TRIBUTARY TO PLEASANT GROVE CREEK NORTH AND EAST OF PHILLIP ROAD, NW OF ROSEVILLE.

Location Detail: POOL #567, WEST OF HAYDEN PARKWAY. MAPPED 0.2 MI W OF FIDDYMENT RANCH.

General: NUMBERS FOUND NOT GIVEN FOR THIS POOL.

Owner/Manager: PVT

Occurrence No. 390 **Map Index:** 82419 **EO Index:** 83442

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1995-02-06
Site: 1995-03-02
Record Last Updated: 2011-04-29

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.76601° / -121.31850°
UTM: Zone-10 N4292153 E646086
Area: 14.0 acres
Elevation: 130 ft
Mapping Precision: SPECIFIC
Symbol Type: POLYGON
Township: 11N
Range: 06E
Section: 33 **Qtr:** NW
Meridian: M

Location: OPEN AREA BETWEEN RESIDENTIAL HOUSING NE OF COUNTRY CLUB DR AT ACTON WAY, CENTERED ABOUT 2.2 MI NW OF ROSEVILLE PO.

Location Detail: 1995: 15 TOTAL WETLANDS SAMPLED BETWEEN PARCELS 32 (EO#390, THIS OCCURRENCE) & 72 (EO#111). PROVIDED MAP GRAPHIC APPEARED SHIFTED WEST OF TRUE LOCATION; MAPPED TO AERIAL IMAGE MATCHING PRESERVED HABITAT.

Ecological: CONSTRUCTED AND SEASONAL HARDPAN VERNAL POOLS WITH NON-NATIVE ANNUAL GRASSLAND.

General: LINDERIELLA OCCIDENTALIS OBSERVED IN CONSTRUCTED VERNAL POOLS SOMETIME BETWEEN 6 FEB AND 2 MAR 1995.

Owner/Manager: CITY OF ROSEVILLE

Northern Hardpan Vernal Pool

Element Code: CTT44110CA

Status
Federal: None
State: None

NDDB Element Ranks
Global: G3
State: S3.1

Other Lists

Habitat Associations
General:
Micro:

Occurrence No. 23 **Map Index:** 11651 **EO Index:** 16254

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1980-XX-XX
Site: 1980-XX-XX
Record Last Updated: 1998-07-15

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.85348° / -121.31556°
UTM: Zone-10 N4301865 E646163
Area: 1,251.8 acres
Elevation: 125 ft
Mapping Precision: SPECIFIC
Symbol Type: POLYGON
Township: 12N
Range: 06E
Section: 33 **Qtr:** NW
Meridian: M

Location: SOUTH OF LINCOLN 2-3 MILES WEST OF HWY 65.

Location Detail: POOLS IN TREELESS ANNUAL GRASSLAND. BOUNDARIES INDICATE EXTENT OF UNDEVELOPED AREA.

Ecological: DIVERSE POOL FLORA. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

Threat: THREAT OF INDUSTRIAL DEVELOPMENT.

General: SEVERAL POOLS KNOWN FOR THEIR INVERTEBRATE FAUNA. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: UNKNOWN

Occurrence No. 67 **Map Index:** 11713 **EO Index:** 16248

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1982-XX-XX
Site: 1982-XX-XX
Record Last Updated: 2001-05-24

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.76982° / -121.27800°
UTM: Zone-10 N4292642 E649597
Area: 77.8 acres
Elevation: 180 ft
Mapping Precision: SPECIFIC
Symbol Type: POLYGON
Township: 11N
Range: 06E
Section: 26 **Qtr:** SW
Meridian: M

Location: JUST NORTH & EAST OF DIAMOND OAKS MUNICIPAL GOLF COURSE, ROSEVILLE, SOUTH BRANCH PLEASANT GROVE CREEK.

Ecological: POOLS ON LOW TERRACE HARDPAN SUBSTRATE. HIGH QUALITY POOLS W/ VARIETY OF POOL TAXA PRESENT, 1982. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

General: ZONED AS RESIDENTIAL IN 1977 ROSEVILLE GENERAL PLAN. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: PVT-ROSEVILLE PROPERTIES

Occurrence No. 68 **Map Index:** 11613 **EO Index:** 16247

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1982-XX-XX
Site: 1982-XX-XX
Record Last Updated: 1998-07-15

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.78625° / -121.32487°
UTM: Zone-10 N4294389 E645492
Area: 51.4 acres
Elevation: 110 ft
Mapping Precision: SPECIFIC
Symbol Type: POLYGON
Township: 11N
Range: 06E
Section: 20 **Qtr:** S
Meridian: M

Location: ADJACENT TO SOUTH BRANCH (PLEASANT GROVE CREEK) ABOUT 1 MILE SW OF FIDDYMENT RANCH, ROSEVILLE.

Location Detail: TWO AREAS; 38 AC RANKED AS MEDIUM QUALITY BY WESCO, 1982, ZONED FORM AG IN 1977 ROSEVILLE GENERAL PLAN; 13 AC OF LOW QUALITY POOLS, ZONED RESIDENTIAL.

Ecological: LOW TERRACE HARDPAN SUBSTRATE. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

General: SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: UNKNOWN

Northern Hardpan Vernal Pool

Element Code: CTT44110CA

Status

Federal: None
State: None

NDDB Element Ranks

Global: G3
State: S3.1

Other Lists

Habitat Associations

General:
Micro:

Northern Volcanic Mud Flow Vernal Pool

Element Code: CTT44132CA

Status
Federal: None
State: None

NDDB Element Ranks
Global: G1
State: S1.1

Other Lists

Habitat Associations
General:
Micro:

Occurrence No. 1 **Map Index:** 11782 **EO Index:** 16218

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1982-XX-XX
Site: 1982-XX-XX

Record Last Updated: 1998-07-16

Quad Summary: Rocklin (3812172/527C), Citrus Heights (3812163/512A), Folsom (3812162/511B), Roseville (3812173/528D)

County Summary: Placer

Lat/Long: 38.75189° / -121.25431°
UTM: Zone-10 N4290690 E651693
Area: 432.3 acres
Elevation: 240 ft

Mapping Precision: SPECIFIC
Symbol Type: POLYGON

Township: 10N
Range: 07E
Section: 06 **Qtr:** XX
Meridian: M

Location: BETWEEN DOUGLAS BLVD & MINERS RAVINE JUST EAST OF ROSEVILLE.

Ecological: DIVERSITY OF POOL TAXA PRESENT INCLUDES DICHELOSTEMMA LACUNA-VERNALIS. MOST OF THIS LARGE AREA IS ON VOLCANIC SUBSTRATE. <50 ACRES IN THE NW PORTION OF THE BOUNDED AREA IS LOW TERRACE FORMATION W/HARDPAN VERNAL POOLS.

General: UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: UNKNOWN

Occurrence No. 4 **Map Index:** 11746 **EO Index:** 16214

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1987-04-22
Site: 1987-04-22

Record Last Updated: 1998-07-16

Quad Summary: Roseville (3812173/528D)

County Summary: Placer

Lat/Long: 38.77614° / -121.26620°
UTM: Zone-10 N4293362 E650609
Area: 428.3 acres
Elevation: 225 ft

Mapping Precision: SPECIFIC
Symbol Type: POLYGON

Township: 11N
Range: 06E
Section: 25 **Qtr:** NW
Meridian: M

Location: WEST OF ANTELOPE CREEK ON HILL EAST OF DIAMOND OAKS MUNICIPAL GOLF COURSE. ROCKLIN-ROSEVILLE BOUNDARY.

Location Detail: 330 AC IN ROSEVILLE; ZONED AG IN 1977 GENERAL PLAN.

Ecological: LARGE AREA OF POOLS ON MEHRTEN FORMATION, EXCHEQUER VERY STONY LOAM. SPP INCL GRATIOLA HETEROSEPALA. PORTION SEEN IN 1987 EXCELLENT EXAMPLE OF VOLCANIC MUDFLOW POOLS. UNABLE TO CONVERT FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

Threat: PROPOSED FOR REGIONAL SHOPPING CENTER.

General: SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: UNKNOWN

Occurrence No. 5 **Map Index:** 11695 **EO Index:** 16213

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1982-XX-XX
Site: 1982-XX-XX

Record Last Updated: 1998-07-16

Quad Summary: Roseville (3812173/528D)

County Summary: Placer

Lat/Long: 38.78157° / -121.28441°
UTM: Zone-10 N4293935 E649016
Area: 62.7 acres
Elevation: 165 ft

Mapping Precision: SPECIFIC
Symbol Type: POLYGON

Township: 11N
Range: 06E
Section: 27 **Qtr:** NE
Meridian: M

Location: LESS THAN 1 MILE NORTH OF DIAMOND OAKS MUNICIPAL GOLF COURSE, EAST OF HIGHWAY 65, ROCKLIN.

Location Detail: 51 ACRES.

Ecological: ON VOLCANIC SUBSTRATE. DICHLOSTEMMA LACUNA-VERNALIS PRESENT. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

Threat: ZONED AS RESIDENTIAL IN 1977 ROSEVILLE GENERAL PLAN.

General: SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Northern Volcanic Mud Flow Vernal Pool

Element Code: CTT44132CA

Status

Federal: None
State: None

NDDB Element Ranks

Global: G1
State: S1.1

Other Lists

Habitat Associations

General:
Micro:

Owner/Manager: UNKNOWN

Progne subis

purple martin

Element Code: ABPAU01010

Status
Federal: None
State: None

NDDB Element Ranks
Global: G5
State: S3

Other Lists
CDFG Status: SC

Habitat Associations
General: INHABITS WOODLANDS, LOW ELEVATION CONIFEROUS FOREST OF DOUGLAS-FIR, PONDEROSA PINE, & MONTEREY PINE.
Micro: NESTS IN OLD WOODPECKER CAVITIES MOSTLY, ALSO IN HUMAN-MADE STRUCTURES. NEST OFTEN LOCATED IN TALL, ISOLATED TREE/SNAG.

Occurrence No. 27 **Map Index:** 70377 **EO Index:** 71268

Occ Rank: Good
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2007-05-23
Site: 2007-05-23
Record Last Updated: 2007-10-31

Quad Summary: Roseville (3812173/528D), Rocklin (3812172/527C)
County Summary: Placer

Lat/Long: 38.77202° / -121.25187°
UTM: Zone-10 N4292929 E651863
Radius: 80 meters
Elevation: 216 ft

Mapping Precision: SPECIFIC
Symbol Type: POINT

Township: 11N
Range: 06E
Section: 25 **Qtr:** SE
Meridian: M

Location: HIGHWAY 65 OVERPASS OVER TAYLOR ROAD, ON THE SOUTH EDGE OF ROCKLIN.

Ecological: HABITAT SURROUNDING FREEWAYS CONSISTS OF NON-NATIVE GRASSLAND AND OAK WOODLAND.

General: 2 ADULTS (PAIR) OBSERVED NESTING IN OVERPASS DRAINAGE HOLE ON 23 MAY 2007.

Owner/Manager: CALTRANS, UNION PACIFIC ROW

Spea hammondii

western spadefoot — **Element Code:** AAABF02020

Status — **NDDB Element Ranks** — **Other Lists**

Federal: None — **Global:** G3 — **CDFG Status:** SC

State: None — **State:** S3

Habitat Associations

General: OCCURS PRIMARILY IN GRASSLAND HABITATS, BUT CAN BE FOUND IN VALLEY-FOOTHILL HARDWOOD WOODLANDS.

Micro: VERNAL POOLS ARE ESSENTIAL FOR BREEDING AND EGG-LAYING.

Occurrence No. 171 **Map Index:** 42145 **EO Index:** 42145

Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1991-04-12
Site: 1991-04-12
Record Last Updated: 2000-01-20

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.76197° / -121.33795°
UTM: Zone-10 N4291674 E644405
Radius: 80 meters
Elevation: 115 ft
Mapping Precision: SPECIFIC
Symbol Type: POINT
Township: 11N
Range: 06E
Section: 32 **Qtr:** NW
Meridian: M

Location: TRIB TO KASEBERG CREEK, 1.3 MILES NE OF JCT BASE LINE & FIDDYMENT ROADS, ROSEVILLE

Location Detail: 5 CONSTRUCTED VERNAL POOLS AND TRIB TO KASEBERG CREEK. MAPPED TO SITE DESCRIPTION (ELEVATION GIVEN DOESN'T MATCH).

Ecological: VERNAL POOLS AND INTERMITTENT CREEK. SURROUNDING LAND USE: MITIGATION SITE, VARIOUS DEVELOPMENTS.

Threat: THREATENED BY INCREASED HYDROLOGYAND NON-NATIVE FISHES

General: SEVERAL TADPOLES OBSERVED, 1991.

Owner/Manager: UNKNOWN

Occurrence No. 172 **Map Index:** 42147 **EO Index:** 42147

Occ Rank: Poor
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1994-03-19
Site: 1994-03-19
Record Last Updated: 2000-01-20

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.76934° / -121.25377°
UTM: Zone-10 N4292628 E651704
Radius: 80 meters
Elevation: 200 ft
Mapping Precision: SPECIFIC
Symbol Type: POINT
Township: 11N
Range: 06E
Section: 25 **Qtr:** SE
Meridian: M

Location: POOLS ADJACENT TO RAILROAD TRACKS NEAR TAYLOR ROAD, 0.4 MILE SOUTH OF SEWAGE DISPOSAL PONDS, ROSEVILLE.

Location Detail: POOLED AREAS BETWEEN TRACKS AND DEVELOPMENT.

Ecological: SURROUNDING LAND USE: RAILROAD EASEMENT. CALIFORNIA LINDERIELLA ALSO PRESENT.

Threat: DEVELOPMENT

General: 5 TADPOLES OBSERVED, 1994.

Owner/Manager: UNKNOWN

Occurrence No. 173 **Map Index:** 42150 **EO Index:** 42150

Occ Rank: Poor
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 1990-02-XX
Site: 1990-02-XX
Record Last Updated: 2000-01-12

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.76985° / -121.33078°
UTM: Zone-10 N4292560 E645012
Radius: 2/5 mile
Elevation: 140 ft
Mapping Precision: NON-SPECIFIC
Symbol Type: POINT
Township: 11N
Range: 06E
Section: 29 **Qtr:** XX
Meridian: M

Location: NEAR THE INTERSECTION OF WOODCREEK OAKS BLVD AND PLEASANT GROVE BLVD, WOODCREEK OAKS SUBDIVISION IN WESTERN ROSEVILLE

Location Detail: MAPPED TO DESCRIPTION GIVEN (TOWNSHIP, SECTION AND ELEVATION DON'T MATCH SITE DESCRIPTION).

Ecological: GRASSLAND WITH NUMEROUS VERNAL POOLS AND SWALES.

Threat: LAND HAS BEEN DEVELOPED SINCE OBSERVATION

General: 30+ METAMORPHS OBSERVED IN A DRYING INTERMITTENT DRAINAGE, 1990.

Owner/Manager: PVT

Spea hammondii

western spadefoot

Element Code: AAABF02020

Status
Federal: None
State: None

NDDB Element Ranks
Global: G3
State: S3

Other Lists
CDFG Status: SC

Habitat Associations
General: OCCURS PRIMARILY IN GRASSLAND HABITATS, BUT CAN BE FOUND IN VALLEY-FOOTHILL HARDWOOD WOODLANDS.
Micro: VERNAL POOLS ARE ESSENTIAL FOR BREEDING AND EGG-LAYING.

Occurrence No. 309 **Map Index:** 60024 **EO Index:** 60060
Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2004-04-23
Site: 2004-04-23
Record Last Updated: 2005-02-16

Quad Summary: Roseville (3812173/528D)
County Summary: Placer

Lat/Long: 38.78621° / -121.36950°
UTM: Zone-10 N4294315 E641615
Area: 11.4 acres
Elevation: 95 ft
Mapping Precision: SPECIFIC
Symbol Type: POLYGON
Township: 11N
Range: 05E
Section: 24 **Qtr:** XX
Meridian: M

Location: UNNAMED TRIBUTARY TO PLEASANT GROVE CREEK NORTH AND EAST OF PHILLIP ROAD, NW OF ROSEVILLE
Ecological: HABITAT CONSISTS OF TWO PONDED AREAS WITHIN A SEASONAL SWALE/CHANNEL
General: ON 23 APR 2004, ONE POOL SUPPORTED <10 TADPOLES AND THE OTHER SUPPORTED 50-100 TADPOLES.
Owner/Manager: UNKNOWN

ATTACHMENT B

USFWS Query of Listed Species: Roseville Quad

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825

June 25, 2012

Document Number: 120625052134

Eric W. Stitt
ECORP Consulting, Inc.
2525 Warren Drive
Rocklin, CA 95677

Subject: Species List for Foothills Corporate Center

Dear: Mr. Stitt

We are sending this official species list in response to your June 25, 2012 request for information about endangered and threatened species. The list covers the California counties and/or U.S. Geological Survey 7½ minute quad or quads you requested.

Our database was developed primarily to assist Federal agencies that are consulting with us. Therefore, our lists include all of the sensitive species that have been found in a certain area *and also ones that may be affected by projects in the area*. For example, a fish may be on the list for a quad if it lives somewhere downstream from that quad. Birds are included even if they only migrate through an area. In other words, we include all of the species we want people to consider when they do something that affects the environment.

Please read Important Information About Your Species List (below). It explains how we made the list and describes your responsibilities under the Endangered Species Act.

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be September 23, 2012.

Please contact us if your project may affect endangered or threatened species or if you have any questions about the attached list or your responsibilities under the Endangered Species Act. A list of Endangered Species Program contacts can be found here.

Endangered Species Division

TAKE PRIDE IN AMERICA

U.S. Fish & Wildlife Service
Sacramento Fish & Wildlife Office
Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the Counties and/or U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 120625052134

Database Last Updated: September 18, 2011

Quad Lists

Listed Species

Invertebrates

Branchinecta conservatio
Conservancy fairy shrimp (E)

Branchinecta lynchi
vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)

Lepidurus packardi
vernal pool tadpole shrimp (E)

Fish

Hypomesus transpacificus
delta smelt (T)

Oncorhynchus mykiss
Central Valley steelhead (T) (NMFS)
Critical habitat, Central Valley steelhead (X) (NMFS)

Oncorhynchus tshawytscha
Central Valley spring-run chinook salmon (T) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Rana draytonii
California red-legged frog (T)

Reptiles

Thamnophis gigas
giant garter snake (T)

Quads Containing Listed, Proposed or Candidate Species:

ROSEVILLE (528D)

County Lists

No county species lists requested.

Key:

(E) *Endangered* - Listed as being in danger of extinction.
(T) *Threatened* - Listed as likely to become endangered within the foreseeable future.
(P) *Proposed* - Officially proposed in the Federal Register for listing as endangered or threatened.
(NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.

Critical Habitat - Area essential to the conservation of a species.
(PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.
(C) *Candidate* - Candidate to become a proposed species.
(V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
(X) *Critical Habitat* designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, **or may be affected by** projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online Inventory of Rare and Endangered Plants.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist and/or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list. See our Protocol and Recovery Permits pages.

For plant surveys, we recommend using the Guidelines for Conducting and Reporting Botanical Inventories. The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

> Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal consultation with the Service.

  During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

  Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our Map Room page.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. More info

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6520.

CITY OF ROSEVILLE
CALIFORNIA

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

MITIGATION MONITORING PROGRAM

Project Title/File Number	NIPA PCL 50 – Foothills Corporate Center Grading Plan
Project Location	8501 Foothills Bl.; Roseville; Placer County; APN: 017-230-014-000
Project Description	The applicant requests approval of a Major Grading Plan that would allow rough grading of the site and seasonal wetlands on the site to be filled.
Project Applicant	Greg Bardini, Morton & Pitalo, Inc.; (916) 984-7621; 75 Iron Point Circle #120, Folsom, CA 95630
Property Owner	Daisy Stires, Sterling Savings Bank ; (509) 227-0960 ; 111 North Wall St., Spokane, WA 99026
Lead Agency Contact Person	Derek Ogden, Phone (916) 774-5276

Section 21081.6 of the California Public Resources Code requires public agencies to "adopt a reporting and monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment." This monitoring program is required for the project as significant adverse impacts have been identified, and mitigation measures have been identified to mitigate those impacts.

MONITORING PROCESS: Existing monitoring mechanisms are in place that assist the City of Roseville in meeting the intent of CEQA. These existing monitoring mechanisms eliminate the need to develop new monitoring processes for each mitigation measure. These mechanisms include grading plan review and approval, improvement/building plan review and approval and on-site inspections by City Departments. Given that these monitoring processes are requirements of the project, they are not included in the mitigation monitoring program. Therefore, only those mitigation measures that are unique to this project are listed in the following monitoring table. The table indicates the required mitigation along with who is the responsible party for monitoring along with when the monitoring is to occur and when the monitoring has been completed.

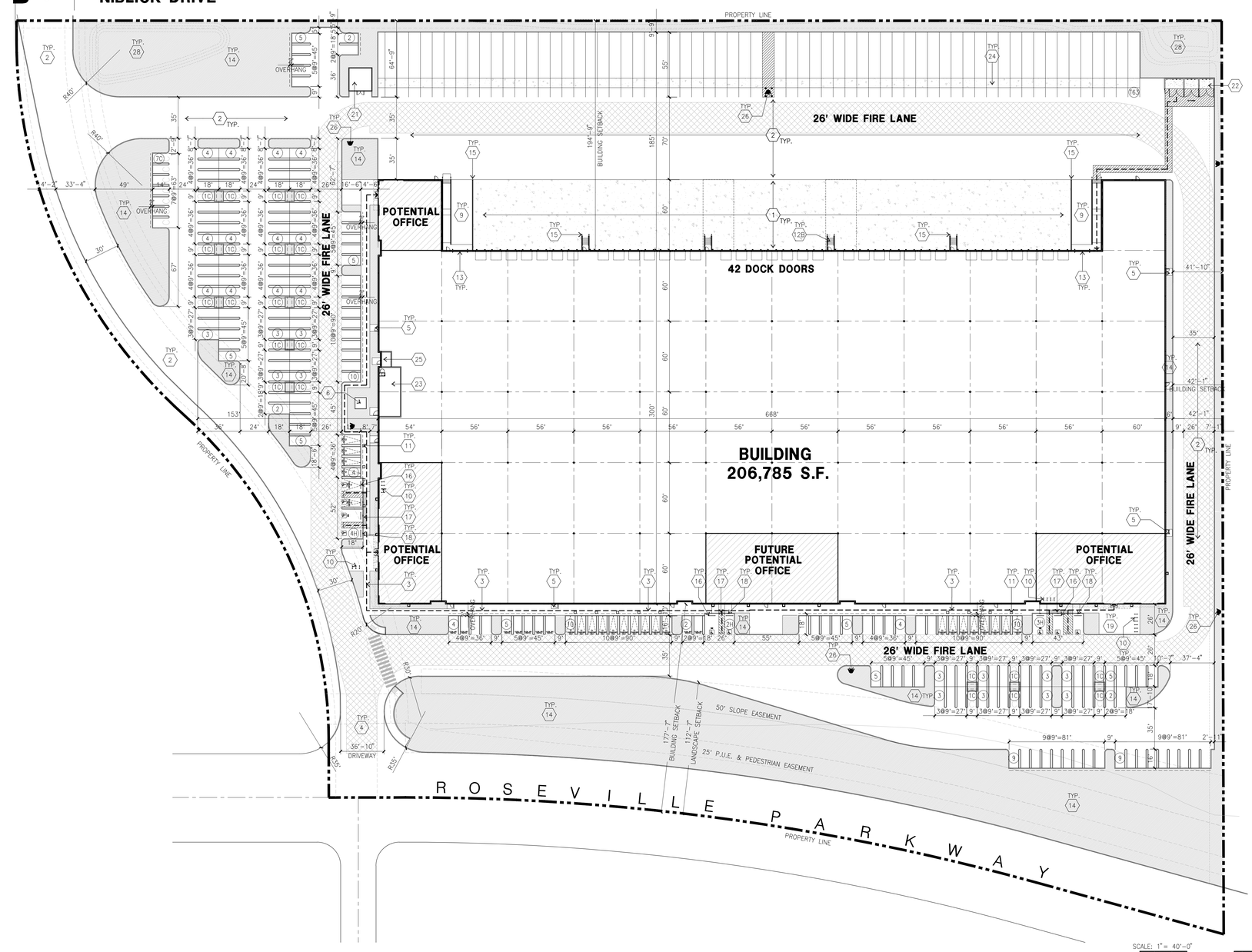
MITIGATION MONITORING TABLE – Carlsberg Lot 5 Grading Plan

MITIGATION NUMBER	DESCRIPTION	GRADING PERMIT	IMPROVE/ BUILDING PLANS	DURING CONST	PLAN CHECK CITY DEPT.	MON. CITY DEPT.	DATE COMPLETE
MM1	**Wetlands** Prior to grading permit the project shall obtain an Army Corps of Engineers wetland fill or discharge "Section 404" permit. The project will be required to purchase credits in an approved wetland mitigation fund or other mitigation required by the 404 permit to ensure no net loss of wetlands.	Planning & Engineering	NA	NA	NA	Planning	
MM2	**Special Status Species** MM2: Prior to project construction special status species surveys shall be conducted to establish the presence/absence of these species on the site. These studies shall be conducted via the appropriate federal and state protocols.	Planning & Engineering	NA	NA	NA	Planning	
MM3	**Cultural Resources** In the event of the discovery of buried paleontological, archaeological or historic deposits, project activities in the vicinity of the find shall be temporarily halted and a qualified archaeologist consulted to assess the resource and provide proper management recommendations. Possible management recommendations for important resources could include resource avoidance or data	Planning & Engineering	NA	NA	NA	Planning	

MITIGATION MONITORING TABLE – Carlsberg Lot 5 Grading Plan

MITIGATION NUMBER	DESCRIPTION	GRADING PERMIT	IMPROVE/ BUILDING PLANS	DURING CONST	PLAN CHECK CITY DEPT.	MON. CITY DEPT.	DATE COMPLETE
	recovery excavations. If human remains are found, the Placer County Coroner's office shall be contacted immediately. The corner shall contact the Native American Heritage Commission, which shall notify the appropriate descendant.						

DC EXHIBIT B



OVERALL SITE PLAN A
scale: 1" = 40'-0"

SCALE: 1" = 40'-0"
0 40' 80' 120'
TRUE NORTH

SITE PLAN KEYNOTES

1. HEAVY BROOM FINISH CONCRETE PAVEMENT.
2. ASPHALT CONCRETE (AC) PAVING
3. ACCESSIBLE PATH OF TRAVEL
4. DRIVEWAY APRONS
5. 5'-6"X5'-6"X4" THICK CONCRETE EXTERIOR LANDING PAD TYP. AT ALL EXTERIOR MAN DOORS TO LANDSCAPED AREAS. FINISH TO BE MEDIUM BROOM FINISH SLOPE TO BE 1/4" : 12" MAX.
6. APPROXIMATE LOCATION OF TRANSFORMER. CONTRACTOR TO VERIFY
7. NOT USED.
8. CONCRETE WALKWAY, MEDIUM BROOM FINISH. SEE "L" DRAWINGS.
9. CONCRETE RAMP WITH CONCRETE GUARD WALL. SEE "C" DRAWINGS.
10. BIKE RACK. SEE DAB-A.2.1 FOR LONG TERM BIKE LOCATION
11. FUTURE ELECTRIC VEHICLE CHARGER.
12A. EXTERIOR METAL STEEL STAIR.
12B. EXTERIOR CONCRETE STAIR.
13. 12' x 14' DRIVE-IN DOOR
14. LANDSCAPE.
15. CONC. FILLED GUARD POST 6" DIA. U.N.O. 48" H.
16. PRE-CAST CONC. WHEEL STOP.
17. TRUNCATED DOMES.
18. ACCESSIBLE PARKING STALL SIGN.
19. HARDSCAPE AT ENTRANCE. SEE "L" DRAWINGS.
20. ACCESSIBLE ENTRY SIGN.
21. PUMP HOUSE
22. TRASH ENCLOSURE.
23. ELECTRICAL ROOM.
24. CONCRETE DOLLY PAD. SEE SITE PLAN FOR WIDTH AND "C" DRAWINGS.
25. FIRE RISER ROOM
26. FIRE HYDRANT
27. NOT USED.
28. STORM TREATMENT SEE CIVIL DRAWINGS

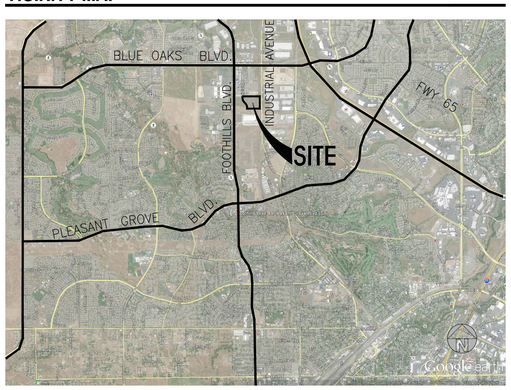
SITE PLAN GENERAL NOTES

1. THE SITE PLAN BASED ON THE SOILS REPORT PREPARED BY GEOTECHNICAL ENGINEER, DATE, PROJECT NUMBER #
2. IF SOILS ARE EXPANSIVE IN NATURE, USE STEEL REINFORCING FOR ALL SITE CONCRETE
3. ALL DIMENSIONS ARE TO THE FACE OF CONCRETE WALL, FACE OF CONCRETE CURB OR GRID LINE U.N.O.
4. SEE "C" PLANS FOR ALL CONCRETE CURBS, GUTTERS AND SWALES
5. PROVIDE STRUCTURAL CALCULATION AND CONSTRUCTION ANCHORAGE DETAIL FOR TRANSFORMER PRIOR TO INSTALLATION.
6. SEE "C" DRAWINGS FOR POINT OF CONNECTIONS TO OFF-SITE UTILITIES. CONTRACTOR SHALL VERIFY ACTUAL UTILITY LOCATIONS.
7. PROVIDE POSITIVE DRAINAGE AWAY FROM BLDG. SEE "C" DRAWINGS.
8. CONTRACTOR TO REFER TO "C" DRAWINGS FOR ALL HORIZONTAL CONTROL DIMENSIONS. SITE PLANS ARE FOR GUIDANCE AND STARTING LAYOUT POINTS.
9. SEE "C"DRAWINGS FOR FINISH GRADE ELEVATIONS.
10. CONCRETE SIDEWALKS TO BE A MINIMUM OF 4" THICK W/ TOOLED JOINTS AT 6' O.C. EXPANSION/CONSTRUCTION JOINTS SHALL BE A MAXIMUM 12' EA. WAY W/ 1:20 MAX. SLOPE. EXPANSION JOINTS TO HAVE COMPRESSIVE EXPANSION FILLER MATERIAL OF 1/4". FINISH TO BE A MEDIUM BROOM FINISH
11. U.N.O. PROVIDE KNOX BOXES AT ALL OFFICE ENTRANCES.
12. PAINT CURBS AND PROVIDE SIGNS TO INFORM OF FIRE LANES AS REQUIRED BY FIRE DEPARTMENT.
13. ON-SITE FIRE MAIN, FIRE SPRINKLER, AND SPRINKLER MONITORING SYSTEM SHALL BE SUBMITTED SEPARATELY TO THE FIRE DEPARTMENT FOR REVIEW AND PERMITTING.
14. ALL VERTICAL MOUNTING POLES OF FENCING SHALL BE CAPPED.
15. LANDSCAPED AREAS SHALL BE DELINEATED WITH A MINIMUM SIX INCHES (6") HIGH CURB
16. ALL INTERIOR AND EXTERIOR WALK SURFACES TO BE NON-SLIP TYPE

SITE PLAN LEGEND

- CONCRETE PAVING. SEE "C" DRWGS. FOR THICKNESS
- STANDARD PARKING STALL (9' X 18')
- STANDARD PARKING STALL (9' X 16'+2' OVERHANG)
- CLEAN AIR/VANPOOL/EV CONDUIT STUB FOR FUTURE EV
- CLEAN AIR/ VANPOOL/EV WITHOUT CONDUIT STUB FOR FUTURE EV
- TRAILER PARKING (10' X 53')
- LANDSCAPED AREA
- FIRE LANE
- COMPACT PARKING STALL (8' X 14'+2' OVERHANG)
- ACCESSIBLE PARKING STALL (9' X 18') + 5' W/ ACCESSIBLE AISLE
- ACCESSIBLE PARKING (VAN) STALL (12' X 18') + 5' W/ ACCESSIBLE AISLE
- PATH OF TRAVEL. MINIMUM WIDTH TO BE 4'. SLOPE NOT TO EXCEED 5% IN THE DIRECTION OF TRAVEL AND CROSS SLOPE NOT TO EXCEED 2%. SEE CIVIL FOR GRADING PLAN

VICINITY MAP



PROPERTY OWNER

RIDGE CAPITAL INC
555 UNIVERSITY AVENUE, SUITE 180
SACRAMENTO, CA 95825
PHONE: 916-330-1975
CONTACT: MICHELLE AZEVEDO

ADDRESS OF THE PROPERTY

751 Roseville Parkway
Roseville, CA 95747

ASSESSOR'S PARCEL NUMBER

017-232-007-000

ZONING

ZONING — LIGHT INDUSTRIAL DISTRICT (M-1)
NORTH INDUSTRIAL PLANNING AREA

APPLICANT'S REPRESENTATIVE

HPA, INC.
600 GRAND AVENUE – STE. 302
OAKLAND, CA 94610
TEL: 925-413-6896
ATTN: DEBIE TRIANI

SHEET INDEX

ARCHITECTURAL

DAB-A1.1 OVERALL SITE PLAN
DAB-A1.2 PUMP HOUSE
DAB-A2.1 OVERALL FLOOR PLAN
DAB-A3.1 ELEVATIONS
DAB-AD.1 DETAILS

CIVIL

C.0 PRELIMINARY GRADING PLAN
C.1 PRELIMINARY UTILITY PLAN

LANDSCAPE

L.1 PRELIMINARY LANDSCAPE PLAN

PROJECT DATA

SITE AREA	**BUILDING**	
In s.f.	611,927	s.f.
In acres	14.05	ac
BUILDING AREA		
Office	10,000	s.f.
Warehouse	196,785	s.f.
TOTAL	206,785	s.f.
FLOOR AREA RATIO (MAX 0.5)	0.34	
AUTO PARKING REQUIRED		
Office: 1/250 s.f.		stalls
(N/A, office doesn't exceed 10% of GFA)		
Whse: 1/1,000 s.f.	207	stalls
TOTAL	207	stalls
AUTO PARKING PROVIDED		
Standard (9' x 18' including overhang)	159	stalls
Compact (9' x 16' including overhang)	29	stalls
Accessible Standard (9' x 18') (108" x 216")	4	stalls
Accessible Van (12' x 18') (144" x 216")	3	stalls
Accessible Standard EV (9' x 18') (108" x 216")	1	stalls
Accessible Van EV (12' x 18') (144" x 216")	1	stalls
Clean Air / Vanpool (5' min parking) (9' x 18' including overhang)	17	stalls
EV charging (10% min parking) (9' x 18' including overhang)	19	stalls
TOTAL	233	stalls
BICYCLE RACK REQUIRED		
Short Term (4 + 5% of total stalls)	16	
Long Term (1 + 5% of total stalls)	13	
BICYCLE RACK PROVIDED		
Short Term (4 + 5% of total stalls)	18	
Long Term (1 + 5% of total stalls)	16	
TRAILER PARKING PROVIDED		
Trailer (10' x 53')	63	stalls
ZONING ORDINANCE FOR CITY		
Zoning Designation - Light Industrial (M-1)		
North Industrial Planning Area		
MAXIMUM BUILDING HEIGHT ALLOWED		
Height - 50'		
LANDSCAPE REQUIREMENT		
Percentage - TBC		
SETBACKS		
Building		
Front - 100' Ave. Bldg.		
Side - 50'		
Rear - 60'		
Landscape		
50' from Roseville Pkwy		
15' from Union Pacific Rail road (Reduced)		
6' parking lot setback from adjacent properties		

OFFICIAL USE ONLY

HPA architecture

hpa, inc.
600 grand ave, suite 302
oakland, ca
94610
tel: 949•862•2113
email: hpa@hparchs.com

Owner:
RIDGE CAPITAL
555 University Ave. Suite 180
Sacramento, CA 95825

TEL: 916-527-8020
FAX: 916-993-6480

Project:
751 ROSEVILLE PARKWAY
Roseville, CA

Consultants:

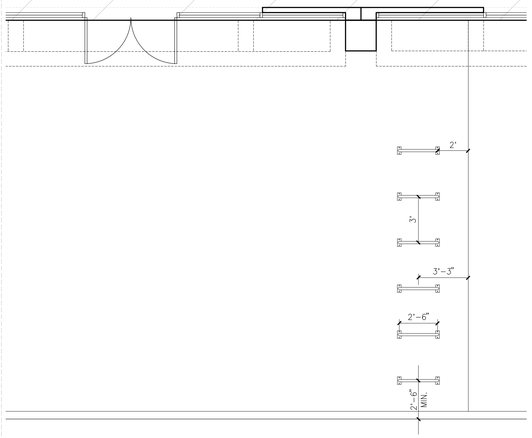
CIVIL	Morton & Pitalo
STRUCTURAL	
MECHANICAL	
PLUMBING	
ELECTRICAL	
LANDSCAPE	Vista Parks
FIRE PROTECTION	
SOILS ENGINEER	

Title: OVERALL SITE PLAN

Project Number: 20524
Drawn by: M.D
Date: 06/01/2021

Revision:
City resubmittal 7/29/2021
City resubmittal 8/31/2021
City resubmittal 9/24/2021

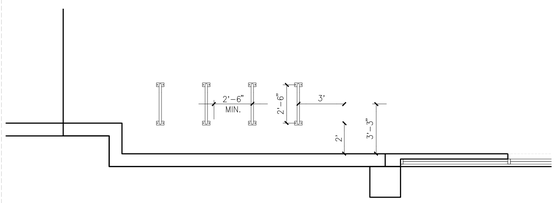
Sheet:
DAB-A1.1



TYPICAL ENLARGED SHORT-TERM BIKE PARKING

SCALE: 1/4" = 1'-0"

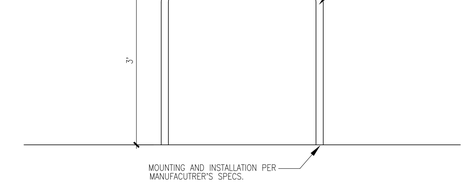
7



TYPICAL ENLARGED LONG-TERM BIKE PARKING

SCALE: 1/4" = 1'-0"

8

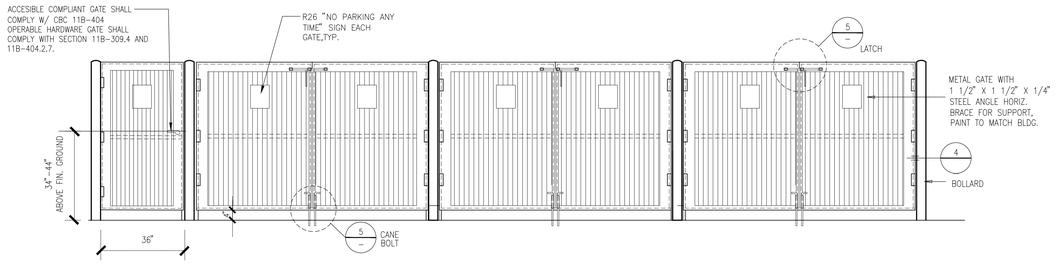


NOTE: TIMBERFORM CYCLOOPS MANUFACTURED BY COLOMBIA CASCADE CO., PORTLAND, OREGAN. (800) 547-1940, (503) 223-1157 MODEL NUMBER: 2170-3-02

BIKE RACK DETAIL

N.T.S.

9



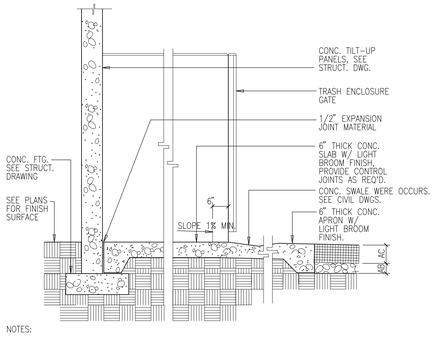
NOTES:
1. PAINT METAL PER SPECIFICATIONS.
2. FOR ADDITIONAL INFORMATION, SEE DETAIL 2

TRASH ENCLOSURE GATE ELEVATION

SCALE: N.T.S.

A10502B

3



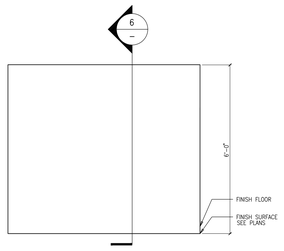
NOTES:
1. SEE SOILS REPORT FOR BELOW SLAB PREPARATIONS AND STEEL REINFORCEMENT RECOMMENDATIONS.
2. SEE DETAILS 2 3 FOR ADDITIONAL NOTES.

TRASH ENCLOSURE SECTION

SCALE: N.T.S.

10502C

1

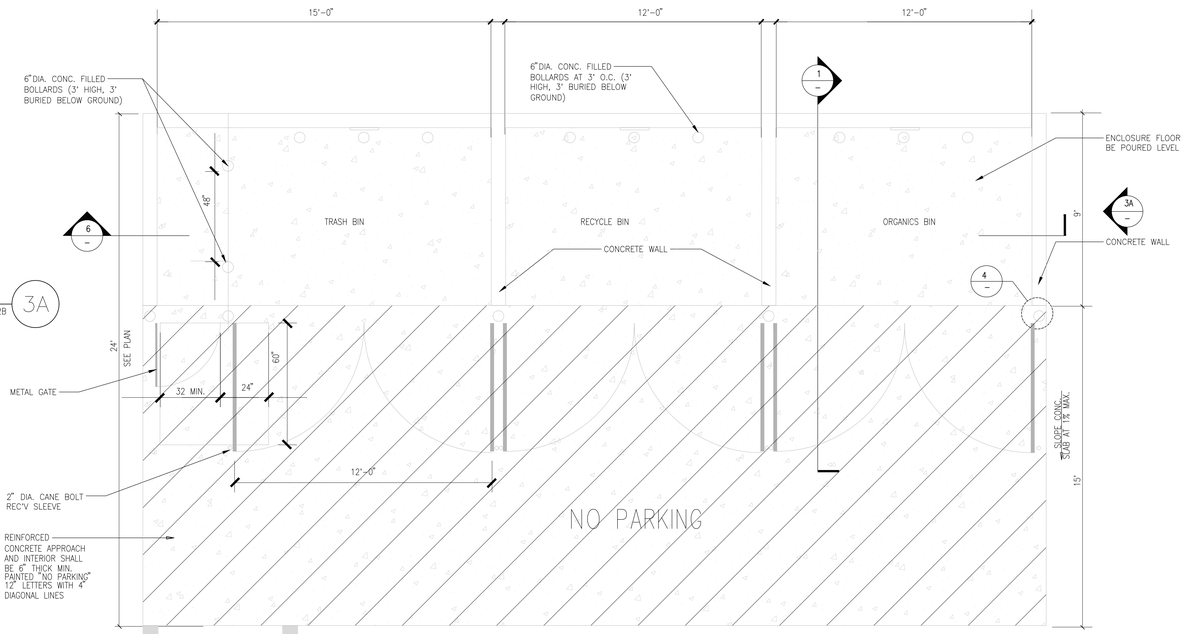


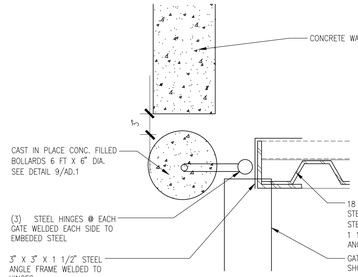
TRASH ENCLOSURE ELEVATION

SCALE: NTS

A10502B

3A



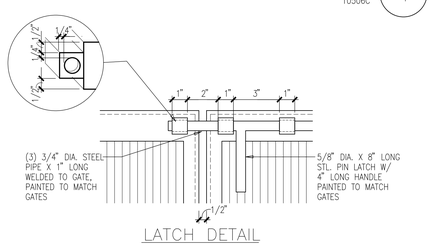


TRASH ENCLOSURE GATE & HINGE

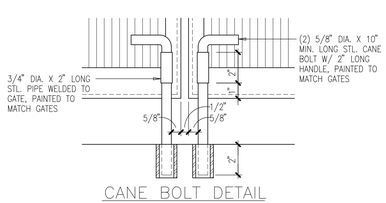
SCALE: NTS

10506C

4



LATCH DETAIL



CANE BOLT DETAIL

TRASH ENCLOSURE GATE LATCHES

SCALE: NTS

DEX-0003

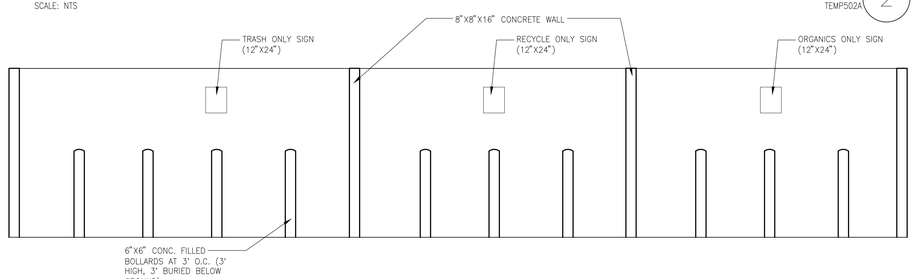
5

TRASH ENCLOSURE PLAN

SCALE: NTS

TEMP502A

2



TRASH ENCLOSURE SECTION

SCALE: N.T.S.

A10502B

6

3

GENERAL NOTES:
1. SEE SITE PLAN FOR LOCATIONS.
2. SEE STRUCTURAL DRAWINGS FOR STEEL REINFORCING.
3. SACK AND PATCH ALL PANEL LIFT POINTS ON OF WALL AND PAINT TO MATCH.
4. SINGLE ENCLOSURE IS 12' WIDE (INTERIOR)
5. THE EXTERIOR FINISH AND COLOR OF THE ENCLOSURE SHALL MATCH THE BUILDING PER THE DESIGN REVIEW PERMIT EXHIBITS AND / OR CONDITIONS OF APPROVAL
6. GREASE/TALLOW BIN ENCLOSURE MAY BE ATTACHED TO THE TRASH ENCLOSURE OR BE CONSTRUCTED SEPARATELY. THE GREASE/TALLOW BIN MUST NOT BE LOCATED WITHIN THE TRASH/RECYCLING ENCLOSURE.
7. NO. 4 REBAR, 12 INCHES O.C. EACH WAY, 3 INCH DOBIES WITH WIRE TIES AT 3' INTERVALS, EACH WAY.
8. SEE SW-1 FOR CITY DETAILS

NOTES:
1. ACCESSIBLE TRASH ENCLOSURE DOOR MUST MEET ALL APPLICABLE SPECIFICATIONS FOR DOORS AS PER 2019 CBC, SECTION 11B-206.4 & 11B-206.4.1
2. PROVIDE A 10" HIGH KICK PLATE AT THE BOTTOM OF THE DOOR, 2019 CBC, SECTION 11B-404.2.10
3. ACCESSIBLE TRASH ENCLOSURE DOOR TO HAVE A MAXIMUM DOOR OPENING OF 5LBS AND A SINGLE-EFFORT, NON-GRASPING TYPE HARDWARE CENTERED BETWEEN 34" AND 44" ABOVE THE CONCRETE DECK.
4. ACCESSIBLE TRASH ENCLOSURE DOOR TO HAVE A MINIMUM 24" STRIKE SIDE CLEARANCE AND MINIMUM 60" DEEP LEVEL LANDING AT THE PULL SIDE OF THE (EXTERIOR) DOOR TO COMPLY WITH 2019 CBC, SECTIONS 11B-404.2.4, 11B-404.2.4.1 & TABLE 11B-404.2.3

HPA architecture

hpa, inc.
600 grand ave, suite 302
oakland, ca
94610
tel: 949•862•2113
email: hpa@hparchs.com

Owner:

RIDGE CAPITAL

555 University Ave. Suite 180
Sacramento, CA 95825

TEL: 916-527-8020
FAX: 916-993-6480

Project:

751 ROSEVILLE PARKWAY

Roseville, CA

Consultants:

CIVIL	Morton & Pitalo
STRUCTURAL	
MECHANICAL	
PLUMBING	
ELECTRICAL	
LANDSCAPE	Vista Parks
FIRE PROTECTION	
SOILS ENGINEER	

Title: DETAILS

Project Number:	20524
Drawn by:	M.D
Date:	06/01/2021

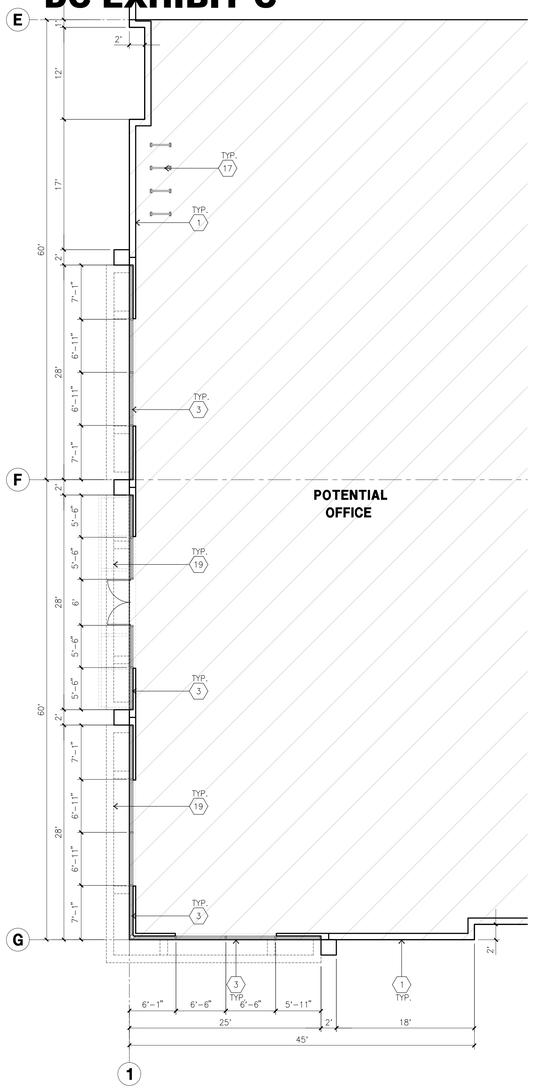
Revision:

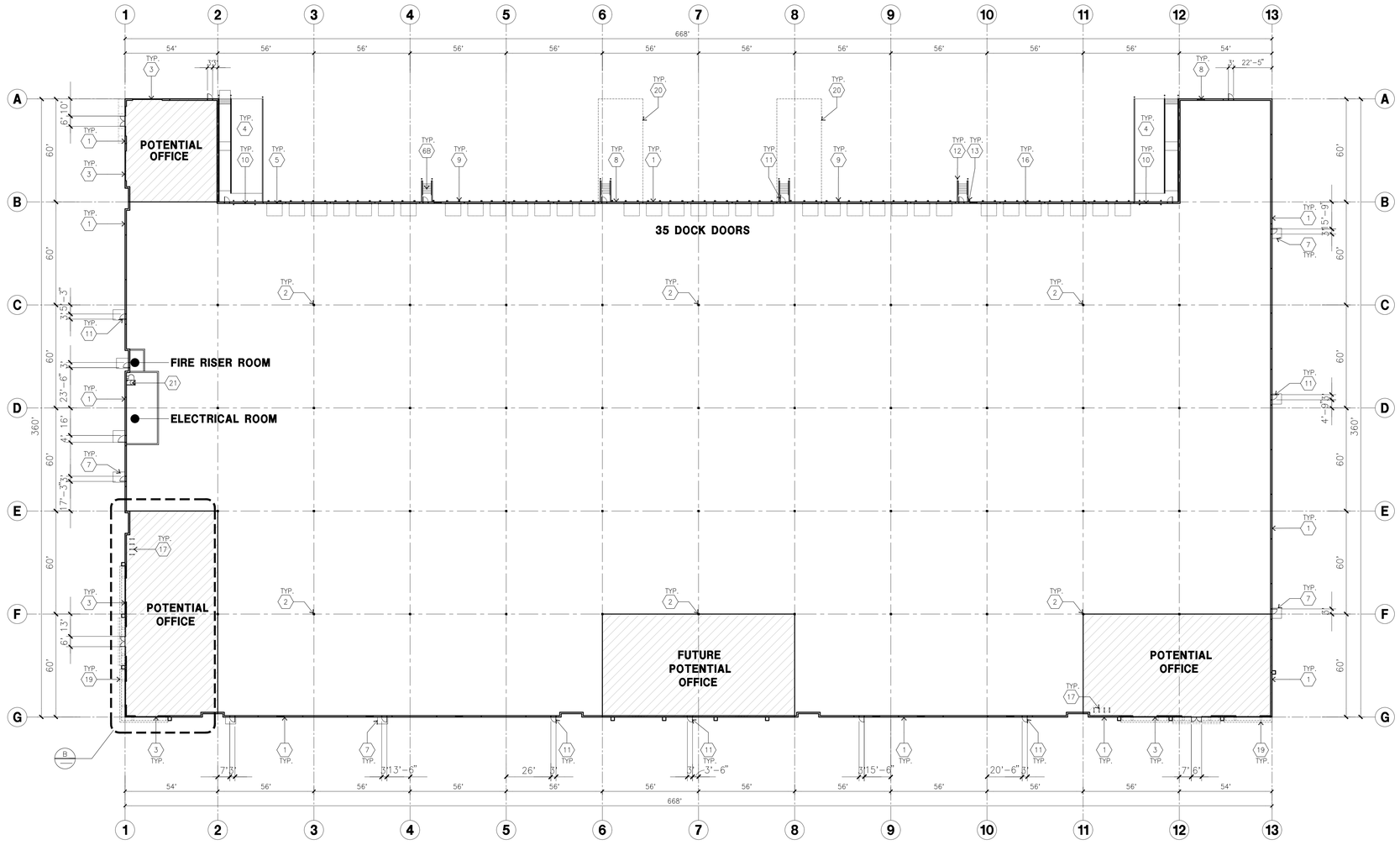
City resubmittal	7/29/2021
City resubmittal	8/31/2021
City resubmittal	9/24/2021

Sheet:

DAB-AD.1

DC EXHIBIT C





ENLARGED FLOOR PLAN B
scale: 1/8" = 1'-0"

SCALE: 1/8" = 1'-0"
0 8' 16' 24' TRUE NORTH

OVERALL FLOOR PLAN A
scale: 1" = 30'-0"

SCALE: 1" = 30'-0"
0 30' 60' 90' TRUE NORTH

KEYNOTES - FLOOR PLAN

1. CONCRETE TILT-UP PANEL.
2. STRUCTURAL STEEL COLUMN.
3. TYPICAL STOREFRONT SYSTEM WITH GLAZING. SEE ENLARGED PLANS AND ELEVATIONS FOR SIZE, COLOR AND LOCATIONS.
4. CONCRETE RAMP W/ 42" HIGH CONC TILT-UP GUARD WALL OR BUILDING WALL ON BOTH SIDES OF RAMP.
5. 9' X 10' DOCK DOOR, SECTIONAL O.H., STANDARD GRADE. DESIGNED TO RESIST CITY REQUIRED WIND SPEED.
6A. EXTERIOR METAL STEEL STAIR.
6B. EXTERIOR CONCRETE STAIR.
7. 5'-6"X5'-6"X4" THICK CONCRETE EXTERIOR LANDING PAD TYPICAL AT ALL EXTERIOR MAN DOORS TO LANDSCAPED AREA. FINISH TO BE MEDIUM BLOOM FINISH. SLOPE TO BE 1/4" : 12" MAX.
8. 4'X8' METAL LOUVER.
9. DOCK DOOR BUMPER.
10. 12' X 14' DRIVE THRU, SECTIONAL O.H., STANDARD GRADE. DESIGNED TO RESIST CITY REQUIRED WIND SPEED.
11. 3' X 7' HOLLOW METAL EXTERIOR MAN DOOR. DESIGNED TO RESIST CITY REQUIRED WIND SPEED.
12. CONC. FILLED GUARD POST. 6" DIA. U.N.O.. 48"H.
13. EXTERIOR DOWNSPOUT WITH OVERFLOW SCUPPER.
14. INTERIOR ROOF DRAIN & OVERFLOW SCUPPERS.
15. INTERIOR ROOF DRAIN WITH PIPED OVERFLOW.
16. Z GUARD.
17. INTERIOR BIKE RACK.
18. ELECTRICAL ROOM.
19. METAL CANOPY ABOVE.
20. FUTURE CONCRETE RAMP W/ 42" HIGH CONC TILT-UP GUARD WALL OR BUILDING WALL ON BOTH SIDES OF RAMP.

GENERAL NOTES - FLOOR PLAN

1. THIS BUILDING IS DESIGNED FOR HIGH PILE STORAGE WITH FIRE ACCESS MAN DOORS AT 100' +/-. A SEPARATE PERMIT WILL BE REQUIRED FOR ANY RACKING/CONVEYER SYSTEMS. INSURE HEAT AND SMOKE VENTS AS REQ'D COMPLY WITH TABLE 910.3 CBC
2. FIRE HOSE LOCATIONS SHALL BE APPROVED PER FIRE DEPARTMENT.
3. SEE "C" DRAWINGS FOR FINISH SURFACE ELEVATIONS.
4. WAREHOUSE INTERIOR CONCRETE WALLS ARE PAINTED WHITE. COLUMNS ARE TO RECEIVE PRIMER ONLY. ALL GYP. BD. WALLS IN WAREHOUSE TO RECEIVE 1 COAT OF WHITE TO COVER.
5. THE BUILDING FLOOR SLAB IS FLAT/SLOPED, SEE CIVIL.
6. SLOPE POUR STRIP 1/2" TO EXTERIOR AT ALL MANDOOR EXITS. SEE "S" DRAWINGS FOR POUR STRIP LOCATION.
7. PROVIDE 6" DIA. CONCRETE BOLLARD AT ALL FIRE RISER AND UNPROTECTED INTERIOR ROOF DRAIN.
8. ALL DIMENSIONS ARE TO THE FACE OF CONCRETE PANEL WALL, GRIDLINE, OR FACE OF STUD U.N.O.
9. SEE CIVIL DRAWINGS FOR POINT OF CONNECTIONS TO OFF-SITE UTILITIES. CONTRACTOR TO VERIFY ACTUAL UTILITY LOCATIONS. PLUMBING/ELECTRICAL COORDINATION.
10. FOR DOOR TYPES AND SIZES, SEE DETAIL SHEET A5.1. NOTE: ALL DOORS PER DOOR SCHEDULE ARE FINISH OPENINGS.
11. CONTRACTOR TO PROTECT AND KEEP THE FLOOR SLAB CLEAN. ALL EQUIPMENT TO BE DIAPERED INCLUDING CARS AND TRUCKS.
12. ALL EXIT MAN DOORS IN WAREHOUSE TO HAVE ILLUMINATED EXIT SIGN HARDWARE.
13. HIGHLY FLAMMABLE AND COMBUSTIBLE MATERIAL SHALL NOT BE USED OR STORED IN THIS BUILDING.
14. PROVIDE FIRE EXTINGUISHERS AT LOCATIONS DETERMINED BY FIRE DEPARTMENT.
15. EACH EXTERIOR EXIT DOOR SHALL BE IDENTIFIED BY A TACTILE EXIT SIGN WITH THE WORDS "EXIT". THE MOUNTING HEIGHT FOR SUCH SIGNAGE SHALL BE 60" FROM FINISH FLOOR LEVEL TO THE CENTER OF THE SIGN.
16. AFFIX AN INTERNATIONAL ACCESSIBILITY SYMBOL ON ALL ACCESSIBLE ENTRANCES PER CBC 11B-216.6
17. ALL INTERIOR AND EXTERIOR WALKING SURFACES TO BE NON-SLIP TYPE

FLOOR SLAB AND POUR STRIPS REQ.

THESE NOTES ARE VERY MIN. REQUIREMENT. SEE "S" DWGS FOR ADDITIONAL REQUIREMENTS

1. FLOOR COMPACTION - 95%
2. TRENCH COMPACTION - 90%
3. BUILDING FLOOR SLAB: SEE STRUCTURAL DRAWINGS FOR DETAILS.
4. CONTRACTOR TO BUILD FOR CLASS V FLOOR PER A.C.I. 302-1R-96
5. CONCRETE SLAB TO HAVE STEEL FLOAT HARD TROWEL BURNISHED FINISH.
6. CONTRACTOR TO CURE SLAB TO BE WET CURING USING BURLINE FOR 7 DAYS MIN.
7. ALL EQUIPMENT & MOVING VEHICLES SHALL BE DIAPERED.
8. NO CRANES, CONCRETE TRUCKS, OR ANYTHING HEAVIER WILL BE PLACED ON THE SLAB.
9. SLAB TO BE FF50 FL35 MEASURED WITHIN 24 HOURS.
10. NO FLY ASH IN THE CONCRETE
11. WHERE [▨] INDICATED, PROVIDE VAPOR BARRIER (15 MIL STEGO OR EQUAL) CONFORMING TO ASTM E 1745 UNDER THE CONCRETE SLAB. PROVIDE SAND PER SOILS ENGINEER OR MANUFACTURER'S RECOMMENDATION. CONCRETE SLAB IN OFFICE AREAS, WHERE SAND OVER VISQUEEN ARE REQUIRED, SHALL BE NATURALLY HYDRATED WITHOUT USE OF BURLENE, CURING COMPOUND, OR RELEASE AGENTS.
12. SEAL CONCRETE SLAB W/ "LAPIDOLITH" SEALER
13. SHUIRESEAL-LAPIDOLITH OR APPROVED EQUAL FLOOR SEALER APPLIED ONE COAT AT END OF JOB IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION.
14. NO PERMANENT GREASE PEN PANEL MARKS ON FLOOR SLAB. NO RED CAULK MARKS. ALL CONSTRUCTION MARKS TO BE REMOVED BEFORE SEALING.
15. 10' POUR STRIP AT TRUCK DOOR. 4FT. MAX. ELSEWHERE.
16. ALL FLOOR SLAB NAIL OR BRACE FRAME HOLES FILLED WITH APPROVED 2 PART EPOXY COMPOUND TO MATCH CONCRETE COLOR. PEGA BOND LV 2000,BURKE EPOXY INJECTION RESIN OR EQUAL.
17. PROVIDE FIRE EXTINGUISHERS PER FIRE DEPARTMENT REQUIREMENT.
18. MM-80 AT SPEED BAY ONLY, PRICE AS ADDITIONAL ALTERNATE

HPA architecture

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Project:
751 ROSEVILLE PARKWAY
Roseville, CA

Consultants:

CIVIL	Morton & Pitalo
STRUCTURAL	
MECHANICAL	
PLUMBING	
ELECTRICAL	
LANDSCAPE	Vista Parks
FIRE PROTECTION	
SOILS ENGINEER	

Title: OVERALL FLOOR PLAN

Project Number:	20524
Drawn by:	M.D
Date:	06/01/2021

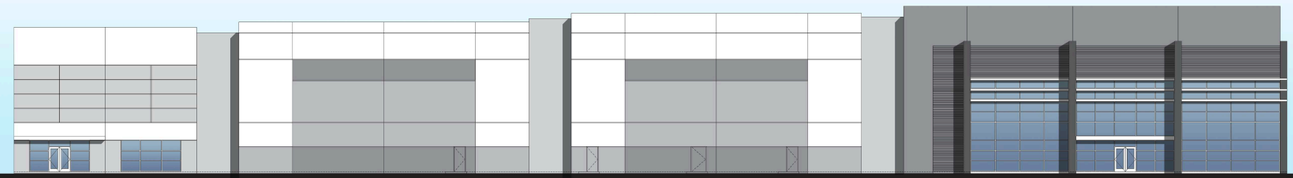
Revision:

City resubmittal	7/29/2021
City resubmittal	8/31/2021
City resubmittal	9/24/2021

Sheet:
DAB-A2.1

DC EXHIBIT D

NORTH ELEVATION



WEST ELEVATION

SOUTH ELEVATION

EAST ELEVATION

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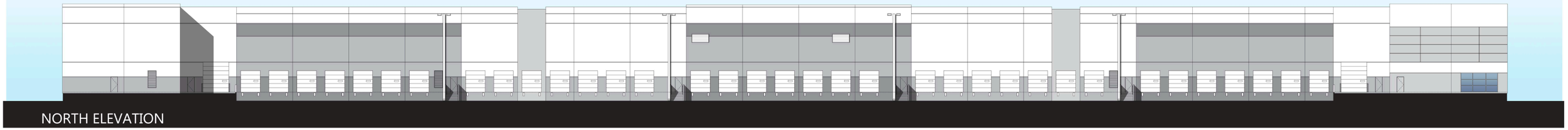
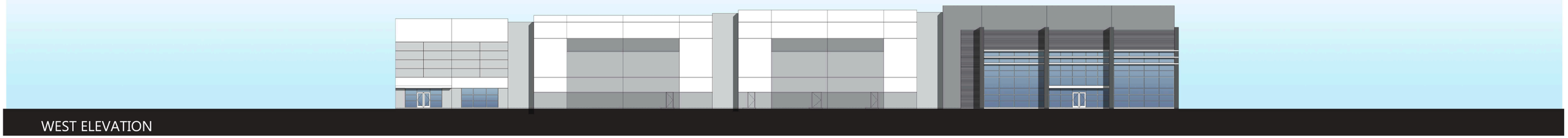
CONCEPTUAL COLORED ELEVATIONS

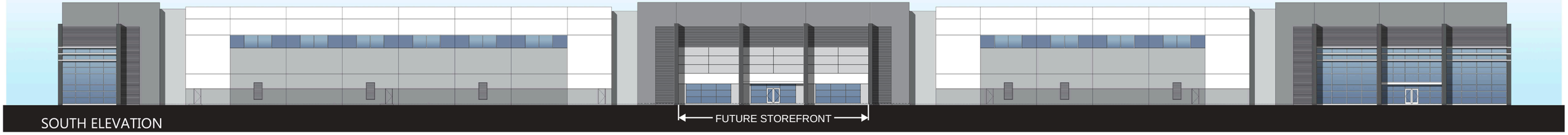
09.22.2021



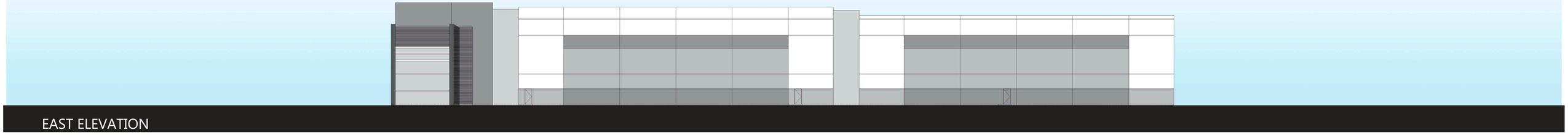
NORTH ELEVATION



WEST ELEVATION



SOUTH ELEVATION



EAST ELEVATION

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ROSEVILLE, CALIFORNIA

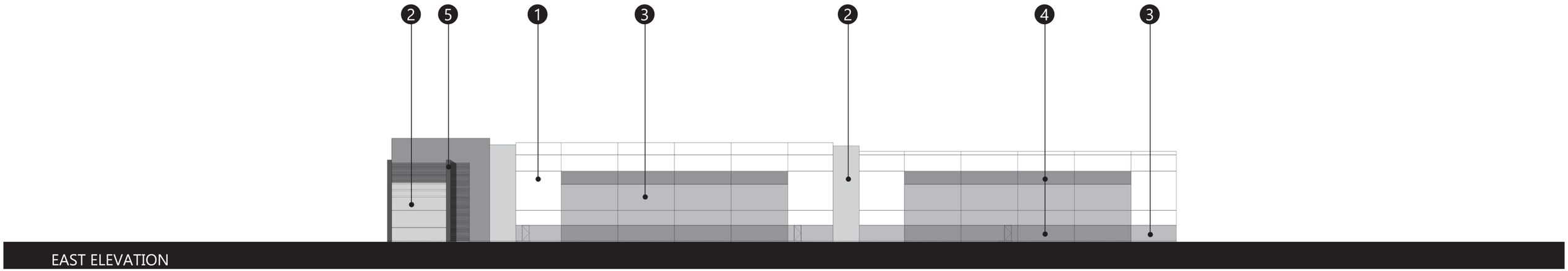
HPA architecture

RIDGE CAPITAL

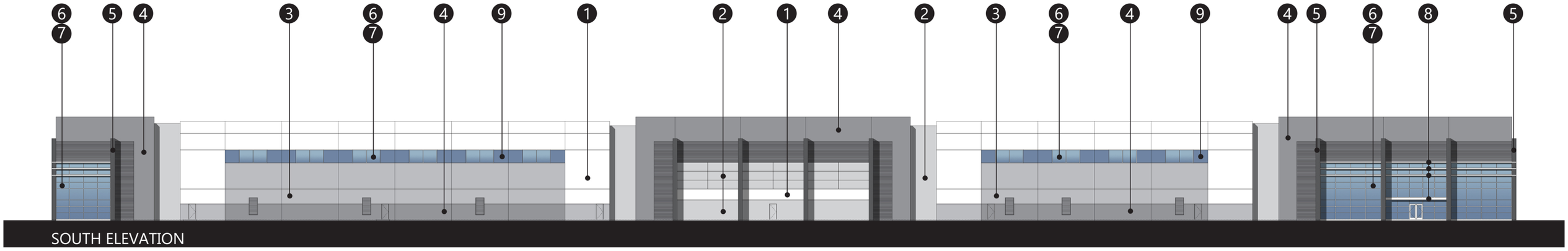
Job No. 20524.00

CONCEPTUAL COLORED ELEVATIONS

09.22.2021



EAST ELEVATION



SOUTH ELEVATION

1 Sherwin Williams SW 7006 EXTRA WHITE

2 Sherwin Williams SW 7071 GRAY SCREEN

3 Sherwin Williams SW 7073 NETWORK GRAY

4 Sherwin Williams SW 7074 SOFTWARE

5 Sherwin Williams SW 7075 WEB GRAY

6 Blue Reflective GLAZING

7 Clear Anodized MULLIONS

8 Sherwin Williams SW 7006 EXTRA WHITE @METAL CANOPY

9 Sherwin Williams SW 6510 LOYAL BLUE

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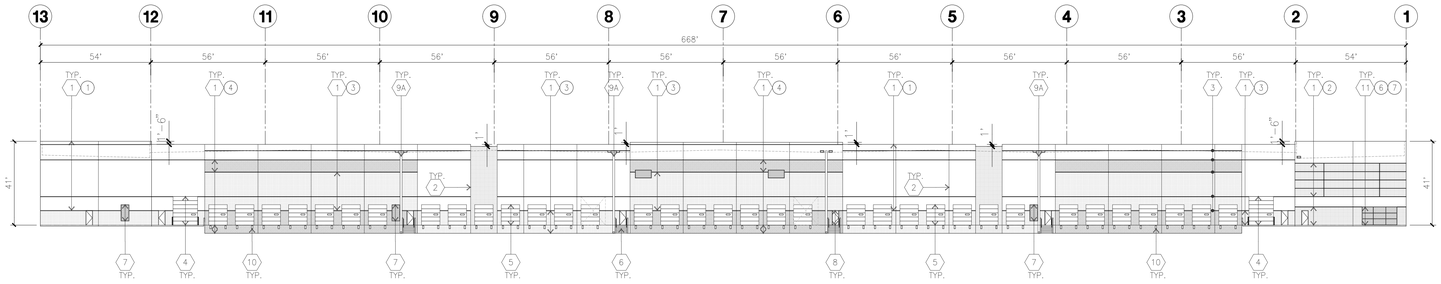
ROSEVILLE, CALIFORNIA

RIDGE CAPITAL

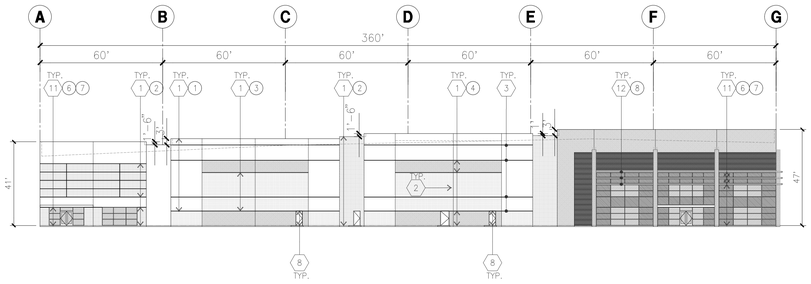
Job No. 20524.00

MATERIAL BOARD

09.22.2021



NORTH ELEVATION A
scale: 1" = 30'-0"



WEST ELEVATION B
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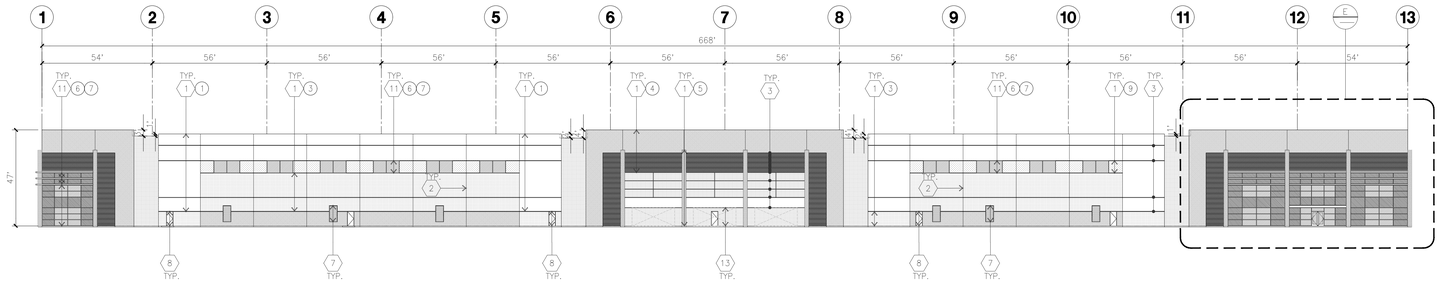
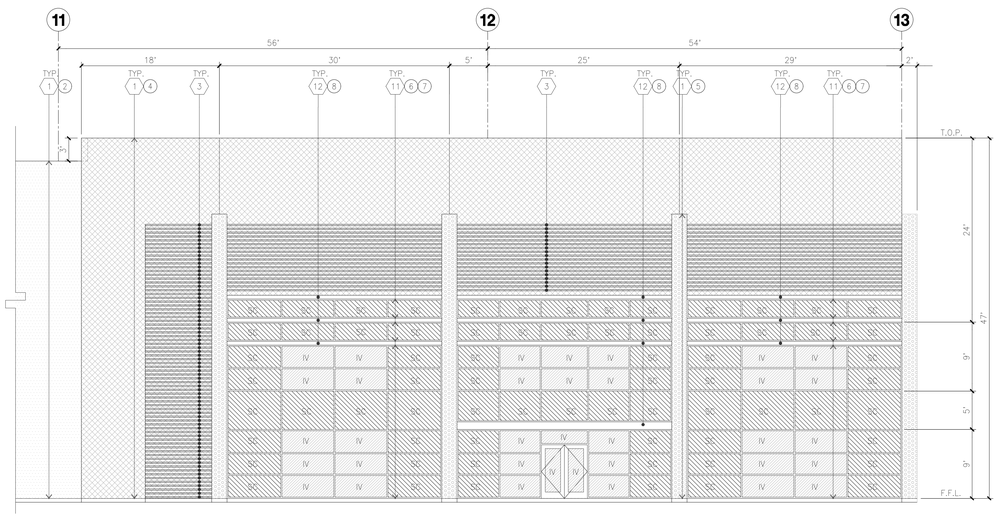
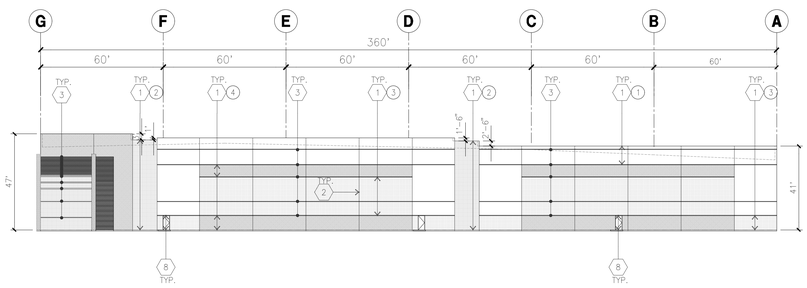


SOUTH ELEVATION C
scale: 1" = 30'-0"



ENLARGED SOUTH ELEVATION E
scale: 1/8" = 1'-0"



EAST ELEVATION D
scale: 1" = 30'-0"

KEYNOTES - ELEVATIONS

1. CONCRETE TILT-UP PANEL(PAINTED). FINISH GRADE VARIES. SEE 'C' DRAWINGS. WATERPROOF ALL WALLS WHERE EXTERIOR GRADE IS HIGHER THAN FINISH FLOOR AND EXPOSED TO THE WEATHER. WATERPROOFING TO BE PROTECTED WITH PROTECTION BOARD AND A MIN. OF 6" OF GRAVEL. PROVIDE TRENCH DRAIN AT BOTTOM AND DAYLIGHT TO CURB OR TAKE TO STORM DRAIN.
2. PANEL JOINT.
3. PANEL REVEAL. ALL REVEALS TO HAVE A MAX. OF 3/8" CHAMFER. REVEAL COLOR TO MATCH ADJACENT BUILDING FIELD COLOR. U.N.O.
4. OVERHEAD DOOR @ DRIVE THRU. PROVIDE COMPLETE WEATHER-STRIPPING PROTECTION ALL AROUND.
5. OVERHEAD DOOR @ DOCK HIGH. PROVIDE COMPLETE WEATHER-STRIPPING PROTECTION ALL AROUND.
6. EXTERIOR CONCRETE STAIR.
7. METAL LOUVER. PAINT TO MATCH BUILDING COLOR.
8. HOLLOW METAL DOORS. PROVIDE COMPLETE WEATHER STRIPING ALL AROUND DOOR. PROVIDE FOR RAIN DIVERTER ABOVE DOOR.
9A. EXTERIOR DOWNSPOUT WITH OVERFLOW SCUPPERS.
9B. NOT USED
10. DOCK BUMPER.
11. ALUMINUM STOREFRONT FRAMING WITH TEMPERED GLAZING.
12. METAL TUBE STEEL CANOPY
13. FUTURE KNOCKOUT PANELS

GENERAL NOTES - ELEVATIONS

A. ALL PAINT COLOR CHANGES TO OCCUR AT INSIDE CORNERS UNLESS NOTED OTHERWISE.
B. ALL PAINT FINISHES ARE TO BE FLAT UNLESS NOTED OTHERWISE.
C. T.O.P. EL.= TOP OF PARAPET ELEVATION.
D. F.F. = FINISH FLOOR ELEVATION.
E. STOREFRONT CONSTRUCTION: GLASS, METAL ATTACHMENTS AND LINTELS SHALL BE DESIGNED TO RESIST CITY REQUIRED WIND SPEED, EXPOSURE 'C' WINDS. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS PRIOR TO INSTALLATION.
F. CONTRACTOR SHALL FULLY PAINT SEVERAL CONCRETE PANEL W/ SELECTED COLORS. LOCATION TO BE SELECTED BY ARCHITECT. ARCHITECT AND OWNER SHALL APPROVE PRIOR TO PAINTING REMAINDER OF BUILDING.
G. BACK SIDE OF PARAPETS TO HAVE SMOOTH FINISH AND BE PAINTED WITH ELASTOMERIC PAINT.
H. FOR SPANDREL GLAZING, ALLOW SPACE BEHIND SPANDREL TO BREATH.
J. USE ADHESIVE BACK WOOD STRIPS FOR ALL REVEAL FORMS.
K. THE FIRST COAT OF PAINT TO BE ROLLED-ON AND THE SECOND COAT TO BE SPRAYED-ON.
L. EXTERIOR STAIRS AND RAMPS TO MATCH BUILDING COLOR. RAILINGS TO MATCH BUILDING COLOR.
M. ALL DOORS TO BE PAINTED THE SAME COLOR AS THE ADJACENT WALL.

ELEVATION COLOR LEGEND/SCHED.

1. CONCRETE TILT-UP PANEL. COLOR : SW 7006 EXTRA WHITE
2. CONCRETE TILT-UP PANEL. COLOR : SW 7071 GRAY SCREEN
3. CONCRETE TILT-UP PANEL. COLOR : SW 7073 NETWORK GRAY
4. CONCRETE TILT-UP PANEL. COLOR : SW 7074 SOFTWARE
5. CONCRETE TILT-UP PANEL. COLOR : SW 7075 WEB GRAY
6. GLAZING COLOR : BLUE GLAZING
7. MULLIONS COLOR : CLEAR ANODIZED ALUMINUM
8. CANOPY MATERIAL : SHERWIN-WILLIAMS SW 7006 EXTRA WHITE
   DOOR COLORS : MATCH BUILDING COLOR PREFINISHED WHITE AT SECTIONAL DOORS
9. CONCRETE TILT-UP PANEL. COLOR : SW 6510 LOYAL BLUE

GLAZING LEGEND

NOTE: ALL EXTERIOR AND INTERIOR GLAZING SHALL BE TEMPERED.

IV : INSULATED VISION GLASS

SPANDREL GLASS WITH CONCRETE BEHIND

V : SINGLE LITE VISION GLASS

IV : INSULATED VISION GLASS
1/4" VISTACOOL PACIFICA + 1/4" SOLARBAN 60 CLEAR
1" INSULATED GLASS UNIT WITH 1/2" AIRSPACE AND 1/4" LITES
U: 0.27 SHGC: 0.21 VLT: 26%
MINIMUM VT TO BE 0.42 PER 2019 CEC TABLE 140.3-B

SC : SPANDREL WITH CONCRETE BEHIND
1/4" VISTACOOL PACIFICA WITH WARM GRAY OPACICOAT PAINTED ON REFLECTIVE, INSTALLED ON CONCRETE.

V : VISION GLASS
1/4" VISTACOOL PACIFICA

MULLIONS : ANODIZED CLEAR.

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LICENSED ARCHITECT — HONG A. PAM — C-29451 — 3-31-23 RENEWAL DATE — STATE OF CALIFORNIA

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751 ROSEVILLE PARKWAY

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LANDSCAPE	Vista Parks
FIRE PROTECTION	
SOILS ENGINEER	

Title: ELEVATIONS

Project Number:	20524
Drawn by:	M.D
Date:	06/01/2021

Revision:

City resubmittal	7/29/2021
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Sheet:

DAB-A3.1

KEYNOTES - PUMP HOUSE

1. CONCRETE TILT-UP WALL (14) FT. HIGH MIN., PAINTED BOTH SIDES.
2. ROOF LINE BEYOND
3. KNOX BOX
4. NOT USED
5. OVERFLOW SCUPPER, SEE DETAIL 15/AD.3 SIMILAR PAINT TO MATCH WALL.
6. DOWNSPOUT, SEE DETAIL 16/AD.3 SIMILAR PAINT TO MATCH WALL.
7. 3'X7' PAIR OF DOORS, SEE DOOR SCHEDULE LEGEND

GENERAL NOTES - PUMP HOUSE

A. CONTRACTOR TO VERIFY ALL GRADES W/ CURRENT "C" PLAN & VERIFY SITE CONDITIONS. VERIFY ALL TOP OF WALL HEIGHTS(T.O.W.) & FINISH SURFACE GRADES.

B. ALL PAINT COLOR CHANGES TO OCCUR AT INSIDE CORNERS U.N.O.

C. T.O.W. = TOP OF WALL ELEVATION

D. F.F. = FINISH FLOOR

E. F.S. = FINISH SURFACE

F. N/A

G. CONTRACTOR TO VERIFY ALL CIVIL AND STRUCTURAL DRAWINGS FOR PUMP HOUSE HEIGHT. CONTRACTOR TO ADJUST PUMP HOUSE HEIGHT AND FOOTING IN THE FIELD.

H. THE FIRST COAT OF PAINT TO BE ROLLED-ON AND THE SECOND COAT TO BE SPRAYED-ON

J. N/A

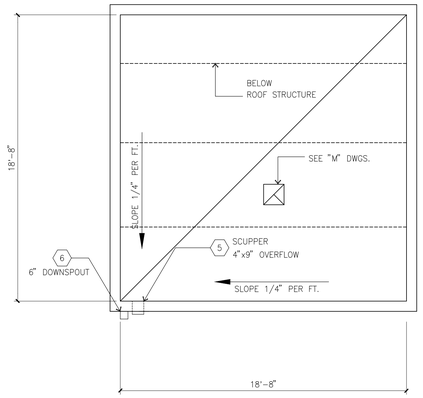
K. ROOF IS TO BE 4-PLY BUILT-UP ROOFING OVER SHEATHING OVER ROOF FRAMING, CLASS A ROOF, SEE DETAILS ON AD.3 AND SPECIFICATIONS.

L. BUILT UP ROOFING TO BE DESIGNED FOR 110 MPH, EXPOSURE "C" AND TO BE A U.L. CLASS A ROOF. FLASHING: 6AF TYPE 5MB MOPPED AP SHEET, U.L. TYPE 63 BUR.

M. ALL ROOFING FASTENERS SHALL MEET ALL CODE AND REGULATION REQUIREMENTS. PROPER REQUIREMENTS ARE IN PROJECTS JURISDICTION AND ALSO, FACTORY MUTUAL (FM) WIND UPLIFT PRESSURE REQUIREMENTS.

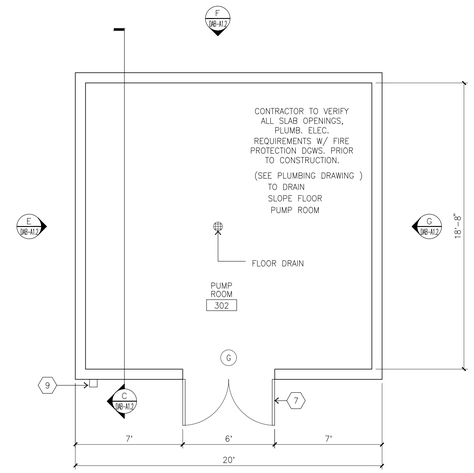
COLOR SCHEDULE - PUMP HOUSE

	1 CONCRETE TILT-UP PANEL	PAINT BRAND_SW 7006 EXTRA WHITE
	2 CONCRETE TILT-UP PANEL	PAINT BRAND_SW 7073 NETWORK GRAY



PUMP HOUSE ROOF PLAN B
scale: 1/4"=1'-0"

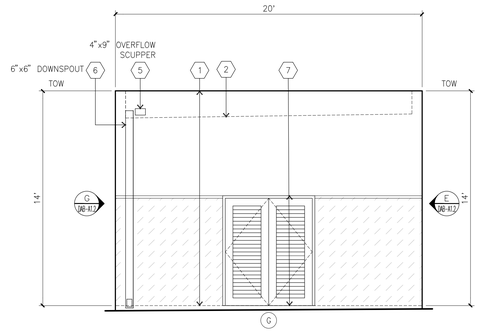
SCALE: 1/4"=1'-0"
0 4' 8' 12'



PUMP HOUSE FLOOR PLAN A
scale: 1/4"=1'-0"

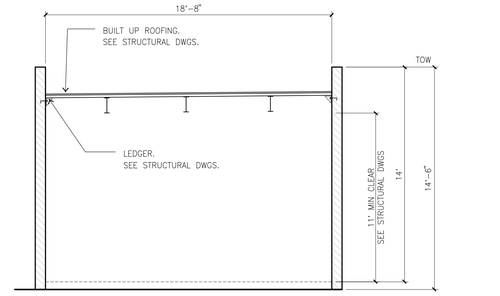
SCALE: 1/4"=1'-0"
0 4' 8' 12'

TRUE NORTH



PUMP HOUSE SOUTH ELEVATION D
scale: 1/4"=1'-0"

SCALE: 1/4"=1'-0"
0 4' 8' 12'



PUMP HOUSE SECTION C
scale: 1/4"=1'-0"

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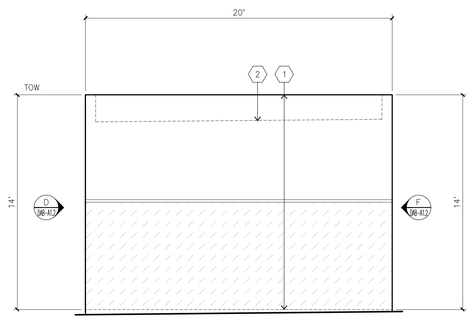
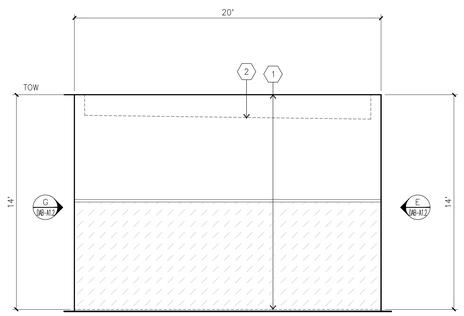
0 4' 8' 12'



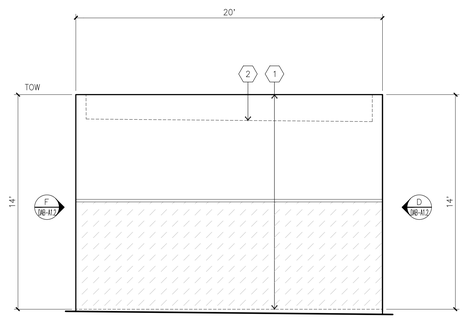
PUMP HOUSE EAST ELEVATION G
scale: 1/4"=1'-0"

SCALE: 1/4"=1'-0"
0 4' 8' 12'



PUMP HOUSE NORTH ELEVATION F
scale: 1/4"=1'-0"

SCALE: 1/4"=1'-0"
0 4' 8' 12'



PUMP HOUSE WEST ELEVATION E
scale: 1/4"=1'-0"

SCALE: 1/4"=1'-0"
0 4' 8' 12'

Note:

SITE PLAN SHALL MEET ALL ENGINEERING AND NPDES REQUIREMENTS.

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Project:

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PLUMBING	
ELECTRICAL	
LANDSCAPE	Vista Parks
FIRE PROTECTION	
SOILS ENGINEER	

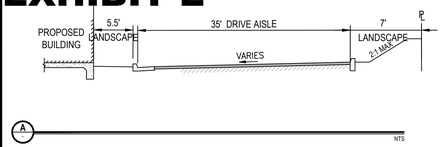
Title: PUMP HOUSE

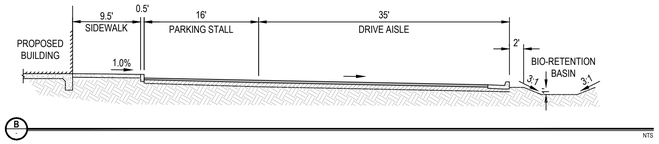
Project Number:	20524
Drawn by:	M.D
Date:	06/01/2021
Revision:	
City resubmittal	7/29/2021
City resubmittal	8/31/2021
City resubmittal	9/24/2021

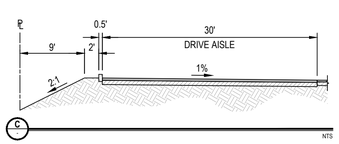
Sheet:

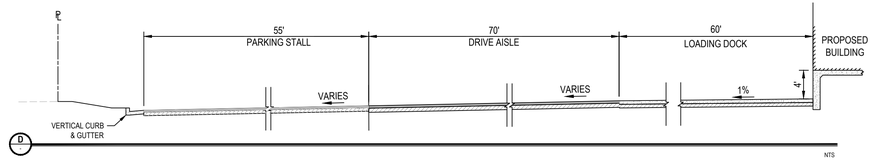
DAB-A1.2

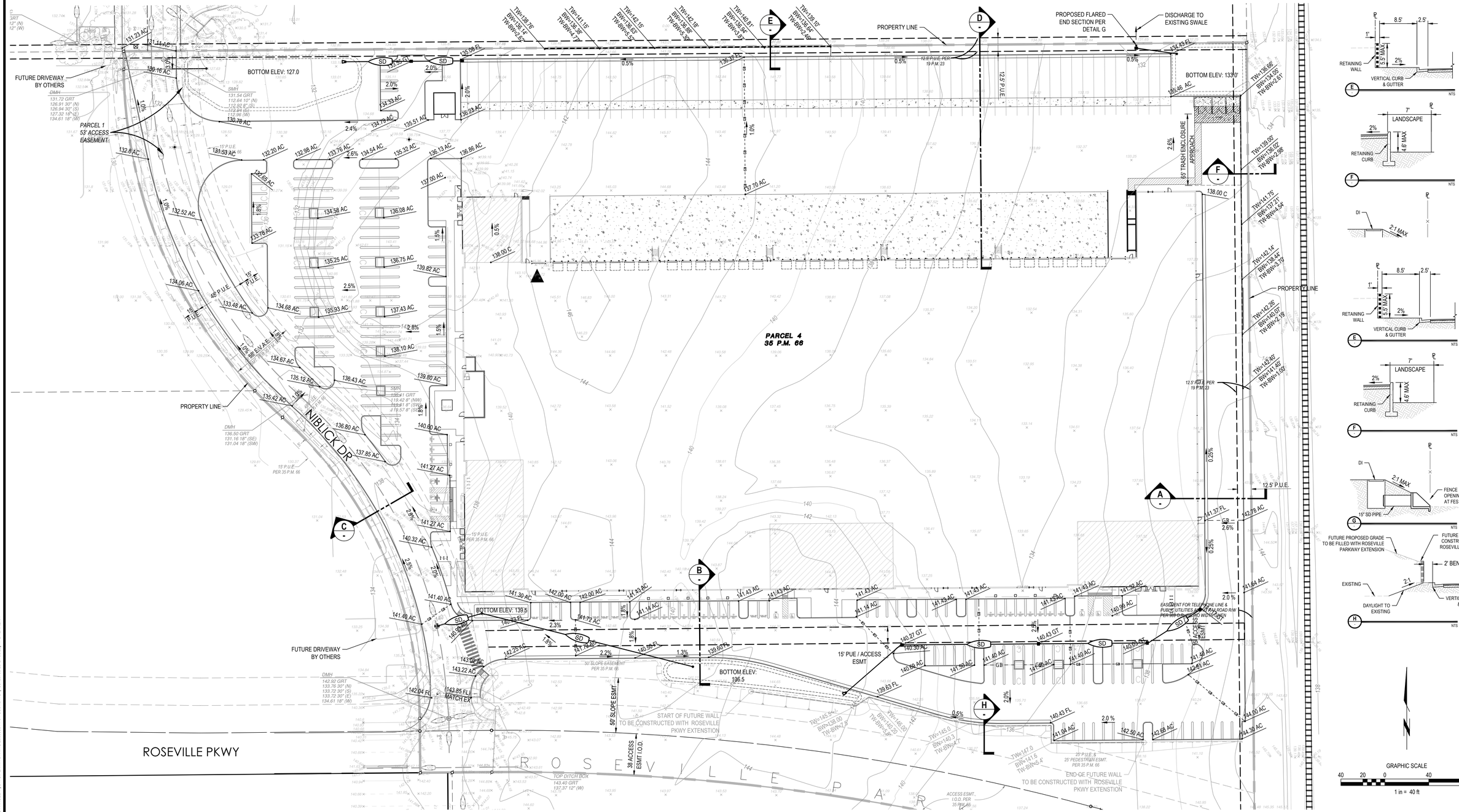
DC EXHIBIT E











NOT FOR CONSTRUCTION

REVISIONS NO.	DESCRIPTION	APPD. ENGR.	DATE	APPD. E.U.	DATE
1	CITY RESUBMITTAL 7/29/2021				
2					
3					
4					
5					

SCALE:
HORIZ. 1" = 40'
VERT. 1" = N/A

BENCH MARK

COMPUTED
DESIGNED
DRAWN
PROJ. ENGR.

MORTON & PITALO, INC.
CIVIL ENGINEERING • LAND PLANNING • LAND SURVEYING
Folsom ∗ Fresno
600 Coolidge Drive, Suite #140
Folsom, CA 95630
phone: (916) 984-7621
web: www.mpengr.com

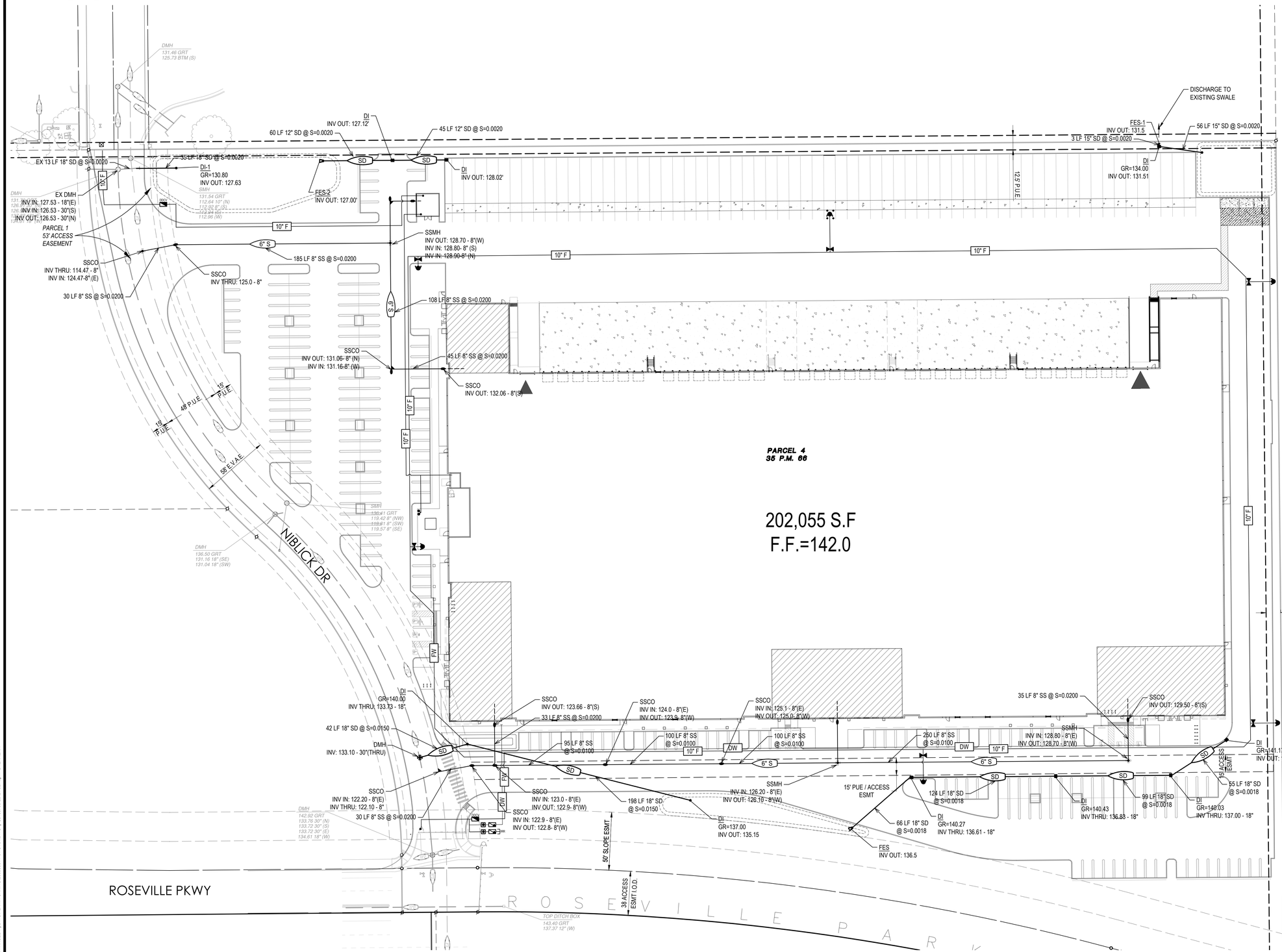
PRELIMINARY GRADING PLAN FOR
FOOTHILLS PARCEL 4
751 ROSEVILLE PARKWAY
APN:017-232-007
ROSEVILLE, CALIFORNIA

DATE AUGUST 26, 2021
SHEET C.0
OF 8

JOB NO. 20-0038-01

Dwg: X:\2020\20-0038-01 (FOOTHILLS PARCEL 4 ID\WORK\DWG\20038901-PR1-GB01.DWG | Saved: 09-29-21 03:26pm SHERRERA

DC EXHIBIT F



LEGEND

EXISTING	PROPOSED	DESCRIPTION
6"W	8"W	DOMESTIC WATER PIPE & SIZE
12"D	12"D	STORM DRAIN PIPE & SIZE
6"S	6"S	SANITARY SEWER PIPE & SIZE
		MANHOLE
		GATE VALVE
		FIRE HYDRANT
		DOUBLE CHECK BACKFLOW PREVENTER
		REDUCE PRESSURE PRINCIPLE BACKFLOW DEVICE
		WATER METER
		FIRE DEPARTMENT CONNECTION

NOT FOR CONSTRUCTION

REVISIONS NO.	DESCRIPTION	APPD. ENGR.	DATE	APPD. E.U.	DATE
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3					
4					
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PRELIMINARY UTILITY PLAN FOR
FOOTHILLS PARCEL 4
751 ROSEVILLE PARKWAY
APN:017-232-007
ROSEVILLE, CALIFORNIA

DATE AUGUST 26, 2021
SHEET C.1
OF 8

JOB NO. 20-0038-01

Dwg: X:\2020\20-0038-01 (FOOTHILLS PARCEL 4-HOWDR-ANWORKING\20038301-PP1-UT01.DWG | Saved: 09-29-21 02:40pm SHERRERA

CAUTION: IF THIS SHEET IS NOT 30"X42"

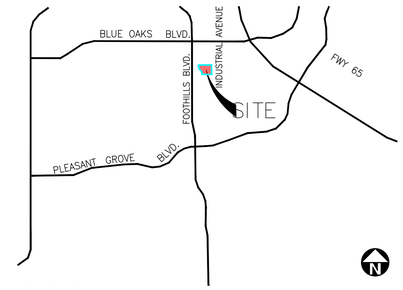
DC EXHIBIT G

north

1" = 40'

0 40' 80' 120'

Aerial Map



Lagerstroemia 'Catawba'	Crape Myrtle	Low	24" Box	3
Koelreutana paniculata	Golden Rain Tree	Low	15 Gallon	11
Pistacia chinensis	Chinese Pistache	Low	24" Box	14
Pinus eldarica	Afghan Pine	Low	15 Gallon	9
Quercus shumardii	Shumard Oak	Low	15 Gallon	8
Quercus f. 'Forest Green'	Forest Green Oak	Low	15 Gallon	11
Quercus suber	Cork Oak	Low	15 Gallon	6
Sequoia 'Santa Cruz'	Redwood	Med	24" box	28
Ulmus 'Frontier'	Frontier Elm	Med	15 Gallon	22

FOUNDATION SHRUBS/ACCENTS

BOTANICAL NAME	COMMON NAME	WUCOLS	SIZE	QTY
Callistemon Low Boy	Low Boy Bottlebrush	Low	5 Gallon	
Cistus purpureus	Purple Rockrose	Low	5 Gallon	
Grevillea noelii	Noel Grevillea	Low	5 Gallon	
Mahonia a. 'Compacta	Dwf Oregon Grape	Low	5 Gallon	
Nandina domestica	Heavenly Bamboo	Low	5 Gallon	
Rosemarinus 'Tuscan Blue	Tuscan Rosemary	Low	5 Gallon	
Rhamnus c. 'Eve Case'	Coffeeberry	Low	5 Gallon	
Rhaphiolepis Pink Lady	Indian Hawthorne	Low	5 Gallon	
Tulbaghia violacea	Society Garlic	Low	1 Gallon	

SCREENING SHRUBS

BOTANICAL NAME	COMMON NAME	WUCOLS	SIZE	QTY
Grevillea canberra gem	Canberra Grevillea	Low	5 Gallon	
Loropetalum 'Purple Majesty'	Fringe Flower	Low	5 Gallon	
Prunus carolinana compacta	Dwf Cherry Laurel	Low	5 Gallon	
Xylosma compacta	Compact Xylosma	Low	5 Gallon	

GR COVER

BOTANICAL NAME	COMMON NAME	WUCOLS	SIZE	QTY
Bacchanis Pigeon Point	Dwarf Coyote Brush	Low	1 Gallon	72" OC
Cistus 'Sunset'	Sunset Rockrose	Low	1 Gallon	60" OC
Cotoneaster 'Coral Beauty'	Bearberry	Low	1 Gallon	48" OC

BIO RETENTION

BOTANICAL NAME	COMMON NAME	WUCOLS	SIZE	QTY
Chondropetalum tectorum	Cape Rush	Med	1 Gallon	48" OC
Juncus patens	Gray Rush	Med	1 Gallon	48" OC
Muhlenbergia rigins	Deer Grass	Low	1 Gallon	48" OC

MULCH

Recycled Brown Mulch	3" Depth

WELO WORKSHEET

8801 Foothills WELO Worksheet							
Reference Evapotranspiration (Eto)				52.2			
Regular Landscape Areas	There are no special landscape areas.				Trees count as 25 sq'		
Hydrozone#	Plant	Irrigation	Irrigation	ETAF	Landscape	ETAF X	Estimated Total
	Factor	Method	Efficiency (PF/IE)		Area (sq. ft.)	Area	Water Use (GPY)
1	0.2	Drip	0.81	0.25	18178	4544.5	147078
2	0.2	Drip	0.81	0.25	14779	3694.75	119577
3	0.2	Drip	0.81	0.25	12354	3088.5	99956
4	0.2	Drip	0.81	0.25	12621	3155.25	102117
5	0.2	Drip	0.81	0.25	7063	1765.75	57147
6	0.2	Drip	0.81	0.25	7589	1897.25	61403
7	0.2	Drip	0.81	0.25	5293	1323.25	42826
8	0.2	Drip	0.81	0.25	7631	1907.75	61742
9	0.2	Drip	0.81	0.25	6954	1738.5	56265
10	0.4	Bubbler	0.81	0.49	700	343	11101
11	0.4	Bubbler	0.81	0.49	900	441	14273
12	0.2	Bubbler	0.81	0.25	550	137.5	4450
13	0.2	Bubbler	0.81	0.25	825	206.25	6675
Total					95437		784609
		Maximum Allowed Water Allowance (MAWA)					1389925
		Estimated Total Water Use (ETWU)					7846913
					Average ETAF		0.25
					Allowed ETAF		0.45

SHADE CALCULATIONS

Tree Variety	Full Value	Full	Half	1/4	Total Sq.'
35' Trees	962 sq.'				
Koelreutana paniculata		1	8		4810
Pistacia chinesis		7	7		10101
Quercus Forest Green		8	3		9139
Quercus shumardii			6		2886
Ulmus Frontier		7	16		14430
Total Shade Area Provided					41366
Parking Area					80094
Shade required	50%				40047
Shade Provided	52%				41366

PRELIMINARY LANDSCAPE NOTES

1. PLANT PALETTE CONTAINS NATIVE AND ADAPTIVE, LOW WATER USE VARIETIES THAT ARE CONDUCIVE TO THE ENVIRONMENTAL CONDITIONS OF THIS SITE.
2. PLANTS WILL BE GROUPED INTO ZONES WITH SIMILAR WATER/ET REQUIREMENTS.
3. ALL PLANTER AREAS SHALL BE TREATED WITH A 3" LAYER OF RECYCLED MULCH EXCEPT IN VEHICLE/HIGH FOOT TRAFFIC AREAS WHICH WILL CONTAIN DECOMPOSED GRANITE AT 3" DEPTH.
4. 40% OF ALL TREES ARE 24" BOX SIZE.
5. 38% OF ALL TREES ARE EVERGREEN.

PRELIMINARY IRRIGATION NOTES

1. THE IRRIGATION SYSTEM SHALL BE DESIGNED FOR FUTURE RECYCLED WATER AND FOLLOW THE CITY OF ROSEVILLE RECYCLED WATER ORDINANCE.
2. A FULLY AUTOMATIC IRRIGATION SYSTEM MEETING CURRENT WATER EFFICIENT LANDSCAPE ORDINANCE REQUIREMENTS SHALL BE INSTALLED INCLUDING THE FOLLOWING:
3. AN ET (SMART) CONTROLLER AND ET SENSOR SHALL BE USED FOR WEATHER BASED IRRIGATION CONTROL.
4. SHRUBS AND GROUND COVER SHALL BE IRRIGATED WITH A PRESSURE COMPENSATING DRIP SYSTEM.
5. TREES SHALL RECEIVE DEEP WATER/FERTILIZATION TUBES AND BUBBLERS ON SEPARATE CONTROL VALVES
6. WELO DOCUMENTATION SHALL BE SUBMITTED WITH LANDSCAPE IMPROVEMENT PLANS (CONSTRUCTION DOCUMENTS). SOIL SAMPLES FOR SOIL REPORT SHALL BE TAKEN AFTER MASS GRADING OPERATIONS HAVE BEEN COMPLETED AND SUBMITTED WITH COMPLETION PACKAGE.

HPA architecture

hpa, inc.
600 grand ave, suite 302
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94610
tel: 949•862•2113
email: hpa@hparchs.com

Owner:
RIDGE CAPITAL
555 University Ave. Suite 180
Sacramento, CA 95825
TEL: 916-527-8020
FAX: 916-993-6480

Project:
8801 FOOTHILLS BLVD
Roseville, CA

VISTA PARKS
design /build /construction
8264 Berryman Court Sacramento, CA 95829
PH. (916) 681-2227 FAX (916) 681-2228

Consultants:

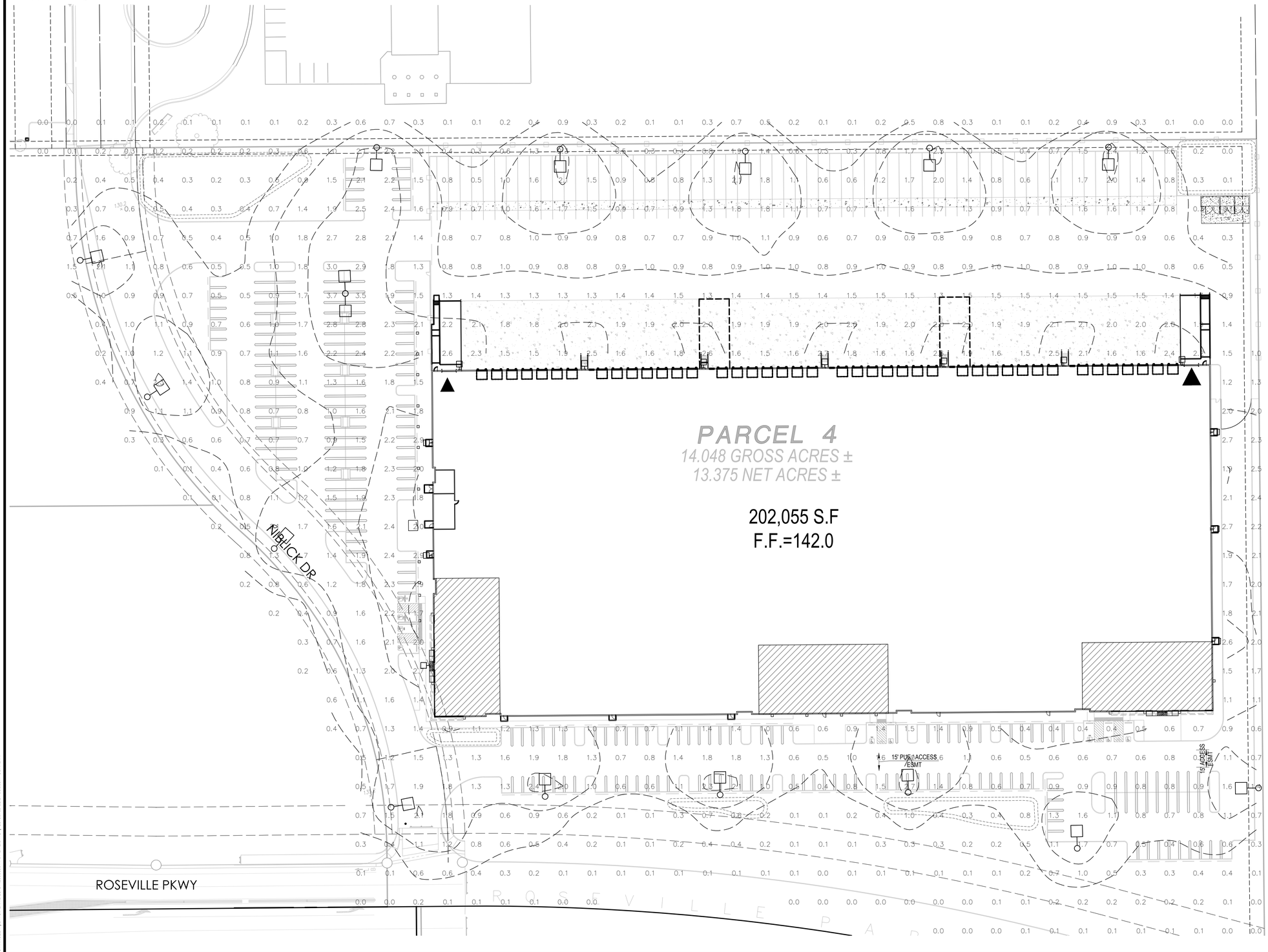
CIVIL	Morton & Pitalo
STRUCTURAL	-
MECHANICAL	-
PLUMBING	-
ELECTRICAL	-
LANDSCAPE	Vista Parks
FIRE PROTECTION	-
SOILS ENGINEER	-

Title:
PRELIMINARY LANDSCAPE PLAN

Project Number:	20524
Drawn by:	EJD
Date:	07/29/2021
Revision:	
City Resubmittal	7/29/2021

Sheet:
LP

DC EXHIBIT H



GRAPHIC SCALE
40 20 0 40 80
1 in = 40 ft

GENERAL PHOTOMETRIC SCHEDULE	
AVERAGE FOOT–CANDLES	1.01
MAXIMUM FOOT–CANDLES	3.7
MINIMUM FOOT–CANDLES	0
MINIMUM TO MAXIMUM FC RATIO	0
MAXIMUM TO MINIMUM FC RATIO	1043.02
AVERAGE TO MINIMUM FC RATIO	284.46

NOT FOR CONSTRUCTION

PHOTOMETRIC PLAN

REVISIONS NO.	DESCRIPTION	APPD. ENGR.	DATE	APPD. E.U.	DATE
1	CITY RESUBMITTAL 7/29/2021				

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PRELIMINARY PHOTOTMETRIC PLAN FOR
FOOTHILLS PARCEL 4
751 ROSEVILLE PARKWAY
APN:017-232-007
ROSEVILLE, CALIFORNIA

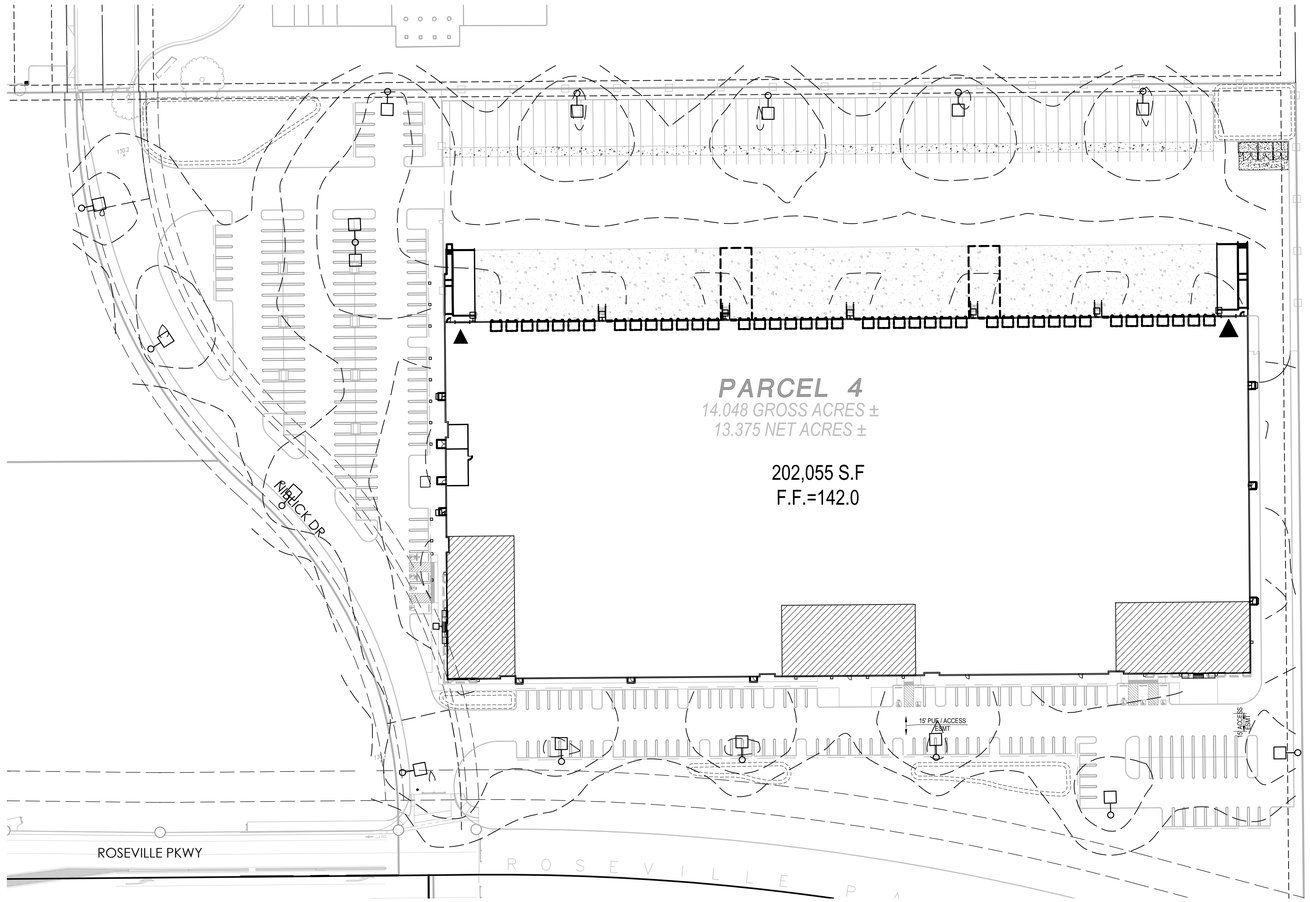
DATE SEPTEMBER 9, 2021
SHEET PT-1
OF 2

JOB NO. 20-0038-01

Dwg: X:\2020\20-0038-01 (FOOTHILLS PARCEL 4-RDW)\PLAN\DESIGN\20038R1-PPT-LITE.DWG | Saved: 09-02-21 09:09am GBARDINI

LUMINAIRE SCHEDULE

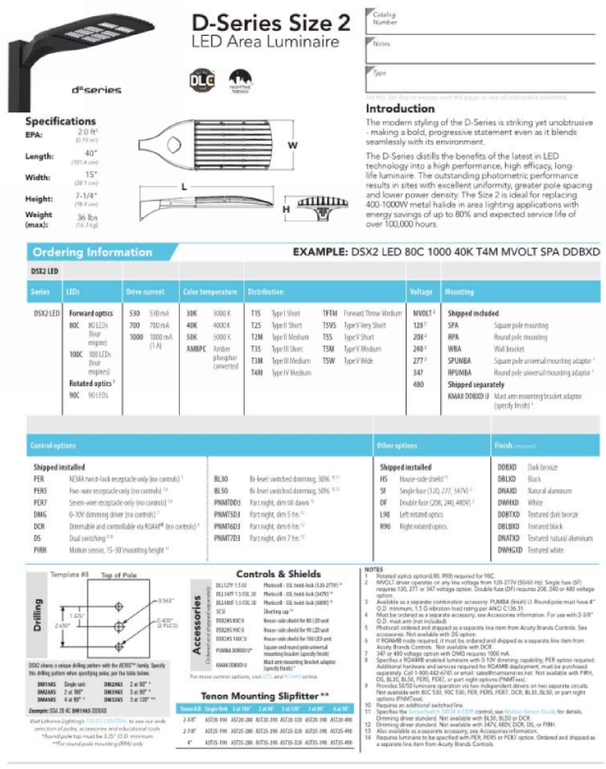
CALLOUT	SYMBOL	LAMP	DESCRIPTION	BALLAST	MOUNTING	MODEL	VOLTS	NOTE 1	NOTE 3	QUANTITY
1TFTM		(1) LED,	DSX2 LED P1 40K TFTM MVOLT	ELECTRONIC	POLE	Lithonia Lighting, DSX2 LED P1 40K TFTM MVOLT	120V 1P 2W	LED DRIVER,	/21/2017 11/9/2017 SCALED PHOTOMETRY TYPE IV, SHORT, BUG RATING: B3 – U0 – G4 18952.5 0 , 0 140 3, 1.2, 0.5 0, 0, 0 ARM MOUNT D-Series Area Size 2 a2d940b6-48b3-4ab1-a888-71794f61f80b NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED. 23842 70 120.1 VOLTS, 205.9 WATTS, 1.72 AMPS AMBIENT: 24.9	16
1TFTM-WP		(1) LED,	DSX2 LED P1 40K TFTM MVOLT	ELECTRONIC	WALL	Lithonia Lighting, DSX2 LED P1 40K TFTM MVOLT	120V 1P 2W	LED DRIVER,	/21/2017 11/9/2017 SCALED PHOTOMETRY TYPE IV, SHORT, BUG RATING: B3 – U0 – G4 18952.5 0 , 0 140 3, 1.2, 0.5 0, 0, 0 ARM MOUNT D-Series Area Size 2 a2d940b6-48b3-4ab1-a888-71794f61f80b NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED. 23842 70 120.1 VOLTS, 205.9 WATTS, 1.72 AMPS AMBIENT: 24.9	13



GRAPHIC SCALE

60 30 0 60 120

1 in = 60 ft



2 PT2 LITHONIA DSX2 LUMINAIRE
SCALE: NONE

TYPICAL LIGHT DETAIL

NO SCALE

NOT FOR CONSTRUCTION

LIGHTING SCHEDULE

REVISIONS NO.	DESCRIPTION	APPD. ENGR.	DATE	APPD. E.U.	DATE
1	CITY RESUBMITTAL 7/29/2021				
2					
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PRELIMINARY PHOTOTMETRIC PLAN FOR

FOOTHILLS PARCEL 4
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APN:017-232-007
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DATE SEPTEMBER 9, 2021
SHEET PT-2
OF 2

JOB NO. 20-0038-01

Dwg: X:\2020\20-0038-01 (FOOTHILLS PARCEL 4)\DWG\PLANSET\PLANSET\20038-01-PP-LITE.DWG | Saved: 09-02-21 09:04am GBARDINI